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## Ability-To-Pay and the Taxation of Virtual Income

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## ABILITY-TO-PAY AND THE TAXATION OF VIRTUAL INCOME

*Adam S. Chodorow\**

*Whether to tax virtual income raises a vexing question. Most people’s intuition suggests that virtual income should be exempt from tax, but the real-world economic value inherent in such income suggests otherwise. Those who have considered the question to date have attempted to justify non-taxation using either an intent-based or imputed-income approach. In this Article, I argue that neither of these approaches nor the proposals they produce are fully satisfactory. Using the ability-to-pay principle, I offer a new approach to this question, which better conforms to existing tax policy and doctrine and produces a more administrable proposal than those made to date.*

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## I. INTRODUCTION

Virtual reality provides a forum for people to engage in a wide range of activities – from role playing in medieval fantasy worlds to setting up on-line branches of real-world businesses. As more people take part in these on-line communities, questions have arisen whether real-world laws do – or should – apply to activities that occur solely within virtual worlds.<sup>1</sup> These questions are not simply academic, as several lawsuits have already been filed alleging that real-world laws should apply.<sup>2</sup> Given the real-world economic value inherent in virtual goods, it seems inevitable that the question whether real-world tax laws do or should apply to virtual activities will need to be decided. Indeed, this issue has begun to attract attention from both the government and academics.<sup>3</sup>

<sup>1</sup> Commentators have focused on areas as diverse as property law, see F. Gregory Lastowka and Dan Hunter, *The Laws of Virtual Worlds*, 92 Cal. L. Rev. 1 (2004), criminal law, Kerr, Orin S., "Criminal Law in Virtual Worlds" . University of Chicago Legal Forum, Forthcoming Available at SSRN: <http://ssrn.com/abstract=1097392>, and intellectual property, see Tom W. Bell, *Virtual Trade Dress: A Very Real Problem*, 56 Maryland L. Rev. 384 (1997).

<sup>2</sup> See, e.g., *Bragg v. Linden Research, Inc.*, Civil Action No. 06-4925 (concerning property rights in Second Life); Allen Sipress, *Does Virtual Reality Need a Sheriff?*, Washington Post (Jun 2, 2007) at A1 (discussing criminal investigations into virtual acts); and Benjamin Duranski, *Rampant Trademark Infringement in Second Life Costs Millions, Undermines Future Enforcement*, VirtuallyBlind.com (May 4, 2007) <http://virtuallyblind.com/2007/05/04/trademark-infringement-virtual-worlds/> (discussing the misappropriation of intellectual property rights by Second Life participants).

<sup>3</sup> The Joint Economic Committee (JEC) has taken up this question but has yet to issue a report. However, Rep. James Saxton, the chairman and ranking Republican member of that committee, has stated that it would be a “mistake” for the IRS to tax income earned solely within the confines of virtual space. See Robert Janelle, *Taxing Virtual Income*, Suite101.com (Oct. 24, 2006), [http://videogames.suite101.com/article.cfm/taxing\\_virtual\\_income](http://videogames.suite101.com/article.cfm/taxing_virtual_income). In addition to the income tax consequences, the JEC is concerned regarding potential money laundering and terrorist threats. See Congress Joint Economic Committee Talking to Virtual Worlds Operators, *Virtual World News* (Aug. 22, 2007), <http://www.virtualworldsnews.com/2007/08/congress-joint-.html>.

For academic consideration of this issue see Edward Castronova, *The Right to Play*, 49 N.Y.L. Sch. L. Rev. 185 (2004) (considering taxation as part of the broader question of whether real-world laws should apply in virtual worlds); Bryan T. Camp, *The Play's the Thing: A Theory of Taxing Virtual Worlds*, 59 *Hastings Law Rev.* 1

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A consensus exists for the proposition that anyone who “cashes out,” i.e., converts virtual wealth to real-world wealth, should be taxed on their gains.<sup>4</sup> The question of whether, and to what extent, the IRS can or should seek to tax activity that occurs entirely within virtual worlds (or in-world) is more difficult. Those who have considered this question are largely opposed to the idea that virtual income should be taxed, and they have crafted both doctrinal and policy-based arguments to support the non-taxation of in-world activities. One scholar relies on an intent-based approach, where the tax result depends on whether the person generates virtual income in pursuit of leisure or profit.<sup>5</sup> Under the resulting proposal, most, but not all, virtual income would be exempt from taxation. Another would classify all virtual income as imputed and therefore outside the tax base, regardless of the type of world or transaction involved.<sup>6</sup>

In this Article, I argue that none of the analysis to date – nor the proposals they produce – is fully satisfactory. Instead, I offer an approach that better reflects core tax principles, implements tax policy objectives and takes into account administrative concerns.<sup>7</sup> I propose a two step process for assessing whether, and to what extent, virtual

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(2008); Leandra Lederman, *Stranger than Fiction: Taxing Virtual Worlds*, 82 *NYU Law Rev.* 1621, 1623 (2007); Timothy J. Miano, *Virtual World Taxation: Theories of Income Taxation Applied to the Second Life Virtual Economy*, 48 *Jurimetrics* \_\_, 48 (forthcoming 2008); Bryan T. Camp and Theodore P. Seto, *Making Money While Having More Fun: Taxation of Online Gaming*, presented at the 2008 Mid-Year meeting of the American Bar Association’s Tax Section at n. 9, available at \_\_\_\_\_. See also Dustin Stamper, *Taxing Ones and Zeros: Can the IRS Ignore Virtual Economies?*, 114 *Tax Notes* 149 (Jan 15, 2007).

<sup>4</sup> See, e.g., Camp, *supra* n. 3 at 2, 45; Lederman, *supra* n. 3 at 1623; Miano *supra* n. 3 at \_\_\_\_.

<sup>5</sup> Lederman, *supra* n. 3.

<sup>6</sup> Camp, *supra* n. 3.

<sup>7</sup> I focus in this Article on how best to tax virtual income within the context of our existing income tax. However, other possibilities exist. Just as the estate tax can be seen as an indirect effort to tax the unrealized appreciation in assets that the income tax foregoes through I.R.C. § 1014, one could use some other mechanism to get at this income. For instance, one could attempt to create tax regimes that operate within the context of virtual worlds, such as a head tax, a sales tax or a fully fledged income tax. Alternately, one could impose a tax on virtual world creators, the cost of which they could pass on in some form or another. Such efforts would not perfectly match the results one would achieve using the income tax system. However, to the extent that people really do think of their virtual income as pretend, it might actually be possible to extract more from them than might otherwise be possible. Consideration of such efforts is beyond the scope of this article.

income should be subjected to real-world taxation. First, one must determine whether the receipt of such income increases a taxpayer's ability to pay real-world taxes. It is this fundamental tax principle that prior analysis has overlooked. In the virtual reality context, ability-to-pay depends on whether the taxpayer can readily cash out, i.e., convert his virtual wealth into real-world wealth, a determination that must be made on a virtual world-by-world basis. If he cannot, the world should be considered "closed," and the receipt of such income should be excluded from the tax base.

If the taxpayer is able to cash out, the virtual world should be considered "open." One must then proceed to the second step of the analysis and determine whether existing doctrine or policy should exclude virtual income from the tax base.<sup>8</sup> For example, we exclude real-world gifts from income under I.R.C. § 102. Similarly, virtual gifts should be excluded from income. This step requires one to classify the income or the transaction involved and then consider whether anything about the virtual nature of the income or transaction warrants different tax treatment from that which would apply in the real world. I argue here that, so long the world is deemed open, the virtual nature of the transactions should not matter for tax purposes.

Taxing virtual income is not without its difficulties. For instance, markets may be thin, making valuation difficult; administrative costs may well swamp the revenue obtained; and compliance issues may arise. In a bow to these concerns, administrative convenience, and perhaps to the disquiet associated with taxing those who are simply playing, I would only impose real-world taxes in years where the value of a person or entity's taxable virtual income exceeded \$600 as measured in U.S. currency, thus imposing tax only on those who earn significant virtual income.

This Article proceeds as follows. Part II provides a brief description of virtual reality and the potential income events with which the tax system must grapple.

Part III considers the existing analyses and proposals. I begin with the intent-based approach and demonstrate that it is inconsistent with existing doctrine and tax policy and that it raises a host of difficult administrative problems. I then turn to the imputed-income approach

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<sup>8</sup> I borrow the terms "closed" and "open" from Edward Castronova. See Castronova, *The Right To Play*, supra n. 3 at 201-202. However, as will be evident from the discussion below in Part IV.A, I define those terms somewhat differently from Castronova.

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and illustrate how it stretches the notion of imputed income past its breaking point and raises a host of administrative problems.

Part IV sets forth my policy and doctrinal analysis, as well as the specific proposal that flows from such analysis. In addition, I lay out a method for determining when worlds should be considered open and closed, a mechanism for making such determinations, and a justification for the \$600 threshold I propose.

Part V concludes.

## II. Brief Description of Virtual Worlds

In this Part, I give a brief description of virtual worlds, as a basic understanding of such worlds is necessary to understand the tax issues they engender. Each world is different, and, therefore, this description is necessarily general.<sup>2</sup>

Virtual worlds are on-line spaces that permit people to interact with one another through characters they create, often called avatars. Virtual worlds differ from traditional video games in a number of important respects. First, these worlds do not pause or end when a user exits. Rather, virtual life continues, and a returning player may well discover that things have changed significantly since she last visited the world. Second, most worlds are designed to permit players to create their own, unique experience within the world and much of what happens in a given world is as much a function of the participants' initiative as it is the creator's. Finally, most worlds have a virtual economy, where players can alternately make, find, win, buy, sell and exchange virtual goods.<sup>10</sup> To gain access to these worlds, users sign End User License Agreements (EULAs) or Terms of Service (TOS) agreements, which purport to establish participants rights with respect to the virtual goods created and obtained in those worlds. The specific terms differ from world to world.

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<sup>2</sup> For a more complete description of the historical developments leading to the creation of virtual worlds, as well as a description of the variety of virtual worlds, see Lastowka & Hunter, *supra* n. 1. See also, Camp *supra* n. 3 at 3-8; Lederman *supra* n. 3 at 6-12.

<sup>10</sup> For a discussion of virtual economies, see 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://ssrn.com/abstract=294828>; see also Bryn Davies, *Sustainable Economics, Price Arbitrage, Information Asymmetry and Elastic & Inelastic Markets in a World of Warcraft Economy*, <http://www.progsoc.org/~curious/economics.html>.

Virtual worlds can generally be broken into two categories: game worlds and unscripted worlds.<sup>11</sup> Game worlds are highly scripted environments, where the game's creator provides a rich environment with scenery, pre-set roles, plot lines, rules for interaction, etc. Players complete quests and search for treasure, often joining together with other players to do so. As players acquire more virtual currency, property, and experience within a world, they are able to do more within the context of the game, often rising to a new "level" and undertaking more difficult quests. Examples of game worlds include World of Warcraft, EverQuest, Lineage, City of Heroes, Dark Age of Camelot and Ultima Online.

The main point of most game worlds is to enjoy the game. Accordingly, creators typically oversee player activity to ensure people do not ruin the environment for others or otherwise damage the game's integrity. Creators generally reserve the right to kick out disruptive players, purport to retain all property rights in the virtual goods created and often restrict players' abilities to arrange for exchanges of virtual items outside the context of the game.<sup>12</sup> For instance, Blizzard Entertainment, which operates World of Warcraft, strictly prohibits the sale of virtual goods for real money and reserves the right to take legal action against those who violate its rules.<sup>13</sup>

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<sup>11</sup> Camp and Lederman use different terminology to describe the different types of worlds. Camp identifies all virtual worlds as Massively Multiplayer On-line Role Playing Games or MMORPGs and differentiates between "structured" and "unstructured" games. Camp *supra* n. 3 at 4. Structured games correspond to what Lederman calls "game worlds," while unstructured games correspond to what she calls "unscripted" worlds. For ease of reference, I use Lederman's terminology throughout.

<sup>12</sup> Some game worlds permit participants to buy and sell currency, but prohibit other types of sales and exchanges. See Camp *supra* n. 3 at 13 (describing World of Warcraft, which allows participants to pick on which server to play, with different servers implementing different rules for and rates of exchange).

<sup>13</sup> In 2004, Blizzard Entertainment released the following statement:

It has come to our attention that certain individuals are selling Blizzard's in-game property for cash on auction sites such as eBay and on personal websites. The World of Warcraft Terms of Use clearly state that all of the content in World of Warcraft is the property of Blizzard, and Blizzard does not allow "in game" items to be sold for real money. Accordingly, Blizzard Entertainment will take any and all actions necessary to stop this behavior. Not only do we believe that it is illegal, but it also has the potential to damage the game economy and overall experience for the many thousands of others who play World of Warcraft for fun. In order to promote a fun and fair environment for all our customers, we are actively investigating those individuals who engage in this inappropriate activity and

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Despite such restrictions, people can and do buy and sell items on eBay and similar sites.<sup>14</sup> Indeed, in a practice known as “gold farming,” some players, too impatient to work through the game to garner the virtual wealth and experience necessary to play at an advanced level, pay others to do so for them.<sup>15</sup> While it is possible to make real-world money by selling one’s virtual goods, it is not clear to what extent transactions outside the confines of the game are motivated by a desire to alter the game experience or to make a profit.

In contrast, unscripted worlds create a space for people to interact without providing any set storyline or activities. As a result, these worlds grow according to the tastes and inclinations of those who participate. Almost all of the goods in unscripted worlds are self-created, i.e., made by those who participate from constituent building blocks made available in the given world.<sup>16</sup> Because unscripted worlds are often designed to facilitate commerce, creators of such worlds tend to grant users significantly greater rights in their creations than is typical in game worlds. Indeed, Second Life operates the LindeX, an official exchange that facilitates people buying and selling virtual currency.<sup>17</sup>

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reserve the right to take legal action against these individuals to protect World of Warcraft for all those who "play by the rules." If you are found to be selling in-game property (such as coins, items, or characters), for real money, you will lose your characters and accounts, and Blizzard Entertainment reserves its right to pursue legal action against you as well.”

Reproduced in Edward Castronova, *Blizzard Goes to War*, Terra Nova Blog (Dec. 2004), [http://terranova.blogs.com/terra\\_nova/2004/12/blizzard\\_goes\\_t.html](http://terranova.blogs.com/terra_nova/2004/12/blizzard_goes_t.html). See also, Greg Sandoval, *Sony to Ban Sale of Online Characters from its Popular Gaming Sites*, CNet (Apr. 10, 2000), available at [http://www.news.com/2100-1017\\_3-239052.html](http://www.news.com/2100-1017_3-239052.html)

<sup>14</sup> See Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. Rev. 1047, 1062 (2005). Writer Julian Dibbell reported that during 2003 he was able to amass and then convert \$11,000 of virtual goods in U.S. currency by “playing” Ultima Online. Stamper supra n. 3. Julian Dibbell, *PLAY MONEY: OR HOW I QUIT MY DAY JOB AND MADE MILLIONS TRADING VIRTUAL LOOT* (Basic Books 2006).

<sup>15</sup> See Julian Dibbell, *The Life of the Chinese Gold Farmer*, N.Y. Times Magazine (Jun. 17, 2007), available at [http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html?\\_r=1&ex=1184817600&en=53bc942a077f47d6&ei=5070&oref=slogin](http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html?_r=1&ex=1184817600&en=53bc942a077f47d6&ei=5070&oref=slogin).

<sup>16</sup> Cory Ondrejka, *Escaping the Gilded Cage: User-Created Content and Building the Metaverse*, in *The State of Play: Law, Games, and Virtual Worlds* 158, 163 (Jack Balkin and Beth Noveck eds., 2006).

<sup>17</sup> In addition to the LindeX, other unofficial exchanges also exist. Linden Labs monitors the exchange rate and maintains a fairly constant rate of around L\$ 270 to \$1

Examples of unscripted worlds include Second Life, The Sims Online and There.<sup>18</sup>

While many people spend time in unscripted worlds as an escape from reality, a number of these worlds are beginning to look more and more like an alternate forum to conduct real-world activities. For instance, a host of businesses, including Nissan, IBM and Nike have established a presence in such worlds.<sup>19</sup> Numerous universities have set up virtual sites to promote themselves and to allow students to interact.<sup>20</sup> Even politicians have begun to establish a virtual presence.<sup>21</sup>

The extent and real-world value of some of these virtual economies is surprisingly large. For instance, a study from 2004 concluded that the Gross National Product for Everquest was \$135 million, or \$2,226 per capita.<sup>22</sup> It has also been estimated that annual real-world sales of virtual goods exceeded \$880 million in 2004.<sup>23</sup> Given the increasing popularity of virtual worlds, these figures are certain to grow.

Over the past several years, people have begun to amass significant virtual wealth, which has significant real world value. At least two people have been reported to have virtual wealth valued at over \$1

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U.S. dollar. See Camp supra n. 3 at 13 and Miano supra n. 3 at 10 for a discussion of the LindeX and other exchanges.

<sup>18</sup> Google is reportedly working on another unscripted virtual world in connection with Arizona State University. See, Chris Taylor, Google moves into Virtual Worlds, MoneyCNN.com (Dec. 14, 2006) available at [http://money.cnn.com/2006/05/11/technology/business2\\_futureboy\\_0511/index.htm?postversion=2006051215](http://money.cnn.com/2006/05/11/technology/business2_futureboy_0511/index.htm?postversion=2006051215); A Social Network for Google Earth?, <http://googlesystem.blogspot.com/2007/09/social-network-for-google-earth.html> (Sept. 23, 2007).

<sup>19</sup> See <http://gamesbrandsplay.com/> (describing Nissan's marketing of the Sentra in Second Life); Washington Post, IBM To Open Islands in Virtual World (Dec. 12, 2006); Allison Enright, How the Second Half Lives, Marketing News (Feb. 15 2007), available at [us.i1.yimg.com/us.yimg.com/i/adv2/pdf/brainfood/second\\_life.pdf](http://us.i1.yimg.com/us.yimg.com/i/adv2/pdf/brainfood/second_life.pdf).

<sup>20</sup> See, e.g., Andrew Johnson, Business and Education Test Online Virtual World's Real-World Potential, Wisconsin Rapids Tribune (Nov. 16, 2007) (predicting that the University of Arizona would have an operation Second Life site by the end of 2007) available at [http://www.wisconsinrapidstribune.com/apps/pbcs.dll/article?AID=/20071116/WR\\_T03/711160527/1844](http://www.wisconsinrapidstribune.com/apps/pbcs.dll/article?AID=/20071116/WR_T03/711160527/1844).

<sup>21</sup> See, Running For President In A Virtual World <http://www.cbsnews.com/stories/2007/04/02/politics/main2639476.shtml>, and the accompanying photo essay of the virtual headquarters of the different candidates.

<sup>22</sup> Castronova, supra n. 10 at 35.

<sup>23</sup> See Fairfield, supra n. 14 at 1062.

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million in U.S. currency.<sup>24</sup> Virtual world participants acquire their virtual wealth in a number of different ways, many of which are analogous to real-world wealth acquisition. In both game and unscripted worlds, people create their own goods, buy, sell and exchange virtual goods, earn salaries for working or receive gifts. Game worlds further allow participants to acquire goods as “drops,” i.e., rewards for completing some task.

The IRS has not sought to tax the acquisition of virtual income from purely in-world activities, though anyone who cashes out is clearly subject to tax on his gains. The question at issue here is whether and to what extent existing tax doctrine and policy support the conclusion people should be taxed on their virtual income, regardless of whether they cash out. Given the large (and growing) amounts at issue, this inquiry has morphed from a purely academic question to one with potentially significant real-world consequences for those who participate in virtual worlds. Indeed, depending on the conclusion, it could change the very nature of virtual reality.

### III. Existing Proposals For Taxing In-World Transactions

Those who have considered whether virtual income should be subjected to real-world taxation are generally hostile to the idea. While some mention taxation in passing,<sup>25</sup> two articles, one by Leandra Lederman and another by Bryan Camp, focus exclusively on this question. Lederman first undertakes a transaction-based, doctrinal analysis, which she ultimately jettisons for an intent-based policy approach that leads to the exclusion of most, but not all, virtual income. In contrast, Camp asserts that all virtual income is a form of imputed income and excludible from the tax base on that ground. In this Part, I briefly summarize and then assess their reasoning and proposals.<sup>26</sup> I

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<sup>24</sup> In 2006, Business Week reported on Second Life’s first millionaire (referring to the value in U.S. currency of her virtual wealth). See, Rob Hoff, Second Life’s First Millionaire, BusinessWeek.Com (Nov. 26, 2006, available at [http://www.businessweek.com/the\\_thread/techbeat/archives/2006/11/second\\_lifes\\_fi.html](http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html)). See also, David Naylor, Technology, Media & Telecoms: A virtual reality (Jul. 6, 2007), <http://www.legalweek.com/Articles/1030336/A+virtual+reality.html> (reporting that another Second Life participant claimed to have made over \$1 million from an initial \$10 investment).

<sup>25</sup> See, e.g., Castronova, The Right to Play, *supra* n. 3 at 204.

<sup>26</sup> Timothy Miano also considers this question in his forthcoming article Virtual World Taxation: Theories of Income Taxation Applied to the Second Life Virtual Economy, Miano, *supra* n. 3. He focuses exclusively on what he calls “commodified

find that neither approach comports well with existing doctrine or policy and that both raise serious administrative difficulties.

#### A. The Intent-Based Approach

Lederman proposes a bifurcated approach, based on the type of virtual world and transaction involved. For game worlds, she would adopt a pure “cash out” rule. For unscripted worlds, she would allow in-world barter transactions to go untaxed. Thus, barter would be taxed on a “cash out” basis. However, she would tax sales of virtual goods or services for virtual currencies. She would adopt these rules in spite of the conclusions one might draw from her doctrinal analysis. Instead, her proposal is based on the conviction that leisure activities should not be taxed, while profit-seeking activity should be.

This approach to the question of taxing in-world activities raises three questions. The first involves the propriety of her doctrinal analysis. The second involves the propriety of her policy not to tax leisure activity. The third involves the fit between her policy preference and her proposal and whether, as a practical matter, it can work as she supposes. I address each in turn.

##### 1. Doctrinal Analysis

Lederman’s doctrinal approach is transaction-based, in that it bases the appropriate tax treatment of virtual income on the type of transaction involved. She distinguishes between drops, sales and exchanges and attempts to place each of these types of transactions within existing tax categories. Absent modification by some overriding tax policy or administrative concerns, she contends that these categories should determine the appropriate tax treatment of the income generated through these transactions. While she ultimately concludes that existing doctrine should not govern here, her analysis provides a foundation for thinking about virtual income and therefore deserves attention.

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worlds” and in particular on Second Life. Given this limited scope, I do not separately discuss his article. Nonetheless, to the extent his views differ from Lederman’s or Camp’s, I mention those differences where appropriate. Similarly, in a short piece for the 2008 American Bar Association’s mid-year Tax Section meeting, Ted Seto proposed a method for assessing the taxability of virtual income, though he focused primarily on drops and the circumstances under which they might be taxable. Seto *supra* n. 3. As with Miano’s article, I discuss Seto’s reasoning and proposal where relevant.

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a. Drops

Drops are items acquired or self-created and are usually associated with game worlds. For example, a player who defeats a dragon might acquire a sword as a reward for his feat of derring-do. Lederman identifies three possible real-world income categories that drops might fall under, including (1) imputed income, (2) found items, and (3) prizes and awards.<sup>27</sup> Imputed income is generally excluded from the tax base. Found items are currently included in income if they represent a true windfall<sup>28</sup> but excluded if they are the result of significant effort on the taxpayer's part.<sup>29</sup> Prizes and awards are expressly included in the tax base under I.R.C. § 74. Lederman concludes that, as drops are typically obtained after significant effort on the part of a participant, they should be considered a species of found object and excluded from income on that ground. I believe this conclusion to be in error. Instead, as demonstrated below, drops should properly be considered prizes and subject to tax as such.

First, I concur with Lederman that drops cannot be considered imputed income.<sup>30</sup> Economists have long considered the question of imputed income and whether it should be subject to taxation. Joseph Dodge has identified two definitions typically used for imputed income:

- (1) the flow of satisfactions obtained by a taxpayer (which would include not only the value of satisfactions derived from owning and spending but also the value of leisure, sleep, a happy marriage, etc.), and
- (2) the market-equivalents of non-market economic activity (such as the value of self-grown crops and the rental value of self-owned assets, and possibly the value of self-performed services).<sup>31</sup>

Dodge criticizes the first definition as being too broad to be useful,

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<sup>27</sup> Lederman *supra* n. 3 at 1643-1650.

<sup>28</sup> Treas. Reg. § 1.61-14. But see, Lawrence A. Zelenak and Martin J. McMahon, *Taxing Baseballs and Other Found Property*, 1999 TNT 167-94 (arguing that the taxation of true windfalls is inappropriate and urging the Treasury Department to rescind this regulation).

<sup>29</sup> See, e.g., self-grown crops (Treas. Reg. § 1.61-4), fish caught by commercial fishermen, hunters' trophies and minerals. See Zelenak & McMahon, *supra* n. 28.

<sup>30</sup> Lederman *supra* n. 3 at 1644-1646.

<sup>31</sup> See 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*, 5 Fla. Tax. Rev. 685, 705 (2000) (hereinafter "Found Objects").

finding the second better because it focuses on the measurable benefit that would accrue from a market activity.

Regardless of the definition one chooses, drops fit poorly. Imputed income is the value someone could obtain if he entered the market and rented a good he owned or performed a service for someone other than himself. The real-world value of a virtual sword one obtains as a drop after battle with a dragon simply does not fit this definition. First, the value of the sword itself is different from the value one might obtain by renting the sword out.<sup>32</sup> Second, the value of the sword is different from the value of the self-performed services undertaken to obtain the sword.<sup>33</sup> Indeed, the value of the sword need not be imputed at all.

Second, I reject Lederman's argument that drops should be considered a form of "taken" item that is traditionally excluded from income.<sup>34</sup> Shortly after Mark McGuire hit his record-breaking home run, a controversy erupted regarding the proper tax treatment of a fan who was lucky enough to catch such a valuable ball. Larry Zelenak and Marty McMahan argued that the Treasury regulation including windfalls in income was wrong-headed, and they urged the Treasury Department to rescind it. In particular, they noted that other types of found objects, such as fish, hunting trophies and minerals were generally excluded from the tax base until sold or exchanged, and they argued that record setting baseballs should be treated no differently. Doctrinally, they argued that all types of found items were properly excluded from income as a form of imputed income.<sup>35</sup>

In response, Joseph Dodge rejected the notion that such items

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<sup>32</sup> The difference between the value of a good and the imputed value of owning a good can be seen in the following simple example. Assume someone owns a home. If the value of the home and imputed value of owning the home were the same, then one would tax homeowners on the full value of their homes year after year, assuming imputed income were in the tax base. Instead, such homeowners would be taxed only on the rental value of their homes, i.e., the money they could have earned from renting their homes that year.

<sup>33</sup> Arguably, the value of the good obtained could reflect the value of the self-performed services consumed in obtaining the good. However, if the values are equivalent, it is only fortuitous. For instance, assume a fisherman goes out and comes back empty handed. He has performed services for himself, but reaped no reward. This does not mean that the value of those services is \$0. Indeed, *ex ante*, he may have willingly paid someone to fish for him. Thus, the services have value apart from the good ultimately obtained. No one has suggested taxing the value of these services, which properly constitute imputed income.

<sup>34</sup> Lederman *supra* n. 3 at 1644.

<sup>35</sup> See Zelenak & McMahan *supra* n. 28.

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could properly be classified as imputed income. Instead, he distinguished between two types of found objects, those that represented a true windfall, i.e., were not the result of taxpayer efforts to obtain the item, and those that the taxpayer sought out and expended energy to obtain. He termed these “found” and “taken” objects, respectively and argued that “taken” objects are properly excluded from income because they represent an investment, and the value in excess of such investment represents appreciation, which is typically not subject to tax absent a realization event. Accordingly, he argued that “taken” objects, but not “found” objects, should be excluded from income until sold. Lederman argues that Dodge’s theory of “taken” items applies to drops because players exert significant and directed efforts to obtain them.<sup>36</sup>

While Dodge’s theory might explain why we tax true windfalls, but do not tax those who farm or fish upon their “taken” objects, it does not necessarily follow that drops are properly considered “taken” objects. Indeed, drops differ from “taken” objects in one significant way. Each example of a “taken” object is taken from nature. In contrast, drops are provided by a world’s creators as a reward for accomplishing a specific task. Accordingly, they fall squarely into the prize and award category, which the Internal Revenue Code explicitly taxes.<sup>37</sup>

The prize-like nature of drops may become clearer if one considers the issue in the context of a different type of on-line game. For instance, the website Worldwinner hosts competitions in a number of different real-world games, such as Scrabble, Boggle and Monopoly. Players purchase points, which they use to enter specific competitions. The winner has his account credited with a number of points, which he can then either cash out or use to keep playing.<sup>38</sup> It seems self evident that the award of points in this context is a prize or award for winning a Scrabble match. Certainly, if a real-world game show gave people money or other property for winning a real-world Scrabble match, the receipt would be considered a prize.<sup>39</sup> Winning a sword for completing some quest is no different.

One could certainly argue that prizes and awards should be excluded from income because they represent the fruits of a recipient’s

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<sup>36</sup> Lederman supra n. 3 at 1646-1648. Lederman also concludes that players would likely have no basis in their drops. Id. at 1648-50.

<sup>37</sup> I.R.C. § 74.

<sup>38</sup> For a discussion of Worldwinner and whether these prizes are taxable before they are cashed out, see Camp and Seto supra n. 3.

<sup>39</sup> I make no predictions regarding the network ratings such a game show might garner.

effort and should be considered a form of “taken” object. Participants may practice for years, first to get onto a show and then to win it. However, the same can be said for compensation. Indeed, prizes are more analogous to compensation than fishing in that one performs a task someone else sets forth and then receives from that person a reward.<sup>40</sup> Regardless, current doctrine clearly includes prizes and awards, and if one is to classify drops into an existing tax category, they are most properly defined as prizes and includible in the tax base absent some overriding policy or administrative concern.

#### b. Sales and Exchanges

Lederman next considers sales and exchanges of virtual goods in game worlds.<sup>41</sup> She takes a rights-based approach and concludes that the answer to the question of whether sales and exchanges can be considered taxable events under current law depends on the rights people have in their virtual currency and goods. If virtual items are considered property, she concedes that sales and barter exchanges are taxable events because they will likely be considered a realization event under the very low standard established in *Cottage Savings Ass’n v. Comm’r*.<sup>42</sup> In contrast, if virtual goods are not considered property, but rather are treated under a license theory, she contends that argument against taxation is stronger, noting that “transactions that amount to mere reallocation of possession of items in which all participants have use rights...do not constitute realization events and are thus not taxable.”<sup>43</sup>

This rights-based approach to sales and exchanges presents two difficulties. The first is administrative, in that this approach requires a

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<sup>40</sup> That the drops are provided by creators of virtual worlds also helps explain why drops cannot be considered imputed income. The presence of this third party reveals that the income is not imputed but the result of a market transaction that involves two sides. The recipient provides services or performs tasks in return for the world’s creator providing the drop. That no money changes hands does not make the value received imputed.

<sup>41</sup> Lederman supra n. 3 at 1650-1655.

<sup>42</sup> 499 U.S. 554 (1991). In *Cottage Savings*, the Supreme Court established a very low threshold for determining whether a realization event had occurred. While it worked to the government’s detriment in that case, it has since proven a powerful tool for the IRS to claim that exchanges are taxable.

<sup>43</sup> Lederman supra n. 3 at 1658. Even if licenses are considered property, she contends that the exchange of licenses might not constitute a realization event, even under the lax *Cottage Savings* standard.

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case-by-case analysis and could lead to different tax results for identical transactions in different worlds or possibly different tax results for identical transactions in the same world, where participants reside in states with differing state law. The second is substantive, in that the case for non-taxation if people are deemed to have use rights is weaker than Lederman suggests.

The rights-based approach raises three administrative difficulties. First, determining whether to tax in-world transactions requires a difficult and potentially costly case-by-case analysis of the rights involved. Each world has its own rights regime, usually contained in a EULA or TOS. Thus, this approach requires taxing authorities to determine the rights attendant to each world before they can determine the appropriate doctrinal answer. This would be difficult enough if the EULAs and TOSs were the last word on participants' rights. However, disputes are likely to erupt, and it seems inevitable that determining participant rights will require costly and time consuming litigation as is the case in the lawsuit between Linden Labs and a user currently pending in Federal District Court in Pennsylvania to determine the parties' respective rights to virtual property in Second Life.<sup>44</sup>

Because these rights rest on contract, they are subject to change. Thus, if a court were to issue a ruling adverse to the interests of a game creator or its users, it seems likely that the creator will revise the EULA or TOS, setting off another round of litigation to determine precisely what rights the new documents create, and consequently, what the proper tax ramifications of in-world transactions should be. As a result, the effort could be not only costly and time-consuming, but also never ending, as the IRS and virtual world participants would likely engage in game of cat and mouse as participants strove to avoid taxation.

Second, basing taxation on the underlying rights people have in their virtual goods gives world creators significant discretion to determine tax consequences by changing those rights to shield transactions from tax. The tax code routinely gives taxpayers discretion to structure their transactions to avoid adverse tax consequences.<sup>45</sup> However, at some point, taxpayers elevate form so far above substance that the IRS challenges the transaction, using the economic substance,

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<sup>44</sup> Bragg v. Linden Research, Inc., Civil Action No. 06-4925.

<sup>45</sup> The most obvious example can be seen in the corporate reorganization provisions, which allow tax free reorganizations, provided one follows the strict requirements of the statute. See I.R.C. § 368. Other examples include leasing in lieu of buying to take advantage of the deduction rules. See, e.g., I.R.C. §§ 162 and 263.

form over substance, and sham transaction doctrines to look past the formal structure or apparent rights to the underlying reality to assess its tax consequences.<sup>46</sup> Under these principles, it is not clear whether labeling rights in virtual goods as property or use rights should or will govern the tax treatment of in-world transactions.

Finally, a rights-based approach leads to the possibility that the tax results of seemingly identical transactions may differ depending on the rules that apply to the world in which the transactions take place. Or, given that laws differ from state to state, the tax results for identical transactions that happen within the same world may differ depending on the state in which the parties to the transaction reside. Federal tax laws are supposed to be uniform, and the possibilities for discrepancies under this doctrinal approach are problematic.

Of course, the possibility of different tax results for identical transactions is inherent in the Federal tax law, in that federal income tax consequences routinely flow from state property law. Where state laws vary, federal income tax consequences can vary, leading to different tax results for seemingly identical behavior.<sup>47</sup> Nonetheless, in the interests of uniformity and despite the general rule that state property law governs, Congress, the IRS and the courts have routinely taken steps to ensure that uniform tax laws apply, regardless of the underlying state law and regardless of how taxpayers choose to structure their transactions.<sup>48</sup> While not every situation calls for uniform federal tax

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<sup>46</sup> Examples of situations where the IRS has challenged the form of a transaction include sales disguised as leases, see, e.g., *Starr's Estate v. Comm'r*, 274 F.2d 294 (1959) and dividends disguised as salary, see, e.g., *Exacto Spring v. Comm'r*, 196 F.3d 833 (7<sup>th</sup> Cir. 1999), rev'g *Heitz v. Comm'r*, T.C. Memo.1998-220. For an overview of the doctrines courts have used, see Allen D. Madison, *The Tension Between Textualism and Substance-Over-Form Doctrines in Tax Law*, 43 S. Clara L. Rev. 699 (2003); Joseph Bankman, *The Economic Substance Doctrine*, 74 S. Cal. L. Rev. 5 (2000).

<sup>47</sup> For instance, whether payments set forth in a divorce decree are considered alimony may depend on whether state law determines that payments end upon the death of the recipient. See Pub. Law No. 99-514, 99<sup>th</sup> Cong., 2d Sess. § 1843(b) (1986) (retroactively removing a requirement that divorce decrees explicitly provide that payments would not continue post death, thereby permitting state laws to control where such decrees were silent).

<sup>48</sup> For instance, in *Poe v. Seaborn*, 282 U.S. 101 (1930), the Supreme Court held that spouses in states with community property could split their income because both spouses had equal rights to the income, regardless of who earned it. This option was not available to spouses living in non-community property states, creating a patchwork of different rules for people in otherwise identical situations. A number of states

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treatment, regardless of state property law labels, the taxation of in-world transactions seems to raise the issues and complexities that would warrant such treatment.

To be sure, Lederman avoids the administrative problems described above by arguing that a policy against taxing leisure activities warrants overriding the doctrinally correct answer. However, as described below, it is not at all clear that it is appropriate to distinguish for purposes of determining whether something should be included in income between those at leisure and those seeking profit. If one rejects the leisure/profit distinction as overriding doctrine, one is stuck with the arduous task of parsing the myriad worlds and their rights regimes, as well as any legal precedent that might bear on the question of how the tax law currently treats such transactions.

The second difficulty with a rights-based approach is substantive. It is not at all clear that the tax treatment of exchanges and sales should or will in fact differ depending on whether people are deemed to have

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considered and did adopt community property laws to take advantage of the ruling in *Seaborn*; some did not. In 1948, Congress permitted income splitting between spouses by adopting rate schedules for the married filing jointly category. In essence, Congress created a uniform rule for all married people, regardless of the underlying state law, thereby avoiding the patchwork system that was slowly developing as a result of *Seaborn*. For a discussion of how the income-splitting provisions came about, see Carolyn C. Jones, *Split Income and Separate Spheres: Tax Law and Gender Roles in the 1940s*, 6 *Law and History Review* 259 (1988).

In *Lyeth v. Hoey*, 305 U.S. 188 (1938), the Supreme Court disregarded state law regarding what qualified as an inheritance to ensure that those who received inheritances as part of a settlement could avail themselves of § 22(b)(3) of the Revenue Act of 1932 (now codified as I.R.C. § 102(a)), which permitted recipients to exclude inheritances from income. In that case, the IRS argued that Massachusetts state law did not consider settlements to be inheritances. Accordingly, they sought to tax the receipt of a settlement. The court overrode the IRS's position and construed the language of § 22(b)(3) to supersede state law definitions, thus creating a more uniform rule.

Finally, the IRS prevailed in *Drye v. U.S.*, 528 U.S. 49 (1999), on the claim that the tax statute should be read more broadly than and effectively override state property law. Here, a taxpayer attempted to avoid a federal tax lien on property he was to inherit by disclaiming it. The taxpayer argued that he had no interest in the disclaimed property under state law and therefore the tax lien could not apply. The Supreme Court disagreed, noting "we look initially to state law to determine what rights the taxpayer has in the property the government seeks to reach, then to federal law to determine whether the taxpayer's state-delineated rights qualify as 'property' or 'rights to property' within the compass of the federal tax lien legislation." 528 U.S. at 58.

property rights or use rights in their virtual goods. Lederman concedes that, if one has property rights in one's virtual goods, then an exchange will likely count as a realization event under the low standard established under *Cottage Savings*.<sup>49</sup> Accordingly, unless such exchanges qualify as I.R.C. § 1031 exchanges or under some other non-recognition provision, such exchanges create taxable income.<sup>50</sup> This result makes sense, as the exchange of items would surely be subject to tax if one party sold his virtual asset to the other for U.S. currency, who then used the cash to purchase a virtual asset from the first party. The form of barter cannot obscure the underlying economic substance of a mutual sale and purchase.

In contrast, Lederman suggests that, if people have use rights in their assets, those who exchange virtual goods may have a “strong argument that in-game trades are not taxable.”<sup>51</sup> First, she notes such exchanges do not constitute a realization event because property has not been exchanged. Accordingly, no tax is due on the exchange of such rights. Second, she cites two of real-world examples where people trade use rights without incurring income. Neither of these arguments is compelling.

Property is often described as a bundle of rights, distinct from any

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<sup>49</sup> 499 U.S. 554 (1991).

<sup>50</sup> By its terms I.R.C. § 1031 applies to “property held for productive use in a trade or business or for investment.” Thus, any claim that virtual property qualified for § 1031 treatment would be inconsistent with the notion that it should escape taxation because those exchanging property are engaged in leisure activities. And, while § 1031 certainly has its supporters, the theoretical justification for such a rule seems weak. For a discussion of the history of I.R.C. § 1031, see Marjorie Kornhauser, Section 1031: We Don't Need Another Hero, 60 S. Cal. L. Rev. 397 (1987). Accordingly, I would be hesitant to extend it to cover virtual goods or beyond the trade and business or investment limitation.

Even if one wanted to apply the like-kind doctrine to virtual exchanges, it is not clear what constitutes like-kind in this context. Several possibilities exist. For instance, all virtual property could be seen as like-kind with all other virtual property. Thus, one could swap any kind of property, or even virtual currency for property, and take advantage of the non-recognition provisions. The argument that all virtual property is like-kind because it is nothing more than code proves too much, as the same can be said for real-world property, all of which is made of atoms. One could limit the like-kind rules for virtual property to mimic the same rules for tangible property. Thus, virtual weapons could be seen as like-kind with all other virtual weapons but not with other items. Finally, one could adopt a stricter rule that would limit the categories even further, such that virtual swords would be deemed like-kind only with other virtual swords.

<sup>51</sup> Lederman supra n. 3 at 1650-1655.

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underlying asset. Thus, even if people are deemed only to have use rights to their virtual goods, those rights can nonetheless be considered a form of property. Indeed, as Bryan Camp explains, they are considered a type of property called a “chose in action.”<sup>52</sup> The exchange of such property should lead to realization under the lax *Cottage Savings* standard and therefore to taxation.

Assuming use rights are construed not to be property under state law, the IRS could well seek to apply some variation of the substance-over-form doctrine to find that the state rights labels have no bearing on the federal tax consequences of these types of trades or exchanges. While the efficacy of such a strategy would be in doubt, the IRS and courts have been sufficiently successful in their efforts to bring about uniform tax treatment and prevent tax avoidance that it cannot be completely discounted.

Accepting, *arguendo*, that use rights are not a form of property, that even if they are, the exchange of use rights does not constitute a realization even, and that the IRS would not prevail on a substance-over-form argument, the argument for non-taxation may nonetheless falter. It is simply not true that all exchanges of use rights escape taxation. For example, assume Andy has a license to use TurboTax, while Betsy has a license to use Quicken. If Andy charges Betsy \$10 to use his copy of TurboTax, he surely would have to pay tax on his gain. Similarly if Betsy were to charge Andy \$10 to use Quicken, she would be taxed on her gain. If instead of engaging in a cash transaction, Andy and Betsy agree to exchange use rights, they should not be allowed to avoid taxation, even in the absence of any realization event. It is not clear why on-line exchanges of such rights should escape taxation.

Lederman cites to two real-world examples where people trade use rights but are not subject to tax. The first involves co-workers who trade equipment owned by their employer. The second involves passengers on a cruise who trade deck chairs.<sup>53</sup> Non-taxation in these examples seems correct, and these examples raise the question whether exchanges of use rights in the virtual world setting should be taxed.

In determining whether these examples present a model one should follow in virtual reality, one must consider why we don't tax such exchanges. If it is for theoretical reasons, then non-taxation of in-world transactions may also be appropriate. However, if it is for fact-based or practical reasons, these examples may be distinguishable. As

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<sup>52</sup> Camp *supra* n. 3 at 54-55.

<sup>53</sup> Lederman *supra* n. 3 at 1653-4.

demonstrated above, if one considers the cash flow implicit in the exchange of use rights, those who exchange use rights have engaged in a mutual sale or rental of such rights. Collapsing the different steps of the transaction should not avoid taxation.<sup>54</sup> Accordingly, the conclusion that we should not tax the exchange of office furniture or deck chairs appears to stem from practical limitations and circumstances that may or may not exist in the exchange of virtual goods.

As a legal matter, the rights people have to use office furniture and deck chairs may differ in nature from their rights to virtual goods, rendering the analogy inapt. Even if the rights are nominally identical, factual differences may lead to different tax results. For instance, no market for office furniture use or deck chairs exists, creating significant valuation issues. Non-taxation in such cases makes practical and administrative sense. In contrast, a real, functioning market for virtual goods exists. Thus, it is relatively easy to determine the value of use rights to virtual goods. Moreover, because the market exists, it is possible to convert one's use rights in virtual goods into real-world property or currency. The inability to do so in the deck chair context may influence our thinking on how best to treat that barter exchange.

In addition, cruises are of a set, limited duration. Thus, the limited nature of the license is highlighted. Virtual worlds have no set end. While people technically have only use rights, they are not expected to give up those rights on a set schedule, as happens when the cruise ends. The universe of people with whom one may trade is also limited. People on cruises can only trade with others on the same cruise. They cannot hold seats for people getting on the next cruise. These restrictions significantly limit the market for the deck chairs. In contrast, virtual worlds are open. Thus, even though one would only trade with someone in-world, new people are joining constantly.

Finally, while the rights at issue might legally be termed use rights, if the creators of virtual worlds effectively cede control over the virtual goods to the players, the use rights begin to function as property rights, despite the label. It seems likely, or at the very least possible, that employers and cruise companies exercise significantly greater control over their property than do the creators of virtual worlds, and this

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<sup>54</sup> If the exchange is deemed a sale, the question of basis arises, but as Lederman notes in her consideration of whether people have basis in the virtual goods by virtue of the monthly fee they pay to participate in any given virtual world, it seems inappropriate to allocate any of the cost of the cruise to the use right. Lederman *supra* n. 3 at 1648. If the exchange is seen as a rental, the issue of basis does not arise.

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difference may affect our sentiments regarding taxation.

In sum, the theoretical arguments against taxing the exchange of use rights fail, although for practical reasons some such exchanges are and should be non-taxable.

## 2. Policy Analysis

Lederman's doctrinal approach and analysis lead her to conclude that virtual income earned in most game worlds, whether as drops, sales or exchanges, will likely be considered outside the tax base. In contrast, most sales and exchanges in unscripted worlds, which provide users greater rights in their virtual creations, will be subject to tax. However, the results ultimately depend on how courts resolve the rights questions in each world. In the final section of her article, Lederman explores the implications of her doctrinal analysis using the traditional measures of administrability, efficiency and equity.<sup>55</sup> She also offers an overarching tax policy objective that she contends should override the doctrinal analysis, noting: "...in general, online activity generating a profit should bear taxation, while mere entertainment value should not have federal income tax imposed on it."<sup>56</sup>

In light of this further analysis, on the theory that people involved in such worlds can be presumed to be engaged in leisure activity, she concludes that virtual income from game worlds should be excluded from the tax base, regardless of the proper doctrinal result. For the same reason, she would not tax barter transactions in unscripted worlds, regardless of the doctrinally correct result.<sup>57</sup> However, she would tax sales of virtual goods for virtual currency, which she claims are more

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<sup>55</sup> Lederman *supra* n. 3 at 1658-70. As part of this analysis, she asserts that any tax on such virtual income would likely be regressive and difficult to enforce without imposing reporting requirements on game owners. In the interests of space, I do not address the arguments regarding the purported regressive nature of a tax on virtual income.

<sup>56</sup> *Id.* at 1659. See also Lederman *supra* n. 3 at 1663 ("From a policy perspective, the right result is not to tax mere entertainment but to tax profit.").

<sup>57</sup> She writes:

Trades of copies of items...are likely to be focused on improving the user's experience, not on profit, because there is little profit margin to be obtained in obtaining a single copy of an item in what typically is an arm's length exchange. These item swaps that do not involve Lindens therefore should not be taxed. Such transactions pose little threat to the tax system, and taxing them would pose issues of administrability. *Id.* at 1665.

likely to occur in a profit seeking context.<sup>58</sup>

This policy analysis and proposal suffers from two distinct problems. First, the notion that we not tax profits generated from leisure activities is inconsistent with existing policy and practice. As described more fully below in Part IV.A, it also flies in the face of the ability-to-pay premise that underlies the tax system. Second, accepting the policy, *arguendo*, the proposal seems ill fitted to achieve this policy goal.

The policy of not taxing economic profits generated during leisure activities has a certain appeal, especially where those profits may never be used outside the leisure context in which they are generated. However, this policy is inconsistent with existing policy and practice. A taxpayer's intent is simply not relevant when it comes to questions of what should be included in gross income.<sup>59</sup> For instance, a child playing with trading cards would have income on the sale or exchange of a card, regardless of whether he intended to make a profit or simply complete his collection.<sup>60</sup> The child has not converted his gain to real-world currency. Yet, he is subject to tax.

Lederman attempts to justify her proposed policy by reference to the Haig-Simon's income definition, which looks to consumption and a change of wealth as the proper measure of income. She contends that "it is inappropriate under an income tax to impose a tax directly on consumption because, given that the funds spent on that consumption

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<sup>58</sup> The sale of virtual items for Lindens could be seen as a barter of one virtual good (say a dress) for another (Lindens), such that both the seller and buyer could arguably be subject to tax. Lederman rejects this approach because, in her view, purchasing something with Lindens is likely to reflect consumption and should not be seen as "selling" Lindens in a taxable transaction. *Id.* at 1669-70.

Lederman notes that any decision not to tax in-world sales would likely spur such sales, creating a bigger tax problem than currently exists. Moreover, given the ability to exchange virtual currencies for real-world ones in most unscripted worlds, liquidity concerns have no purchase. Intentional tax evasion might also proliferate, as people link real world transactions to virtual exchanges.

<sup>59</sup> *Camp supra n. 3* at 47 ("The reach of §61 does not depend on intent.") and 61-62 ("intent of the taxpayer is irrelevant to the search for an administrable legal concept of gross income."). This is not true on the deduction side of the ledger. The deductibility of expenses depends upon whether they are personal (not deductible under I.R.C. § 262), expenses incurred in pursuit of a trade or business (deductible under I.R.C. § 162) or expenses incurred in pursuit of a hobby (deductible under I.R.C. § 183, but only to the extent of gains from that activity).

<sup>60</sup> *Camp supra n. 3* at 61-62. By its own terms I.R.C. § 1031 would not apply to a child trading baseball cards, as we are supposing he has no intent to make a profit, and § 1031 requires that property be held for investment.

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were not deductible, taxing the consumption value would effectively tax the activity twice.”<sup>61</sup> Thus, where in-world barter is “consumption-oriented,” as opposed to “profit-oriented,” no tax should be levied.<sup>62</sup>

The difficulty with this argument is that taxing barter does not represent a tax on consumption. Instead, it is a tax on an accession to wealth that was delayed by virtue of the realization requirement. Thus, taxing barter transactions does not impose a separate, double tax on consumption. Moreover, even if it did, this logic would apply equally to barter exchanges of real-world property, where the goal was consumption, rather than profit. For instance, if Catherine trades her appreciated surfboard for Darcy’s appreciated hang glider, both are pursuing consumption. Under Lederman’s analysis, no tax should be due. This is clearly contrary to existing law, as Lederman herself concedes.<sup>63</sup>

Accepting, *arguendo*, that it is appropriate not to tax people for their leisure activities when such activities do not ultimately lead to real-world wealth, the propriety of the proposal depends on its ability to differentiate between those seeking leisure and those seeking to make a profit. Unfortunately, intent is quite difficult to discern, and any rule will likely be both over- and under-inclusive, taxing some who should go untaxed, and failing to tax some who should be taxed. The question here is whether this proposal is too inaccurate or susceptible of significant abuse. I believe that it is both, at least with regard to unscripted worlds.

Lederman’s proposal to adopt a cash-out rule for game worlds seems appropriate given her policy goals. While I am unaware of any empirical study on the issue, it seems correct to say that most people who participate in game worlds are there to play. While some small subset of people might be attempting to hoard virtual gold in the hopes of getting rich,<sup>64</sup> the number is likely, at least for now, to be quite small.<sup>65</sup> In addition, the creators of most game worlds take significant

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<sup>61</sup> Lederman *supra* n. 3 at 1659.

<sup>62</sup> *Id.* at 1663.

<sup>63</sup> *Id.* at 1624.

<sup>64</sup> See Dibbell *supra* n. 14 (reporting that during 2003 he was able to amass and then convert \$11,000 of virtual goods by “playing” Ultima Online); Dibbell *supra* n. 15 (describing the practice of gold-farming); Daniel Terdiman, *THE ENTREPRENEUR'S GUIDE TO SECOND LIFE: MAKING MONEY IN THE METAVERSE* (2007); Robert Freedman, *HOW TO MAKE REAL MONEY IN SECOND LIFE* (2007).

<sup>65</sup> According to Edward Castronova, so long as it is possible to cash out, the number of people engaged in more than play is likely to increase over time, as the

steps to ensure that the walls between reality and their worlds remain strong. Blizzard Entertainment, the creator of World of Warcraft, and Sony, the creator of Everquest, have banned sales outside the context of the worlds to protect the integrity of the games, threatening to punish those who violate the rules.<sup>66</sup>

Thus, even if some small minority may play with the sole purpose of making virtual money that they can later convert into real-world currency, the games are specifically designed for leisure, the rules are written to preclude real-world profit seeking activities, and those rules are actually enforced. Accordingly, the possibility and consequences of misclassification of taxpayers, by allowing them to defer taxation until they cash out, seem small. If the goal is not to tax leisure activities, a cash out rule for game worlds seems reasonable.

Lederman's proposed rules for unscripted worlds are far more troubling. In calling for a "cash out" rule for barter exchanges but taxation for in-world sales, she suggests that those who barter are engaged in leisure, while those who sell are not. This claim is difficult to defend. First, as Lederman acknowledges, it seems likely that some people buying and selling items are engaged solely in leisure activities.<sup>67</sup> This is precisely what one would expect. Currencies exist to facilitate trade because it may not be possible to find someone who has what you desire and who also desires what you have. Even if one finds such a person, trading may not be possible if the goods each person has are of different value. Thus, the likelihood that those who buy and sell goods are engaged in play is quite high. As a result, this proposal would subject to tax a large number of people who should not be taxed.

Second, it is not clear that the majority of those engaged in barter are engaged in leisure activity. Lederman uses an example of someone exchanging a copy of a T-shirt for a copy of some virtual jeans.<sup>68</sup> It is not clear that this example is emblematic of most barter exchanges, thus warranting an exclusion from income of all such exchanges. For instance, assume that the real Levi Company (Levi) opened a virtual store, selling virtual jeans. Further assume that Levis has two goals. The first is to earn Lindens, which it can then exchange for dollars or spend on in-world advertising. The second is simply to advertise by

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profit-seeking meme displaces the leisure meme. Castronova, *The Right to Play*, supra n. 3 at 199-200. Assuming he is correct, at some point the underlying reality may change sufficiently that a cash-out rule will no longer be appropriate for game worlds.

<sup>66</sup> See supra n. 13.

<sup>67</sup> Lederman supra n. 3 at 1666.

<sup>68</sup> Id.

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encouraging people to clothe their avatars in virtual jeans.

Next, assume that Levi opens a “second hand” store and offers to exchange virtual jeans for other virtual clothing that it could sell at this store. Finally, assume that Edith, who has made a virtual sweater for her avatar, decides to trade it for a pair of virtual 501s. This barter exchange would entail one party seeking to make a profit and the other seeking to have fun.<sup>69</sup> It is not hard to imagine barter transactions where both parties seek to make a profit. For instance, Edith may well be dressing not for a virtual party, but rather in an effort to earn currency that she can later cash out and use in the real world. Absent some empirical study to support the division between those enjoying leisure activities and those seeking profits, it is not possible to evaluate whether the proposal accomplishes the stated policy goal.

Even if we could conclusively demonstrate that most barter transactions currently fell on the leisure side of the line, while most sales fell on the profit side, adopting a rule that would tax one but not the other would almost certainly lead to a dynamic response. Those seeking to earn a profit would structure their transactions to receive goods instead of currency to avoid taxes. Indeed, one can imagine participants in virtual worlds designating some good to serve as an alternate virtual currency to avoid taxation. Such a rule would impose significant complexity and inefficiency on the virtual world. And, it would lead to a (virtual) reality completely inconsistent with the factual assumption underlying the non-taxation of barter transactions. As a result, Lederman’s proposal for unscripted worlds will likely fail to accomplish the policy goals that underlie it.<sup>70</sup>

### 3. Conclusion

In sum, both Lederman’s doctrinal and policy approaches are problematic. She places drops in the wrong tax category. Her treatment of sales and exchanges requires difficult and time consuming analysis that depends on the types of rights people are deemed to have in their

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<sup>69</sup> In fact, Levi could be seeking to make a virtual profit or to increase its real world profits. For instance, one goal may be to gather goods in trade, sell them and then cash out. Another may be to generate real-world sales of Levis by “advertising” them on willing avatars. Regardless, Levi would be seeking a profit and should be subject to tax under the theory Lederman advances.

<sup>70</sup> Lederman notes that barter transactions present valuation problems that sales avoid. Lederman *supra* n. 3 at 1663-4. However, that issue is distinct from the policy issue of whether leisure should be taxed.

virtual goods, leading to the possibility that identical transactions will yield different tax results, depending on the world involved or the state in which the players reside. It also leads to the possibility that the government and creators of virtual worlds will embark on a game of cat and mouse, as game creators seek to modify the rights they confer to affect their desired tax results. Substantively, the distinction she attempts to draw between the exchange of property versus use rights finds less support than she suggests.

Lederman's policy of not taxing those engaged in leisure is inconsistent with current tax law and raises a host of practical problems, namely the difficulty of determining who is engaged in leisure and who is not. Even accepting this policy goal, her proposal to tax sales in unscripted worlds, while allowing exchanges to go untaxed, seems ill-suited to the task of separating those seeking profit from those seeking leisure. Moreover, it is susceptible of manipulation, such that, even if it were appropriate *ab initio*, the dynamic response to such a rule would soon render it inadequate.

#### B. The Imputed-Income Approach

Bryan Camp proposes a different approach to the question of whether the government should tax virtual income. He contends that income generated through in-world activity constitutes imputed income and therefore falls outside of the current doctrinal definition of gross income.<sup>71</sup> He also contends that virtual income is analogous to casino chips, which appear to have a cash out rule. Finally, Camp makes a policy-based argument that virtual income should be excluded because a "magic circle" or "fourth wall" separates virtual reality from our own. He recognizes that these boundaries might one day crumble, leading to the taxation of such income. He posits that this will occur when activities in-world displace real-world economic activity, as evidenced by real-world businesses accepting virtual currency.<sup>72</sup>

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<sup>71</sup> Camp *supra* n. 3 at 60-69.

<sup>72</sup> Camp expressly sets aside a number of questions that might arise if virtual activity were considered taxable, including whether someone might be allowed deductions for on-line activities because they qualify as a trade or business under I.R.C. § 162 and how the hobby loss rules of I.R.C. § 183 might apply. Camp, *supra* n. 3 at 14, fn. 34. He also sets aside questions of how one should report income earned from cashing out and what the consequences of factual distinctions or pending legal issues, including questions of whether one is selling property, a copy of a copyrighted work, a license, etc., might be. *Id.* at 70-71.

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This approach avoids the case-by-case analysis required by the intent-based approach described above, as the tax result does not depend on the type of transaction involved or the kind of legal rights one has in one's virtual property and currency. Rather, it allows for one rule, applicable to all virtual worlds, and imposes tax only when someone cashes out, thus ensuring we know the true market value of the virtual goods. It also has the virtue of keeping the tax man out of the virtual universe, a result most virtual-world creators and participants would cheer.

Nonetheless, this approach too suffers from a number of problems. First, and foremost, as described below, virtual income fits poorly into the imputed income definition. Second, the analogy to casino chips is strained. Finally, determining when the boundaries should be deemed sufficiently porous so as to warrant taxation of in-world transactions creates a host of administrative problems.

### 1. Doctrinal Analysis

Camp begins his doctrinal analysis by conceding that, absent some intervening doctrine, virtual income should be included in the tax base because it represent a clearly realized accession to wealth.<sup>73</sup> He offers two justifications for the non-taxation of virtual wealth. First, he asserts that virtual income should be considered imputed income and excluded from the tax base as such.<sup>74</sup> He contends that trading of virtual goods in-world are “not normal market transactions but represent self-provided services or, at most, enjoyment of self-owned property.”<sup>75</sup> Second, Camp argues virtual income is analogous to the casino chips in *Zarin v. Comm’r*,<sup>76</sup> which the Third Circuit held represented an opportunity to

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<sup>73</sup> Camp, supra n. 3 at 47.

<sup>74</sup> Id. at 44 (“the concept of imputed income doctrine provides the appropriate protections for taxpayers in all virtual worlds and, more importantly, tells us at what point in-world transactions ought to be taxable.”).

Camp identifies three possible limitations that can affect whether an item should be considered income for Federal tax purposes. They include: (1) Difficulty of valuation, which he calls “Priceless;” (2) Realization, which implicates timing and is often associated with liquidity concerns; and (3) Imputed Income, which implicates both difficulty of measurement and a level of government intrusiveness that would be unacceptable. Camp concludes that neither the priceless nor realization limitations would bar the taxation of virtual income. Instead, he concludes that “[i]t is the concept of imputed income that draws the proper line.” Id. at 49-61.

<sup>75</sup> Id. at 60.

<sup>76</sup> 916 F.2d 110 (3<sup>rd</sup> Cir. 1990).

gamble and not in and of itself money. Accordingly, no tax should be due until someone cashes out either his chips or his virtual income.

While these arguments may have some initial appeal, on closer examination they fail. Virtual wealth acquisition fits poorly into the category of imputed income, and the facts and legal questions at issue in *Zarin* are sufficiently distinguishable that the analogy between casino chips and virtual wealth fails.

Camp defines imputed income as “a flow of satisfactions from...goods and services arising out of the personal exertions of the taxpayer on his own behalf”<sup>77</sup> and describes the policy reasons for excluding such income. With regard to services, taxing self-performed services would create a strong incentive for people not to perform them. At its most extreme, taxing self-performed services could lead to health issues, as people might refrain from cleaning their bathrooms or refrigerators for fear of being taxed. Despite these concerns, Camp notes that the strongest policy reasons for not taxing imputed income from services are practical. The services at issue occur outside the marketplace, and it is difficult to determine their value. Moreover, “the sheer volume of small dollar transactions would create an administrative nightmare for taxpayers and the IRS alike,”<sup>78</sup> requiring “intrusive oversight” that would simply be unacceptable to most people. These same problems exist with respect to imputed income from property.<sup>79</sup>

As noted above in connection with Lederman’s transaction-based approach, people acquire their virtual wealth in a number of different ways. Thus, it is not appropriate simply to classify it all as imputed. Rather, one must consider each separate means of acquisition to determine whether it fits into the category of imputed income. As demonstrated below, most means of virtual wealth acquisition fit poorly into this category because one need not impute a value to benefits that would have accrued from some hypothetical market transaction. Instead, virtual world participants actually receive items of discernable economic value for engaging in activities or transactions with other people or the world’s creators. Simply put, there is nothing imputed about this income.

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<sup>77</sup> Camp supra n. 3 at 37, quoting Donald B. Marsh, *The Taxation of Imputed Income*, 58 Pol. Sci. Q. 514 (1943).

<sup>78</sup> Id. at 38.

<sup>79</sup> Camp notes that valuation problems could possibly lead to arbitrary enforcement and create enforcement problems. Id. at 43. Moreover, the imputed value of the property is likely to vary over time. For instance, the rental market for property often fluctuates with the value of housing and home loan interest rates.

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First, the question of initial acquisition. Setting aside purchases and other exchanges, people in virtual worlds acquire goods by creating them, finding them, or winning them after some contest. The latter two means of acquisition are generally referred to as “drops.” As for self-created items, Camp correctly notes that in the real-world such items are generally not included in the tax base. For instance, farmers, fishermen and artists are not taxed when they grow crops, catch fish or create a new work of art.<sup>80</sup> Rather, they are taxed upon disposition. Self-created assets are often talked of as a form of imputed income.<sup>81</sup> Arguably, the value of the asset reflects the value of the self-performed service. However, as explained above, an asset’s value is different from the asset itself, and categorizing self-created assets as imputed income seems wrong.<sup>82</sup>

Dodge offers a different explanation for excluding self-created items from income, contending that such property reflects an investment, a means to making profit, but not the profit itself.<sup>83</sup> An even more straight-forward justification for exclusion is that there has been no realization. Self-created assets are simply fruit on the metaphorical tree. Until the fruit is separated from the tree, i.e., a market transaction occurs, no realization occurs, and taxation is inappropriate.

Turning next to drops.<sup>84</sup> As described above in Part III.A.1.a, drops too do not fit well into the traditional definition of imputed income. Imputed income is the value someone could obtain if he entered the market and rented a good or performed a service. In other words, it is imputed. The value of a drop is not imputed. Drops occur when someone receives something of value from the world’s creator for performing a task. Thus, the need for imputation does not exist.<sup>85</sup>

Lederman argues that drops fall under Dodge’s theory of “taken” items because players work hard to acquire them, just as fishermen work

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<sup>80</sup> The rules for taxing cash-method farmers on their crops can be found in Treas. Reg. § 1.61-4(a).

<sup>81</sup> See, e.g., Dodge, Found Objects, supra n. 31 at 705.

<sup>82</sup> See Part III.A.1.a, supra.

<sup>83</sup> Dodge, Found Objects, supra n. 31 at 694.

<sup>84</sup> As noted above, drops typically occur in fantasy game worlds. However, they are not limited to such worlds. See Camp & Seto supra n. 3 (discussing Worldwinner.com).

<sup>85</sup> While one could argue that the value of the good received reflects the value of self-performed services performed to obtain the drop, the value of the good received may well be different from the imputed value of the services. See supra Part III.A.1.a.

hard to acquire their catch.<sup>86</sup> In contrast, I argue that drops are properly considered prizes. Whatever one's conclusion regarding the true nature of drops, it seems that Camp's contention that drops are a form of imputed income is surely wrong.

I turn next to situations where people simply hold their virtual goods. In such cases, people clearly derive some benefit from holding those goods. Indeed, the value of that benefit can be imputed by considering what the person would have received if he had entered the marketplace and rented the good to someone else. This benefit clearly fits the definition of imputed income. Consistent with the treatment of all other types of imputed income, the benefits that flow from the ownership or possession of virtual goods or the performance of services for oneself in-world should not be subject to taxation, and no one has suggested taxing this type of income.

Finally, consider in-world sales and exchanges of virtual goods. Accepting, *arguendo*, that the acquisition or holding of virtual goods gives rise to imputed income, it does not follow that the exchange or sale of virtual property yields imputed income. Rather, in such cases, people have entered the market and received something of real-world value from someone else in return. In other words, they have actual income as a result of the trade. Thus, Camp's assertion that the exchange of goods are "not normal market transactions but represent self-provided services or, at most, enjoyment of self-owned property"<sup>87</sup> flies in the face of what actually happens.

This assertion can be demonstrated with a simple example. Imagine two neighbors, each of whom has a garden in the backyard. One grows tomatoes; the other grows squash. For purposes of this example, I will accept that such crops are imputed income. As soon as the growers sell the produce, they have entered the market and have received value for their services. The policy reasons relating to valuation and government intrusiveness for excluding imputed income no longer apply. Indeed, as they have real income, the need to impute disappears. Accordingly, those who sell self-grown crops must pay tax on the proceeds of any sale.

Similarly, if the neighbors trade tomatoes for squash, they will be subject to tax, based on the fair market value of the produce each receives. Simply exchanging imputed income in one's hands for imputed income in the hands of another does not convert the gain into

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<sup>86</sup> Lederman *supra* n. 3 at 1644.

<sup>87</sup> Camp *supra* n. 3 at 60.

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imputed income. Rather, by engaging in barter, people have entered the market, received real income, and under current tax law must be subject to tax.<sup>88</sup> Thus, the theory of imputed income cannot exclude exchanges of virtual goods from the income tax base.<sup>89</sup>

Camp's second doctrinal argument is equally difficult. Based on the reasoning set forth in *Zarin v. Comm'r*,<sup>90</sup> Camp contends that virtual wealth should be analogized to casino chips, which arguably represent an opportunity to play, as opposed to income.<sup>91</sup> Moreover, he notes that taxes are generally not determined on one's gambling winnings until one cashes out. He argues that *Zarin* and the underlying policies apply equally to virtual income. This analogy fails for a number of reasons.

First, discussions of casino chips generally focus on the receipt of chips from the casino or by the casino from the customers. By and large, they involve chips that were advanced to the customers in return for a marker, i.e., a promise to pay.<sup>92</sup> Translated into the milieu of virtual reality, this might arguably equate to game world drops, as the game creators make drops available to players. However, this analogy is

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<sup>88</sup> Note that the justification for taxing the barter transaction here is distinct from the justification for taxing barter in the absence of imputed income. The decision to tax barter is sometimes considered necessary to protect the tax base, as people might trade goods to escape a tax on cash receipts. See Zelenak & McMahon, *supra* n. 28. Here, the exchange is taxed because real income is received. Certainly, valuation problems will arise in any barter transaction, but Camp has expressly rejected such limitations in a non-imputed income context. Camp *supra* n. 3 at 25.

<sup>89</sup> Miano also addresses the question of whether virtual income can be considered imputed income. He rejects the claim. However, he does so using an example of a virtual gaming company that sells stock and comparing it to a real-world company engaged in the same business. Miano *supra* n. 3 at 38-44. However, as explained above in the text, it is not the similarity between real-world and virtual activities that precludes a determination that virtual wealth creation is a form of imputed income. Nor is it the build up of value as a result of personal effort or the market. Rather, it is the receipt of something of value from a third party that takes such wealth out of the imputed income category.

<sup>90</sup> Camp *supra* n. 3 at 64.

<sup>91</sup> In some respects, this argument is analogous to Joseph Dodge's argument that "taken" items represent an investment that may lead to income but should not be considered income in-and-of-themselves.

<sup>92</sup> For instance, *Zarin* focused on the tax consequences of Zarin's receipt of chips from a casino in return for his marker and his subsequent release from any obligation to repay them. *Flamingo Resort v. U.S.*, 664 F.2d 1387 (9<sup>th</sup> Cir. 1982) involved the receipt by a casino of chips it had lent to a patron in return for a marker. The legal issue was whether the receipt of the chips qualified as income under the accrual method of accounting, i.e., whether the all events test had been met.

strained, as players must complete tasks to obtain their drops. They are not simply provided to players to induce them to keep playing, with the idea that players will repay the game creators the value of the drops at some later point. It would be a mistake to generalize court rulings about the tax attributes of such chips to other potential forms of income.

Second, the legal issue in *Zarin* and the underlying facts are sufficiently different from those at issue in the virtual world context that it is inappropriate to apply the reasoning and holding of that case here.<sup>93</sup> The legal issue in *Zarin* was whether the casino's decision not to require Mr. Zarin to repay the chips it had provided him would subject Mr. Zarin to cancellation of debt income. Notably, Mr. Zarin was not able to cash out his chips. Rather, he was required to gamble them at the casino. Under those facts, the claim that chips merely represent an opportunity to gamble makes some sense. Depending upon the type of world, those who participate in virtual reality can and routinely do "cash out" by converting their virtual wealth into real-world wealth. Where a realistic ability to "cash out" exists, the units of play argument makes little sense. While they certainly make it possible for participants to continue playing, they can readily be withdrawn at any point and converted to cash. Instead, this key difference points to the significance of the ability-to-pay principle, discussed below in Part IV.

Finally, the "cash out" rule associated with casino chips can be seen as nothing more than a form of accounting period. Over the course of a night, any losses incurred are deductible against gains. Thus, it makes little sense to calculate gains and losses separately for each bet. Rather, it is more efficient to tally the wins and losses at the end of the night, when the gambler cashes out. Thus, the treatment of casino chips does not depend on the theory that "units of play" are excludible from tax until they are converted to currency but rather reflect administrative convenience by treating gambling as an open transaction until a player cashes out.

This practice could lead to abuse where a taxpayer gambles across two accounting periods. By leaving his winnings in the form of casino chips over New Year's Eve, a calendar-year taxpayer may effectively delay the tax owed to the next year. While this certainly must occur, and the IRS allows it to happen, as a matter of tax law, it seems highly unlikely that a taxpayer challenged on such a ploy could successfully argue that he did not have income until he cashed out. The receipt of

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<sup>93</sup> For a discussion of the *Zarin* case, see Theodore P. Seto, *Inside Zarin*, 59 SMU L. Rev. 1761 (2006) and the articles cited therein in fn. 23.

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chips should be taxed as income in the year they are won and cannot be excluded on the theory that they are merely units of play, exempt from income tax.<sup>94</sup>

## 2. Policy Analysis

Camp bases his policy argument for non-taxation of virtual wealth on the claim that people engaged in virtual worlds are “playing,” i.e., they are engaged in an activity that is make-believe and separate from real-world activity. Using the metaphors of the “magic circle” and the “fourth wall” that separates the actors from the audience, he argues that what happens in virtual reality is pretend, and one should not be taxed if he pretends to have earned \$1 million. However, he concedes that the circle may break and the fourth wall crumble, so that taxation would be appropriate. Camp identifies this point as occurring where “economic activity in Second Life begins to displace economic activity outside Second Life.”<sup>95</sup> He notes that “The most likely evidence of that shift will be when account owners gain the ability to trade Linden dollars for real goods and services that are useful outside of Second Life, beyond the Fourth Wall.”<sup>96</sup> At that point, the virtual currency will have morphed into a real currency, and “you will not be able to tell the players from the audience.”<sup>97</sup> Until then, “concerns about government overreaching and intrusion implied by the imputed income doctrines should outweigh the attraction of taxing trackable transactions of objects that have a readily ascertainable fair market value.”<sup>98</sup>

Camp’s policy argument raises two concerns. The first relates to the notion that we should not tax pretend. The second relates to the difficulty of deciding when the boundaries are sufficiently porous so as to warrant taxation.

Camp uses the example of Zelda, who designs and sells dresses in virtual reality, to explain the separation between virtual reality and our own and the reason non-taxation is purportedly appropriate. He states: “Zelda is not a wedding dress designer; she simply plays one in Second Life.”<sup>99</sup> Her skill allows her to play more within the Second Life world

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<sup>94</sup> For a debate regarding the constructive receipt doctrine in this context, see Camp and Seto *supra* n. 3.

<sup>95</sup> Camp *supra* n. 3 at 69.

<sup>96</sup> *Id.*

<sup>97</sup> *Id.*

<sup>98</sup> *Id.* at 60.

<sup>99</sup> *Id.* at 66.

and thus should be considered play. Accordingly, Zelda should not be taxed on her virtual income. This example raises a host of difficult questions. First, whether someone pretends to be something they are not is not the relevant question for tax purposes. Each year, people pretend to be lawyers, duping their clients into paying for their legal services. Such would-be lawyers cannot escape taxation by claiming they were just pretending. Similarly, Marie Antoinette, who liked to pretend she was a milk-maid, should not escape taxation on the sale of the milk she obtained by claiming that she was only pretending. What matters for tax purposes is whether she received anything of value. Thus, the question must be whether the virtual wealth Zelda acquires has value.

Second, Camp's example assumes the conclusion, i.e., that Zelda is simply pretending. If we accept that "pretend" matters for tax purposes, determining whether Zelda is pretending is at the heart of the analysis. What if Zelda really were a wedding dress designer in real life? What if she decided to spend more time designing dresses on-line than in the real world, precisely because she sought to take advantage of the tax deferral that would arise under the cash out rule Camp proposes? What if she were an engineer who could have started a real-world wedding dress design company? A number of professions, such as graphic design, could be done equally well in virtual reality and reality, making the determination even more difficult.

In the end, Camp's attempt to justify non-taxation based on the notion that Zelda is only pretending is strikingly similar to Lederman's argument that we should not tax leisure, a position Camp rejects. Both depend on the taxpayer's state of mind in going on-line. As Camp aptly notes, the question for tax purposes is not whether one seeks to make a profit.<sup>100</sup> The question is whether one actually does so. Moreover, there is no reliable way to determine intent, making such a standard difficult to police.

In Camp's defense, he seems to focus not on any one individual's intent but rather on the world as a whole. If the world is pretend, then all activities in it are deemed pretend, regardless of what any particular individual believes. Of course, this simply raises the question of how one determines that the world should be considered pretend. One could look to see whether the majority of players were pretending, but this standard would again focus on intent and be even more difficult to evaluate than determining a single participant's intent. Instead, Camp contends that each virtual world should be judged pretend/not pretend

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<sup>100</sup> Id. at 61.

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based on the porosity of the boundaries between that world and reality. This raises the second problem with Camp's policy argument.

In an essay entitled *The Right To Play*, Edward Castronova laments reality's encroachment into virtual reality, noting that "virtual worlds represent a new technology that allows deeper and richer access to the mental states evoked by play, fantasy, myth and saga."<sup>101</sup> Such access is limited to the extent the real world intrudes upon such worlds, and Castronova proposes special legislation to protect play spaces. He posits two types of worlds: closed worlds, in which game creators retain complete control, and the outside world, including the tax collector, is kept at bay; and open worlds, where the borders are "considered completely porous."<sup>102</sup> In open worlds, he contends, the outside laws, including the tax laws, would fully apply.<sup>103</sup>

Unfortunately, virtual reality does not fall neatly into the closed and open categories Castronova describes. Rather, the boundaries between reality and the variety of virtual realities are all permeable to one degree or another. Some worlds encourage and facilitate the exchange between worlds, thus approaching completely porous boundaries. Others attempt to regulate or limit such exchanges. Nonetheless, even for those worlds that explicitly prohibit exchanges and actively try to enforce the rules, it seems reasonable to assume that the boundaries nonetheless remain porous.

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<sup>101</sup> Castronova, *The Right To Play*, supra n. 3 at 185.

<sup>102</sup> Id. at 201-202.

<sup>103</sup> Castronova states:

To be preserved as play space under the law, the synthetic world would have to conform to standards of construction and policy, just as corporations must conform to such standards in order to retain their special status. For example, an interration would have to maintain strict separation of the synthetic economy from the economy of the Earth. If players can regularly buy and sell assets from the synthetic world for real dollars, the synthetic world is no longer clearly distinct from the outside world's economy; it is no longer a play space, it is a tax haven. A tax haven has no right to special privileges under the real world's law, and its case for interration is weak. In general, interrations would be subject to scrutiny on real world matters. As a result, the lack of good faith efforts to maintain the space as a play space could lead to the revocation of the charter. [footnote omitted] Id. at 204.

In the omitted footnote, Castronova notes that external sales may be difficult to police. However, such sales result in what appears to be a gift, in-world, as one avatar gives an item to another for compensation received outside of the world's boundaries. Castronova suggests prohibiting gratuitous transfers as a means of enforcing the no external sales rules. Id. at 204, fn. 25.

As a result, if one is to base non-taxation of virtual gains on the premise that such gains represent “play,” where play refers not to the intent of a given user (as Lederman might support) but rather refers to the separation between reality and virtual reality, it is necessary to define the point at which the barriers are sufficiently porous as to subject in-world activity to taxation. Camp contends that this will occur when in-world activities displace real-world economic activity. He posits that the best evidence of this occurring will be when virtual currencies morph into real ones, i.e., when they are accepted like real currencies.<sup>104</sup>

As described more fully below in Part IV.A, I reject the notion that displacement of real-world economic activity is the appropriate measure by which to determine the tax consequences of in-world activities. However, assuming, *arguendo*, that it is, this standard presents a number of difficulties. First, as a matter of theory, one must choose an indicator for determining when real-world economic activities have been displaced. Second, one must choose a threshold above which in-world activities can no longer be considered pretend. There seems no principled way either to pick an indicator or set the threshold, once one has been picked. Finally whatever indicator or threshold one picks, it is unclear how one would gather the information necessary to determine when the line is crossed.

Camp argues that the best evidence that virtual activities are displacing real-world economic activities will be when real world businesses begin to accept virtual currencies. However, this suggestion just begins the inquiry. Hard core gamers might accept virtual currencies, while companies such as IBM do not. Is the tipping point based on the number of people accepting payment in virtual currencies, the identity of those accepting virtual currency, or the value of the virtual currency being accepted? It is not at all clear the basis on which one would choose among these indicators.

Camp does not rule out other evidence that real-world economic activities are being displaced. I would argue that the best indicator that real-world economic activity was actually being displaced would be by obtained by measuring the value of displaced activities. The question would then arise how one should measure displaced value. A number of possibilities come to mind. For instance, companies as diverse as Nissan, IBM and Nike have all established a presence in virtual reality.<sup>105</sup> These companies are clearly not pretending, and it is almost

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<sup>104</sup> Camp *supra* n. 3 at 69.

<sup>105</sup> See *supra* n. 19.

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certain that their expenditures on in-world activities are displacing other real-world economic activities the companies could engage in.

Setting aside established real-world businesses, a number of in-world activities undertaken by individuals may displace real-world economic activities. Take Zelda, the dress maker. While Camp argues that she is just pretending, she may well be a dress maker in real life who has decided to work on-line to take advantage of the tax deferral afforded by a cash out rule. Even if Zelda is simply pretending to be a dress maker and has no intent to make a profit, her virtual activities may well displace real-world economic activities. First, Zelda may simply decide to spend more time playing in virtual reality and less time doing whatever she does to make a living. Second, Zelda's virtual activities may well affect the real-world, regardless of her intentions. For instance, Zelda's customers could take her virtual designs and use them in the real world to make real dresses, bypassing real-world dress designers. Of course, it would be almost impossible to determine how much displacement these activities caused.

Assuming one could settle on an appropriate indicator of economic displacement, one would have to decide how much displacement must exist before all in-world transactions should be subjected to tax. In other words, one must pick a threshold? Whether one were to choose the number of people accepting virtual currency or the value of the virtual currency accepted by real-world businesses, one would have to decide how many people or how much value. If one were to choose instead the value of economic activity displaced, one would face the same problem. How much real-world money was spent on in-world activities before all activities are subject to tax? How much in-world activity is appropriate before one concludes that too much real-world activity is displaced. There seems to be no principled way to pick these thresholds.

Assuming one could pick both an indicator and a threshold, one must be able to verify that the threshold has been reached. It is not at all clear how one would go about gathering the data necessary to make an informed decision. If one were to accept Camp's measure, i.e., the receipt by real-world companies of virtual currency, one must confront the fact that no system exists to track who receives virtual currencies for real-world work or the value of such currency. If one were to look instead to the value of displaced economic activities, one must confront the problem that it is virtually impossible to determine when virtual activities in fact do displace real-world economic activities, let alone the difficulty determining the value of the displaced activities.

Finally, setting aside artificial indicators and thresholds, the on-line

activities of real-world companies, universities, politicians and those seeking real world profit strongly suggest that, at least in some worlds, the fourth wall has already crumbled and the conceit that this is all pretend can no longer be maintained, regardless of any one individual's intent or belief.<sup>106</sup>

### 3. Conclusion

In sum, Camp's doctrinal arguments founder on the claim that virtual income is a form of imputed income and on his attempt to analogize virtual wealth to casino chips. His policy argument, that virtual income should not be taxed because virtual reality is a form of play or make-believe, is inconsistent with existing tax policy and raises a host of difficult line-drawing and measurement issues that defy principled or easy solutions.

## IV. A NEW PROPOSAL FOR TAXING VIRTUAL INCOME

In this Part, I set forth my proposal for taxing virtual income. As described in the introduction, I propose a two step analysis. In the first step, one must consider whether the receipt of virtual income in a given world increases a taxpayer's ability to pay real-world taxes. If it does not, then all virtual income from that world should be exempted from tax until the taxpayer cashes out. If it does, then one must proceed to the second step in which one categorizes the different types of virtual income and determines whether each should be included in income under current doctrinal rules.

Subpart A lays out the policy underlying the first step of the analysis. It focuses upon the ability-to-pay principle, a core tax principle that the analysis to date has largely overlooked. Subpart B lays out the doctrinal analysis of the different types of virtual income that is necessary for the second step of the analysis. Subpart C sets forth my proposal.

### A. Policy Analysis

At its most abstract, the definition of income encompasses the flow

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<sup>106</sup> See supra Part II.

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of satisfactions each person receives.<sup>107</sup> However, even the earliest thinkers on this issue realized that any attempt to tax satisfactions would be impracticable. First, the flow of satisfactions from any one item would likely differ from person to person, leading to differential taxation based on each individual's unknowable utility curve. Second, it would be difficult, if not impossible, to determine how much tax should be paid on items incapable of valuation. Accordingly, they narrowed their income definitions to focus on those things that could readily be assigned a value in money or money's worth.<sup>108</sup> However, the fact that an item can be valued does not necessarily mean that it should be automatically be included in income. Rather, as I hope to demonstrate here, the ability-to-pay principle acts as a further filter when deciding what should be included in the tax base.

The ability-to-pay principle has many permutations. In its most prominent form, it factors into the debate over progressive taxation.<sup>109</sup> However, it is also relevant to the discussion of how to choose a tax

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<sup>107</sup> See Robert M. Haig, *THE CONCEPT OF INCOME- ECONOMIC AND LEGAL ASPECTS, THE FEDERAL INCOME TAX* (1921), reprinted in Richard A. Musgrave and Carl S. Shoup, *READINGS IN THE ECONOMICS OF TAXATION* 57 (1959). Haig acknowledged that conceptually income is a "flow of satisfactions" that includes immeasurable intangibles, such as sunsets.

<sup>108</sup> *Id.*

<sup>109</sup> See, e.g., Walter J. Blum and Harry Kalven Jr., *The Uneasy Case for Progressive Taxation*, 19 *U. Chi. L. Rev.* 417 (1952). Significant debate exists regarding the appropriate basis for allocating tax burdens: for ability-to-pay, see, e.g., Joseph M. Dodge, *Theories of Tax Justice: Ruminations on the Benefit, Partnership, and Ability-to-Pay Principles*, 58 *Tax L. Rev.* 339 (2005) (rejecting the benefits principle in favor of the ability-to-pay principle), for benefits, see e.g., Deborah A. Geier, *Incremental Versus Fundamental Tax Reform and the Top One Percent*, 56 *SMU L. Rev.* 99 (2003) (arguing for a blend of the benefits and ability-to-pay principles of taxation); Deborah A. Geier, *Time to Bring Back the "Benefit" Norm?*, 33 *Tax Notes* 893 (Mar. 8, 2004), for distributive justice, see, e.g., Liam Murphy & Thomas Nagel, *THE MYTH OF OWNERSHIP: TAXES AND JUSTICE* (2002) (arguing that tax systems should be evaluated based on their after-tax effects), and for Judeo-Christian ethics, see, e.g., Susan Pace Hamill, *An Evaluation of Federal Tax Policy Based on Judeo-Christian Ethics*, 25 *Va. Tax Rev.* 671 (2006); see also Adam S. Chodorow, *Biblical Tax Systems and the Case for Progressive Taxation*, 23 *Journal of Law and Religion* 53 (2008).

My point here is not to defend the ability-to-pay principle in this context, and I concede it may have limitations that are sometimes overlooked. See, e.g., Stephen Utz, *Ability To Pay*, 23 *Whittier L. Rev.* 867 (2002). Instead, my goal is to demonstrate how this principle provides guidance regarding the proper treatment of virtual income.

base.<sup>110</sup> For instance, one reason we don't have a head tax is that it completely disregards ability-to-pay. A family of 6 with an annual income of \$50,000 would simply have no ability to pay a \$10,000 per person head tax. In contrast, using consumption or income as the tax base correlates tax liability to the cash or assets an individual actually has, thus taking ability-to-pay into account.

Even after choosing income as the base, the ability-to-pay principle continues to play an important role in deciding what to include in income. Taxes are paid in dollars, and items that cannot readily be converted into dollars do not increase one's ability to pay taxes. Thus, even if it were possible to place some value on the satisfaction derived from viewing a sunset, if such satisfaction is not readily monetized, one should think twice about including the value in the tax base. The person who views the sunset is no more able to pay his taxes than the person who does not, and it seems wrong to impose more taxes on such a person than on others who have not been as fortunate. Indeed, it may create significant hardships, depending on the value of the benefit received or the tax rate.

This concern for ability-to-pay manifests in a number of ways in our tax system. For instance, we do not tax imputed income, even in instances where it can be readily and reliably valued. While many reasons may exist for this policy, one justification relates to the fact that the receipt of such income does not increase one's ability to pay real world taxes.<sup>111</sup> If we knew that a shave cost \$10, we would not think that a person who shaved himself, thus reaping a benefit worth \$10 was in a better position to pay his taxes than the person who failed to shave.

Even where accessions to wealth could readily be converted to cash, we sometimes exclude them from income. For instance, we do not tax self-created assets until they are sold. If Picasso were to create a new painting, his net worth certainly increases when compared to the period immediately preceding his burst of artistic activity. He is certainly able to pay more in taxes than he was before, even though he might have to sell the painting to do so. Nonetheless, we do not include

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<sup>110</sup> See Edwin R. A. Seligman, *The Income Tax: History, Theory, and Practice of Income Taxation* 4 (2d ed. 1914) ("This history of finance, in other words, shows the evolution of the principle of faculty or ability to pay--the principle that each individual should be held to help the state in proportion to his ability to help himself.").

<sup>111</sup> The concept of imputed income is discussed more fully above in Parts III.A.1.a and III.B.1 and below in Part IV.B.

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self-created assets in income.<sup>112</sup>

One of the justifications offered for retaining the realization requirement is that taxing appreciation may lead to taxpayer liquidity issues and difficulties in paying taxes due on such appreciation.<sup>113</sup> Liquidity concerns are also one of the justifications offered for not deeming a gift to be a sale or other disposition under I.R.C. § 1001(a) or for taxing the receipt of gifts and inheritances.<sup>114</sup> Thus, even though appreciation and the receipt of gifts or an inheritance clearly constitute a measurable accession to wealth, and are therefore income under that formulation, we nonetheless exclude them from the tax base at least in part because liquidity concerns speak to the question of a person's ability-to-pay.<sup>115</sup>

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<sup>112</sup> I discuss the tax treatment of self-created assets more fully below in Part IV.B and assume for this example that they are not a species of imputed income. Certainly, if Picasso were to hold the painting until the next tax year, the value of the painting could not be again be considered the value of his self-performed efforts.

<sup>113</sup> See Deborah H. Schenk, *A Positive Account of the Realization Rule*, 57 *Tax L. Rev.* 355 (2004). Most scholars acknowledge that the realization requirement is now a matter of administrative convenience and that Congress is free to dispense with it at will. However, at least one scholar contends that the realization requirement remains a constitutional one. See Henry Ordower, *Revisiting Realization: Accretion Taxation, the Constitution, Macomber, and Mark to Market*, 13 *Va. Tax Rev.* 1 (1993).

<sup>114</sup> See Joseph M. Dodge, *A Deemed Realization Approach is Superior to Carryover Basis (and Avoids most of the Problems of the Estate and Gift Tax)*, 54 *Tax L. Rev.* 421 (2001) (discussing the liquidity problems a deemed realization rule would create); Adam S. Chodorow, *Maaser Kesafim and the Development of Tax Law*, 8 *Fla. Tax Rev.* 153, 171 (2007) (identifying liquidity as one of the concerns justifying the non-taxation of gifts). Scholars have offered a number of other justifications for the non-taxation of gifts, including the existence of the gift and estate tax systems, see John K. McNulty, *Flat Tax, Consumption Tax, Consumption-Type Income Tax Proposals in the United States: A Tax Policy Discussion of Fundamental Tax Reform*, 88 *Cal. L. Rev.* 2095, 2181 (2000) (linking repeal of the gift tax with a repeal of I.R.C. § 102), and the claim that these types of transfers should not be considered a form of consumption. William D. Andrews, *Personal Deductions in an Ideal Income Tax*, 86 *Harv. L. Rev.* 309, 348-349 (1972) (arguing that consumption should be viewed using the family as a unit); Douglas A. Kahn & Jeffery H. Kahn, "Gifts, Gifts and Gifts" – *The Income Tax Definition and Treatment of Private and Charitable "Gifts" and a Principled Policy Justification for the Exclusion of Gifts from Income*, 78 *Notre Dame L. Rev.* 441, 461 (2003) (arguing that consumption requires the destruction, not transfer, of rights).

<sup>115</sup> Congress is not entirely consistent in this regard. The mark-to-market rules provide an example where the ability to pay is simply ignored. Under I.R.C. § 475, securities dealers must mark their securities to market at the end of each year, effectively including any unrealized gains in income, regardless of whether they have

The deferred sales rules found in I.R.C. § 453 also arguably reflect judgments regarding the tax base and ability-to-pay. Taxpayers who sell their assets for a series of deferred payments have engaged in a realization event and under the normal tax laws should be required to pay tax on their gains in the year of the sale. However, as they have not actually received the money for the sale, they might have no ability to pay the tax in the year of the sale. Section 453 permits them to report their gain over time, as they receive payments.<sup>116</sup>

In looking to the ability-to-pay principle for guidance on the proper treatment of virtual wealth, I recognize that it has its limits. We tax a number of items that arguably do not increase a person's ability to pay real-world taxes. For instance, if an employer allows an employee the use of a ski cabin, we tax the employee on the value of use of that cabin, even though the employee has no additional money with which to pay the tax. The same is true for any non-exempt fringe benefits the employer provides. One can argue in these cases that the recipient negotiated for use rights or benefits in lieu of money and therefore should not escape tax under this principle.

Other examples are more difficult. Imagine a real-world game show that awards prizes. However, instead of giving prizes with no strings attached, it precludes winners from ever selling them. Moreover, it provides that the prizes may only be used in the state in which the winner lives at the time he wins it. One could take it a step further and say that the game show retains ownership of the prize and only allows the winner to use it until the game show asks for it back. The value of such prize could be readily determined as the rental cost of the item for one year. Intuition suggests that the winner should be taxed on the value of this prize, even though these restrictions mean that the winning of the prize does not increase the winner's ability to pay.<sup>117</sup>

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the cash on hand to pay the taxes on such gains. Similarly, in the context of the estate tax, Congress appears to have no concern for the ability to pay, as all assets are included in the tax base, including the value of unrealized appreciation, etc.

<sup>116</sup> Section 453 is in the section of the code that deals with accounting and can be read as merely an accounting mechanism to be used when taxpayers receive deferred payments. Indeed, it seems required when applied to a cash method taxpayer, in that taxes flow from cash receipts and not formal sales. However, this section applies equally to accrual method taxpayers. In this context, it more clearly reflects a concern about ability-to-pay.

<sup>117</sup> In actuality, the receipt of such a prize might well increase someone's ability to pay under certain circumstances. Imagine someone who was planning a vacation and had decided on a cruise. Let's say that the cruise would cost \$500. Next, suppose that this person went on a game show and won the very cruise she was planning to buy.

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Despite these limitations, the ability-to-pay principle remains an important consideration when deciding what should be included in the tax base. In the context of virtual worlds, whether the receipt of virtual income increases a person's ability to pay is a function of the permeability of the boundaries between reality and a given world. Boundaries can be breached in two directions, as people can either "cash in" by purchasing virtual currency or "cash out" by selling their virtual goods for real-world money. The ability to cash in permits us to value virtual goods. In contrast, the ability to cash out determines whether someone can use such value outside the confines of the world. Thus, for purposes of determining the appropriate tax treatment of virtual income, permeability in only one direction matters, i.e., the ability to cash out.<sup>118</sup>

This proposition can be illustrated using a thought experiment that Bryan Camp offered in defending his proposal for the non-taxation of virtual income. In this experiment, loosely modeled on renaissance fairs, people come together to recreate medieval life in a hypothetical real-world fantasy park called World of Medieval Life.<sup>119</sup> They dress in medieval clothing, speak with bad English accents and generally do things they think might have occurred in the Middle Ages. To further their fun, and as medium of exchange, the park uses its own pretend currency, which Camp calls Dinars (D\$). Participants are allowed to

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She would have \$500 extra in her bank that she would not have had. Thus, to be precise, the right result from an ability-to-pay perspective would be to examine the taxpayer's intent with regard to the prize won.

Such a solution is simply unworkable if the income tax is to be administrable. However, this is precisely the result a number of rabbis have endorsed when considering whether the receipt of an illiquid gift should lead to the obligation to tithe. If the recipient intended to buy himself the object received, then he cannot claim the receipt has created a liquidity problem, and he has an obligation to tithe on the gift's value. If he did not intend to purchase the object received, he can delay the tithe until he sells the object, assuming he has a legitimate liquidity issue. For a discussion of this principle, see Chodorow *supra* n. 114 at 169-177.

<sup>118</sup> This conclusion is similar to the one Ted Seto reached in a short essay examining the taxability of unredeemed winnings on Worldwinner, a website that allows participants to compete on-line in a variety of games, such as Scrabble, Boggle and Monopoly. They are awarded points for winning contests, which they can then use to continue playing or redeem for cash. See Camp and Seto *supra* n. 3. Seto suggests that these points should be taxed if they are either redeemable or convertible. By redeemable, he means subject to redemption from the world's creators/operators. By convertible, he means alienable to third parties. Seto suggests that this criteria should apply more broadly to all virtual wealth acquisition, but he does not explore the details or ramifications of his suggestion.

<sup>119</sup> Camp *supra* n. 3 at 62-64.

purchase Dinars only from the park operators. The operators of World of Medieval Life own all the assets within the park, preclude their removal from the park and prohibit people from selling either their assets or Dinars for anything other than Dinars.

Camp contends that it would be wrong to tax someone for winning or earning Dinars and that this example supports his claim that virtual income not be taxed. While I agree with Camp's conclusion that someone who wins or otherwise earns Dinars in this example should not be taxed, I disagree with his reasoning, which focuses on the pretend nature of the activity. Instead, this example reveals the significance of the ability-to-pay principle and the consequences that naturally flow from both inward and outward permeability.

In this example, the boundary between reality and virtual reality is broken in only one direction, as people are allowed to cash in, but not out. Those with more money in the real-world can significantly affect what happens in the fantasy world by purchasing sufficient Dinars to buy a title, raise an army, or do whatever it is one does in such venues. Moreover, because there is an established exchange rate, it is possible to calculate the real-world value of items within the fantasy world. For instance, if the exchange rate is \$10 for D\$100, a sword that costs D\$200 can be valued at \$20. However, that one can value the sword does not necessarily mean that one should tax its receipt. If it not possible to sell the sword outside of the world, the receipt of a sword worth \$20 does not affect the holder's ability to pay his real-world taxes. Thus, it does not necessarily follow that he should pay more in taxes.

Another hypothetical may help illustrate this point. Assume two taxpayers. One earns \$50,000. The other earns \$50,000 but "works" as a squire for a knight in World of Medieval Life. For his services, he is paid with a sword worth D\$200. He cannot use sword outside of the park, sell it or otherwise convert his Dinars into real-world currency. Had he been paid \$20 in U.S. currency, he would certainly have been required to pay tax on his earnings, even though he was simply pretending to be a squire. This result makes sense, as he has had a clear accession to wealth, and his ability to pay taxes has similarly increased. However, if his is paid in the form of a sword that he cannot use outside the context of the world, his ability to pay taxes, which must be paid in dollars, remains unchanged. This example reveals that it is not simply the ability to value that matters in the analysis of whether to tax virtual wealth acquisition, but rather the ability to cash out that should determine in the first instance whether the receipt of virtual income

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should lead to real world taxation.<sup>120</sup>

Identifying the ability to cash out as the critical factor in determining the taxability of virtual income does not end the inquiry; it is just the beginning. As described above in Part III.B.2, virtual life is far messier than theory might suggest. Worlds do not fall neatly into two categories: closed and open. Instead, they fall along a continuum, especially as it relates to the ability to cash out. At one extreme is Second Life, which facilitates the ability to cash out by operating the LindeX, an official exchange where players can buy and sell virtual currency.<sup>121</sup> Other worlds may prohibit exchanges outside the context of the world but do little to enforce the rules. Still others actively police such transactions and either confiscate property or close the accounts of those who break the rules.<sup>122</sup> One commentator estimated in 2004 that the secondary market for virtual goods was approximately \$880 million.<sup>123</sup> While some of these sales are for goods from worlds that

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<sup>120</sup> As noted above in n. 117, even absent the ability to cash out, the receipt of something in-world might affect one's ability to pay, as the taxpayer might now be relieved of a purchase he was intending to make. While theoretically accurate, for administrative reasons, it is simply not possible to implement the ability-to-pay principle in its purest form.

A strong argument could be made that taxes should be due even in this scenario, i.e., where no ability to cash out exists. If the person could have been paid in U.S. currency, but chose instead to be paid in Dinars, one could argue that the form of the transaction should be discarded, and instead one should imagine the form of the transaction to be as follows. It is as if the person was paid \$20 in U.S. currency and then used that money to buy D\$ 200, which he then used to purchase the sword. It is precisely this type of recharacterization that justifies imposing taxes on the taxpayer in *Old Colony Trust Co. v. Comm'r*, 279 U.S. 716 (1929). However, that one could imagine a hypothetical cash transaction that led to the same result does not mean that one must do so. Given the rules that seek to keep transactions within this hypothetical world separate from the real world, it seems unnecessary to recharacterize the transaction, even if some slippage may in fact occur.

Indeed, an argument could be made for taxation even absent the ability to cash in. For instance, if our squire had the choice to be paid \$20 or D\$200, because the recipient has the choice, he has constructively received dollars, even if he chooses to be paid in Dinars. The argument for taxation is more difficult if the knight would only agree to pay in Dinars. The Dinars still have value, as they permit the recipient to consume them in world as a form of entertainment. However, we start this analysis under assumption that virtual income has value as an economic matter. The question for our purposes is whether, given all the circumstances, it should be included in the tax base.

<sup>121</sup> For a description of the LindeX, see Miano *supra* n. 3 at 10.

<sup>122</sup> See *supra* n. 66.

<sup>123</sup> See Fairfield *supra* n. 23.

permit external exchanges, it is almost certain that a substantial portion of these sales involve goods from worlds where such sales are prohibited.<sup>124</sup> Even those worlds that are largely successful at policing their rules are not likely to be perfect, as there are likely to be some who are willing to break the rules and clever enough to get away with it.

Unless one is willing to declare that all in-world transactions in every world are subject to taxation, the policy question facing tax theorists is how much outward permeability to allow before subjecting in-world transactions to taxation.<sup>125</sup> One option might be to look to a virtual world's formal rules to determine whether in-world transactions should be taxed. If a world prohibits transactions outside the virtual space, then in-world transactions should arguably be exempt from tax. The difficulty with this approach is that it creates an incentive for worlds to prohibit such transactions formally but secretly to encourage them or look the other way when they do occur. To allow non-taxation in such situations would elevate form over substance and permit virtual world creators essentially to "check the box" as to whether they intended in-world transactions to be tax free or taxable.

Another option might be to require worlds to police and actively enforce rules prohibiting the sale or exchange of assets outside the confines of the world. This option raises the difficult practical question of how much enforcement would be necessary to satisfy the standard. The answer may well depend on one's perspective. For instance, Edward Castronova argues that worlds must police sites where such exchanges occur. Indeed, insofar as extra-legal exchanges manifest themselves in-world as gratuitous transfers, he proposes that worlds might need to prohibit such exchanges to be considered "closed" and therefore immune from the tax laws.<sup>126</sup> However, Castronova is

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<sup>124</sup> See, e.g., Julian Dibbell, *Dragon Slayers or Tax Evaders?*, *Legal Aff.*, Feb. 2006, at 47, 47, available at [http://www.legalaffairs.org/issues/January-February-2006/feature\\_dibbell\\_janfeb06.msp](http://www.legalaffairs.org/issues/January-February-2006/feature_dibbell_janfeb06.msp).

<sup>125</sup> While Seto identified the ability to cash out as the critical factor in determining the taxability of virtual income, he did not explore the question of what level of redeemability or convertibility would be sufficient to warrant taxation. However, based on the assumption that it is not readily possible to cash out of *World of Warcraft*, he suggests that it should be considered a closed world. Camp and Seto *supra* n. 3 at fn. 6. This suggests that Seto would look to both formal and practical limits on the ability to cash out in determining whether a world was sufficiently closed so as to warrant not taxing in-world transactions.

<sup>126</sup> Castronova, *The Right To Play*, *supra* n. 3 at 206 and fn. 25. While at first blush, this seems like a workable solution, it could easily be gamed through bargain sales. For instance, if someone buys a sword on EBay for \$50, rather than have the

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concerned with protecting the sanctity of play spaces and recognizes that *any* permeability in the boundaries will inexorably make a virtual space an extension of reality, as some participants will inevitably seek real world advantages. While banning gratuitous transfers makes sense in the effort to preclude real world activities from intruding into a play space, it is not clear that tax theory requires such draconian measures.

Even for worlds that adopt such measures, it is almost certain that a black market will arise. The question is whether this should matter when trying to classify a world as open or closed. That one person in Uzbekistan might be willing to buy a virtual sword on the black market for five thousand Uzbekistan soms (UZD\$5,000)<sup>127</sup> should not subject everyone involved in the virtual world to tax when they win a sword in a virtual contest. However, if the market is large enough, sufficiently developed, and accessible, the argument that the world is functionally open gains currency, and one must decide whether the opportunity to cash out in clear violation of a world's rules should subject a person to tax, despite his decision to adhere to the rules.

In sum, the ability-to-pay principle suggests that taxation of virtual wealth depends upon one's ability to cash out. However, given life's complexity and the different degrees of permeability, the decision cannot be based solely on theory. Instead, it must necessarily reflect a compromise, where the answer is a function of intuition, formal rules, the practical ability of people to cash out, and the extent to which the compromise tracks the theoretically correct result.

## B. Doctrinal Analysis

If one determines that a virtual world is closed, i.e. participants cannot readily convert their virtual wealth into real-world wealth, no further doctrinal analysis is necessary. Such income should be excluded from the tax base. In contrast, if the world is deemed open such that taxation is theoretically appropriate, it is still necessary to consider whether various tax doctrines or policies would nonetheless exclude

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seller simply give him the sword in-world, he could arrange to purchase the sword for 1 gold piece, far less than its in-world value. Unless the virtual world creator is willing and able to monitor the prices at which sales and exchanges are made, it would be hard to stop such evasive techniques. Such rules would also run the risk of making the experience less enjoyable, as the ability to haggle and cope with scarcity is precisely what makes these worlds interesting.

<sup>127</sup> The conversion rate between U.S. dollars and Uzbekistan som is about \$1: UZD\$13,000.

virtual income from the tax base. While it is tempting to try to sweep all virtual wealth into one category as Camp did, self-created assets, drops and sales and exchanges all present different issues. Accordingly, I address each in turn.

Under existing law, the value of real-world self-created items is excluded from income even though such items represent an accession to wealth. As described above, if Picasso were to create a new painting, he would have an undeniable accession to wealth. However, he would not be taxed until he sold it. Some would classify self-created assets as imputed income and excuse them from income as such.<sup>128</sup> Arguably, they are analogous the “taken” objects Dodge describes and should be seen as an “investment” leading to income, but not income in-and-of-themselves.<sup>129</sup> However one classifies such objects, it is undisputed that there has been no realization event. Whatever the underlying theory, real-world self-created assets are not subject to tax. No reason exists to believe that virtual assets should be treated differently. Accordingly, if someone makes a virtual good, it should be excluded from income under existing law until it is disposed of in a taxable transaction.

The question of how current law treats drops is more difficult. As with self-created objects, drops reflect an accession to wealth. However, they could fall into a number of different existing tax categories, some of which require their inclusion in income and others of which excuse them. For instance, if they are considered a prize, drops will be covered by I.R.C. § 74 and included in income. If they are considered a treasure trove, they will be included in income under Treas. Reg. § 1.61-14. In contrast, if drops are considered a form of imputed income, they should be excluded from the tax base. Similarly, if drops are classified as “taken” items under the theory Dodge articulates, they should be excluded. As described above in Part III.A.1.a, I believe that drops should be considered a form of prize and taxed as such because they are given to a participant by the world’s creator as a reward for completing some task.<sup>130</sup> In this regard, they look more like compensation than self-

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<sup>128</sup> See, e.g., Dodge, *Found Objects*, supra n. 31 at 691-692, defining imputed income as “the market-equivalents of non-market economic activity (such as the value of self-grown crops and the rental value of self-owned assets, and possibly the value of self-performed services).”..Professor Dodge was, in turn, referring to a discussion of this issue by Henry Simons. See H. Simons, *Personal Income Taxation* 51-52 (1938).

<sup>129</sup> Dodge, *Found Objects*, supra n. 31 at 696 (“there is no meaningful distinction between ‘taken’ and ‘self-created’ objects.”).

<sup>130</sup> Depending on the facts, some self-created items could be considered drops and therefore subject to tax. In unscripted worlds that simply provide participants

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created or “taken” objects, which do not involve third parties.

The final category is sales and exchanges. Lederman contends that the doctrinally correct answer to whether these activities should be included in income depends on whether people are deemed to have property or use rights in their virtual goods and currency. Camp avoids the issue entirely by asserting that all such income is imputed and excluded from the tax base on that ground. Nonetheless, he questions whether the property/use right distinction matters because use rights can be seen as a species of property, a chose-in-action, and the exchange of such rights constitutes a realization event.<sup>131</sup> I concur with Camp’s assessment of the nature of use rights.

However, as described above in Part III.A.1.b, even if courts were to hold otherwise, the exchange of use rights should lead to taxation. The examples Lederman adduces of the non-taxation of the exchange of use rights are sufficiently distinguishable from exchanges of virtual goods that they are not persuasive regarding the proper tax treatment of the exchanges at issue. Finally, given that parties to sales and exchanges have entered the market and received something of value, the sale or exchange of virtual assets cannot properly be exempted from income under an imputed income theory.

In sum, once one concedes that virtual income has value and determines that participants can readily cash out, nothing about the virtual or on-line nature of these transactions suggests a tax result different from what one would expect with a real-world good.<sup>132</sup>

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with building blocks from which they can fashion whatever they will, the self-created label seems appropriate. See Camp *supra* n. 3 at 7-8 for a description of this process. It seems less clear in the context of game worlds. Camp gives the example from World of Warcraft of someone who creates a powerful weapon. Camp *supra* n. 3 at 10-11. He is provided a recipe and must gather the materials and forge the weapon. On the one hand, this looks like a self-created asset. On the other hand, it could be described as a prize granted by the world’s creators for gathering the materials and following the recipe.

<sup>131</sup> Camp *supra* n. 3 at 50-60.

<sup>132</sup> Arguably, some other feature of virtual reality might warrant overriding doctrine, such as administrative concerns that do not arise in the real-world context. One commentator explored whether people engaged in virtual reality might more easily and inadvertently fall under the tax partnership rules than actors in the real world, thus justifying exclusion of virtual income from the tax base, before ultimately concluding that this concern was unwarranted. See Miano *supra* n. 3. In addition, one could argue that policy objectives external to tax, such as a desire to nurture virtual reality in its infancy, warrant non-taxation. *Id.* However, such arguments go beyond

### C. The Proposal

So, where does all of this policy and doctrinal analysis lead me? I propose that the IRS adopt two different tax regimes, depending on whether the world is deemed closed or open. I would impose on closed worlds a cash out tax regime. In other words, I would exempt in-world transactions from tax. The policy justification for this proposal is that the receipt of virtual income does not sufficiently increase a recipient's ability to pay real-world taxes, such that inclusion in the tax base is appropriate. Accordingly, the type of in-world transaction involved, self-creation, drop, sale or exchange is simply not relevant. At present, this would encompass most game worlds, but it could apply equally to unscripted worlds.

For open worlds, I propose that the IRS tax virtual wealth acquisition for any person or entity that earns over \$600, as measured in U.S. currency, in any given year. In this context, the type of transaction matters. Just as in the real-world, the value of self-created assets is excluded from income, so should self-created virtual assets be excluded from income. I would treat drops as prizes and therefore subject to tax. Similarly, I would include in income any gains on the sale or exchange of virtual assets.

Finally, I propose that the IRS publish a list annually of closed and open worlds. This process would operate similarly to the IRS's oversight of non-profit organizations to which tax deductible donations can be made.<sup>133</sup> In this way, the IRS can make a case-by-case analysis of each world and determine the proper treatment, based on its assessment of whether the world is truly a closed world, or whether it is simply another forum in which to conduct real world activity. To avoid *ex post* taxation, I propose that the list apply prospectively.

This proposal raises a number of issues. While some answers may be evident from the analysis and discussion above, I address them

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the basic question of whether the existing doctrines, standing alone, cover virtual income.

<sup>133</sup> As set forth in Notice 92-28, 1992-1 C.B. 515, the IRS periodically makes public notices announcing organizations that qualify as exempt under various provisions of I.R.C. § 501. See, e.g., Tax Analyst Doc 2008-1173 (Jan 18, 2008) and Tax Analyst Doc. 2008-1164 (Jan. 11, 2008). Similarly, it periodically revokes the exempt status of organizations through letter rulings, see, e.g., LTR 200803023 (Oct. 26, 2007), and routinely announces lists of organizations to which charitable donations can no longer be made. See, e.g., Announcement 2007-111, 2007-49 IRB 1153 (Dec. 3, 2007).

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specifically below.

First, one must establish the standards for determining whether a world is to be considered open or closed. From a theoretical standpoint, the existence of black markets means that virtual goods will likely always have real world value and players will be able to cash out, regardless of the rules or efforts to prevent their violation. While this is certainly true, it seems a bit overreaching to tax virtual activities where people who play by the rules will not, in fact, do so. While these people have an increased ability to pay their taxes as a matter of economic reality, this ability presupposes their violating the terms of their agreement with the virtual world creators. Instead, imposing taxes only on those who do cash out seems more appropriate.

Accordingly, I propose that the IRS look primarily to the rules regarding the ability to buy and sell virtual assets outside the confines of the virtual space and the extent to which world creators enforce those rules to determine whether a world should be considered closed for tax purposes. I would leave to the IRS the discretion to promulgate rules, after suitable comments from interested parties, regarding what efforts would be required. I would also note that, under certain circumstances, if a vibrant black market arises that is readily available, even strong efforts to curtail extra-world activities might not be sufficient to warrant closed status.

Second, the \$600 threshold for the open world regime appears to violate the ability-to-pay principle in that it shields from taxation people who earn less than \$600 in a given virtual world in any give year, even though their receipt of virtual income clearly increases their ability to pay. As noted above, the ability-to-pay principle acts as a guide to the theoretically correct answer, but it does not and should not necessarily control the real-world results. Several reasons justify a deviation in this case, many of which Lederman and Camp raised in their arguments against taxing virtual wealth.

The first reason relates to the difficult of valuing virtual goods. While it is certainly possible to determine the value of virtual goods, as both Lederman and Camp note, the market for such goods is much thinner than the market for real goods.<sup>134</sup> This problem is highlighted whenever people engage in barter. The difficulty of valuing items in a barter exchange exists for real-world objects and services; it is compounded for virtual items that are not routinely bought and sold.

The second reason relates to the cost of imposing the tax relative to

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<sup>134</sup> Lederman supra n. 3 at 1660, 1670; Camp supra n. 3 at 32-33.

the income generated. As a practical matter, imposing tax on the first \$1 of income may well impose significant burdens on taxpayers, while yielding minimal revenue. Under such circumstances, it seems that some level of exemption is appropriate. In some regards, this exemption functions like the standard deduction, which obviates the need of taxpayers with few deductions from keeping track and reporting those deductions each year.<sup>135</sup>

The third reason relates to the likelihood and effect of taxpayer non-compliance. As Camp notes, most normal people may well be unaware of the tax consequences of barter exchanges.<sup>136</sup> Those who are aware of the rules may deem it not worth their while to figure out the extent of their virtual income and simply fail to report such income. While the cost to the treasury may be small in any given instance, the act of non-compliance here might well lead to a lessening of the respect for law and an increase in non-compliance in other, more important areas.<sup>137</sup> Non-compliance could be reduced through the use of detailed reporting requirements,<sup>138</sup> say through a 1099-Virtual. Given the electronic nature of the transactions, tracking such income may be easier than it appears. However, currently, no such requirements exist, and world creators are likely to oppose them if proposed.

The final reason relates to the disquiet most feel about taxing those engaged in purely leisure activities. The leisure/work distinction is not one we observe when deciding what to include in income.<sup>139</sup> Nonetheless, both Camp and Lederman note that it seems wrong to tax people who are simply playing and who may never convert their virtual wealth into real-world wealth.<sup>140</sup> Creating a threshold below which no tax should be due has the virtue of preserving doctrine while accommodating the underlying intuition that taxation in this instance would be difficult and unpopular.<sup>141</sup>

The question next arises as to how to choose a threshold. It should be high enough to provide the benefits sought, but not so high as to

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<sup>135</sup> See I.R.C. § 63(c). For taxpayers who may have deductions near the threshold level, this benefit may be apparent only, as they will track their expenditures to see whether they are better off itemizing. However, a significant number of taxpayers do benefit from this administrative compromise.

<sup>136</sup> Camp *supra* n. 3 at 32-33.

<sup>137</sup> Lederman *supra* n. 3 at 1660; Camp *supra* n. 3 at 32-33.

<sup>138</sup> Lederman *supra* n. 3 at 1669.

<sup>139</sup> Camp *supra* n. 3 at 60.

<sup>140</sup> Lederman *supra* n. 3 at 1659; Camp *supra* n. 3 at 60.

<sup>141</sup> Lederman *supra* n. 3 at 1660, 1666, 1670.

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negate completely the doctrinally correct result. The Internal Revenue Code contains a number of different thresholds that bear on the inquiry. In particular, the information reporting rules speak to the question of how best to balance administrative costs and the possibility of non-compliance. This regime suggests that virtual income be exempted from the real-world tax base if it is below \$600 in any given year.<sup>142</sup>

The federal income tax system relies on individuals to self-report their income. However, the government's faith in the people goes only so far. In addition to audits, the government requires a wide variety of people and entities to file information returns that indicate who received payments from them and how much they received.<sup>143</sup> The government then matches this information against the tax returns it receives to ensure that people are properly reporting their income.

The reporting requirements can be broken down into four main categories. The first requires reporting of all amounts. For instance,

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<sup>142</sup> The withholding rules provide another point of reference when trying to establish a threshold above which virtual gains should be subject to tax. The modern withholding rules were first introduced into the Internal Revenue Code in 1943. They are designed to ensure that the government receive a steady flow of revenue throughout the year and to ensure that people do not spend their income as they earn it, thereby having nothing left with which to pay their taxes. It has the salutary effect of requiring reporting, which aids in ensuring that people properly report their income. For a brief history of withholding in the U.S. and critique of its use, see Richard L. Doerner, *The Case Against Withholding*, 61 *Tex. L. Rev.* 595 (1982).

I.R.C. § 3402 establishes the basic withholding rules. The basic rule is that employers must withhold taxes on all wages that exceed the exemptions claimed by an employee. The exemptions allowed for a single person who is not a dependent of another include the personal exemption and the standard deduction. The figures for 2007 would thus allow annualized wages of \$8,750 before the obligation to withhold applied. See Rev. Proc. 2006-53 for the inflation adjusted figures for the personal exemption and standard deduction to be used for the 2007 tax year. See also I.R.C. § 3402(n) (excusing from withholding those who will have no income tax liability).

Other, specific withholding requirements apply to specific types of income. For instances, I.R.C. 3402(q) imposes an obligation to withhold from gambling winnings that exceed \$5,000 "if the amount of the proceeds is at least 300 times as large as the amount wagered." For state-sponsored lotteries, withholding must be done on all amounts over \$5,000, regardless of the amount wagered. I.R.C. § 3402(q)(3)(B). A similar limit applies for sweepstakes, wagering pools, certain pari-mutual pools, jai alai and non-state sponsored lotteries. I.R.C. § 3402(q)(3)(C).

These thresholds are simply for withholding. Because failure to withhold does not present the same tax evasion possibilities as failure to report income, these numbers are not as compelling as potential thresholds as those for the reporting limits.

<sup>143</sup> The statutory provisions requiring information returns are generally found in I.R.C. §§ 6031-6059.

employers must report all salaries and brokers must report all proceeds from sales and exchanges, regardless of the amounts in question.<sup>144</sup> The second requires reporting if amounts paid out to any individual or entity aggregate over \$10. Examples include the payments of dividends and interest.<sup>145</sup>

The third reporting requirement covers amounts over \$600. This threshold applies to a wide range of income events, including cancellation of debt income,<sup>146</sup> certain real estate transactions,<sup>147</sup> the receipt of student loan interest,<sup>148</sup> the receipt of mortgage interest,<sup>149</sup> the payment of tuition and related costs of higher education,<sup>150</sup> and payments in the ordinary course of a trade or business, unless covered by some other provision<sup>151</sup>. The reporting threshold for prizes won on game shows,<sup>152</sup> payments to physicians from certain types of organizations,<sup>153</sup> the purchase of fish<sup>154</sup> and crop insurance proceeds<sup>155</sup> are also set at \$600. Finally, the baseline threshold for reporting gambling winnings is set at \$600.<sup>156</sup>

The fourth reporting requirement covers amounts over \$10,000. For instance, those who receive payments of \$10,000 or more in a trade

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<sup>144</sup> See I.R.C. §§ 6051 (employers) and 6045 (brokers). The code requires a number of other returns regardless of income at issue, including from those who pay certain railroad retirement benefits (I.R.C. § 6050G), returns from trusts to beneficiaries (I.R.C. § 6034A), returns of S corporations (I.R.C. § 6037), returns of partnerships (I.R.C. § 6031) and returns by certain fishing boat operators (I.R.C. § 6050A).

<sup>145</sup> See I.R.C. §§ 6042 (dividends) and 6049 (interest). Other examples of returns due on amounts over \$10 include royalties (I.R.C. § 6050N), refunds of state or local taxes (I.R.C. § 6050E) and payments of unemployment compensation (I.R.C. § 6050B).

<sup>146</sup> I.R.C. § 6060P.

<sup>147</sup> Treas. Reg. § 1.6045-4.

<sup>148</sup> I.R.C. § 6050S.

<sup>149</sup> I.R.C. § 6050H.

<sup>150</sup> I.R.C. § 6050S.

<sup>151</sup> I.R.C. § 6041.

<sup>152</sup> Treas. Reg. § 1.6041-1(d)(3).

<sup>153</sup> Treas. Reg. § 1.6041-1(d)(2).

<sup>154</sup> I.R.C. § 6050R.

<sup>155</sup> Treas. Reg. § 1.61-4(c).

<sup>156</sup> This requirement appears to flow from I.R.C. § 6041, which does not explicitly mention gambling. Gambling winnings are reported on a Form W-2G. For reasons that are not entirely clear, the reporting thresholds are \$1,200 for bingo and \$1,500 for Keno. See Treas. Reg. § 1.6041-1(a). These reporting obligations do not apply if the winnings exceed the threshold level for withholding set forth in I.R.C. § 3402(q).

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or business must file returns reflecting those payments.<sup>157</sup> Financial institutions must report any currency transactions in excess of \$10,000.<sup>158</sup> Similarly those with a financial interest in a foreign account worth more than \$10,000 must inform the IRS of such interest.<sup>159</sup>

The decision to require information reporting is not without cost. For those subject to the requirements, it is expensive to track payments, print, and submit such returns. Similarly, the government must devote resources to creating the rules, enforcing them, and effectively dealing with the returns they receive. However, there may be benefits to the returns beyond the tax revenues they may bring in. For instance, the existence of such returns may well increase confidence in the system and a sense that other people are paying their fair share. Numerous studies have suggested that this sense may contribute to the high voluntary compliance rates we see in this country, which make little sense given the low audit rates and penalties.<sup>160</sup> Thus, the levels at which the reporting requirements kick in reflect a measured judgment regarding the cost of reporting, the amount of slippage allowable, assuming the non-reporting below certain thresholds will lead to increased tax evasion, and the external effects reporting may have on general tax compliance.

If the task is to choose a threshold under which no taxes on virtual wealth will be owed, the “any amount” standard reflected above is obviously inapplicable. The “in excess of \$10” standard is not much better. First, this standard is limited primarily to interest and dividends. Second, as a practical matter, insofar as the \$10 limit applies primarily to financial institutions and brokers whose customers routinely surpass these limits, it seems unlikely that such institutions will omit returns for the few who do not.<sup>161</sup> Thus, even though the limit exists, it seems likely that many of these institutions will send returns even to those for whom no duty exists. In other words, the \$10 threshold is likely very close in operation to the “any amount” threshold.

The \$10,000 standard generally applies to large transfers related to

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<sup>157</sup> I.R.C. § 6050I.

<sup>158</sup> 31 C.F.R. § 103.22.

<sup>159</sup> 31 C.F.R. § 103.24 and Form TD F 90-22.1.

<sup>160</sup> See, e.g., Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 *Ohio St. L. J.* 1453 (2003) (considering the interplay of enforcement and tax compliance norms).

<sup>161</sup> As evidence, I refer you to the 1099-Int I received a few years back from Wells Fargo on my checking account for \$1.83. This document is on file with the author, at least until the statute of limitations on assessment has passed. See I.R.C. § 6501.

the banking system and payments from businesses. Its genesis seems tied up in tracking currency exchanges and money laundering, i.e., potential illegal activity separate from tax evasion. It applies to a small number of categories and therefore makes little sense as a threshold.

In contrast, the \$600 reporting standard seems appropriate on a number of levels. First, unlike payments to which the \$10 limit applies, the \$600 limit applies to a wide range of activities. The broad application suggests that it the \$600 figure is not tied to any particular activity. Second, and perhaps more important, it applies to gambling, a source of income extremely unlikely to be reported absent information returns. In other words, the possibility of income not reported in an information return being omitted from a taxpayers return, and the associated revenue loss, is quite high. The \$600 figure thus arguably serves as a meaningful proxy for the appropriate balance between the administrative costs of reporting and allowable non-compliance and revenue loss.<sup>162</sup>

The \$600 figure also works in the context of virtual worlds, in that it is high enough to exempt those who dabble in virtual reality, but low enough to capture those who are making significant amounts. As both Camp and Lederman note, the value of most goods is relatively low, meaning that most participants are unlikely to earn significant income in any given year.<sup>163</sup> While it seems likely that someone might generate \$10 of income over the course of a year through his virtual activities, only those who spend considerable time in-world actively working to

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<sup>162</sup> This of course leads to the interesting question of the \$600 figure's origin. It has been in the code since before 1954, and Congress has routinely used it, apparently without reflection. On the one hand, this fact suggests that Congress has endorsed \$600 as an appropriate measure. On the other, it may well reflect legislative laziness. The \$600 figure first appeared in amendment to the predecessor sections for I.R.C. §§ 151, 6012, and 6041 (§§ 25, 51, and 147 of the Internal Revenue Code of 1939) in the Revenue Act of 1948. 62 Stat. 110, PL 471. Between 1939 and 1948, the personal exemption amount and the reporting threshold were routinely linked. Compare e.g., 1939, ch. 2 § 25(b)(1), 53 Stat. 18, 1939 (\$1,000) and ch. 2, § 147, 53 Stat. 64 (\$1,000); 1941, ch. 412, §111(a), 55 Stat. 696 (\$750) and 1941 ch. 412, §112(c), 55 Stat. 697 (\$750). In 1948, both were changed from \$500 to \$600. See 1948 ch. 168, § 201, 62 Stat. 112 and 1948, ch. 168, § 202(c)(3), 62 Stat. 114. For some reason, after 1948, the link between the personal exemption amount and the information reporting amount were de-linked, and the \$600 reporting limit has never been changed. If this figure were adjusted for inflation, it would be \$5,368 in 2008 dollars. See the Consumer Price Index inflation calculator operated by the Federal Reserve Bank of Minneapolis at <http://minneapolisfed.org/Research/data/us/calc/index.cfm>.

<sup>163</sup> Camp supra n. 3 at 38.

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accumulate significant wealth are likely to be above the \$600 amount. Accordingly, setting the threshold at \$600 is likely to provide the administrative benefits intended by the decision to adopt a threshold.

Finally, accepting, *arguendo*, Lederman's policy goal of not taxing leisure, using a threshold may actually be a better way to achieve the that aim. Lederman's proposal to adopt a cash out rule for game worlds seems appropriate, as it seems correct that most who play games in such worlds are there for leisure. However, her approach to unscripted worlds seems too imprecise. Assigning motives based on whether people engage in barter transactions or sales is too crude a method to distinguish between the two types of people, and the dynamic response would make a mockery of any effort to impose disparate tax treatment within such worlds. In contrast, the \$600 threshold for open worlds avoids the pretense of accurately assessing motive based on the type of transaction. Moreover, it is not susceptible of manipulation, except to the extent people can shift virtual income from one year to the next to stay under the \$600 threshold. Thus, it may be a better proxy for intent than the one Lederman has chosen.

## V. CONCLUSION

Whether to tax virtual income raises a vexing question. Most people's intuition suggests that such income should be exempt from tax, but the fact that such income has real-world economic value suggests otherwise. Given the difficulties in valuing virtual goods, the administrative costs of taxing virtual income, the dangers of non-compliance, and the judgment calls involved in determining when these concerns warrant deviating from theory, finding a theoretically pure solution to this issue, or even one in which all concur, is simply not possible.

Those who have considered the question to date have attempted to justify non-taxation using either an intent-based or imputed-income approach. As described above, neither the approaches nor the proposals they produce are fully satisfactory. Using the ability-to-pay principle as an initial filter, my approach achieves similar results, while better conforming to existing tax policy and doctrine and producing a proposal that is more administrable than those made to date.

Regardless of which approach or proposal one prefers, taxes will be owed whenever someone cashes out. This necessarily implicates basis. For instance, suppose someone purchases a sword on EBay for \$20 and later sells it on EBay for \$30. It seems wrong to tax him on \$30, if his

gain is only \$10. It becomes even more complicated if he sells the sword in-world for 100 pieces of gold, mingles the gold with other gold he has earned in-world and then purchases some item that he later sells on EBay. As a result, even if the IRS chooses to ignore virtual wealth, it will ultimately need to grapple with the difficult question of basis and deductions. However, that is the subject of another paper.