

# iTAX: AN ANALYSIS OF THE LAWS AND POLICIES BEHIND THE TAXATION OF PROPERTY TRANSACTIONS IN A VIRTUAL WORLD

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## INTRODUCTION

Since the turn of the century, there has been a proliferation of people around the world engaging in virtual communities, where they live out their fantasy lives over the Internet. Through these online communities, some virtual participants create and sell products, while others build and auction property. These transactions—with a total estimated value of \$2.09 billion

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per year<sup>1</sup>—would be subject to taxes in the nonvirtual world, but escape taxation due to their virtual nature.

While these virtually created products, land, and services amount to little more than information archived in an Internet database,<sup>2</sup> there are many reasons to characterize virtual property as a functional equivalent of nonvirtual property—a status that could require taxation when such property is bought or sold.<sup>3</sup> *Second Life*, one of the most popular virtual environments<sup>4</sup> and the focus of this Comment, has recognized participants' rights to retain full intellectual property protection for the digital content they create, including “characters, clothing, scripts, textures, objects and designs.”<sup>5</sup> While the tax code has not specifically declared virtual items to be property, there is a growing trend among scholars and courts to treat virtual items as such.<sup>6</sup> This Comment supports the position of these

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1. See generally Posting of Tuukka Lehtiniemi to Virtual Economy Research Network, *How Big Is the RMT Market Anyway?*, [http://virtual-economy.org/blog/how\\_big\\_is\\_the\\_rmt\\_market\\_anyw](http://virtual-economy.org/blog/how_big_is_the_rmt_market_anyw) (Mar. 2, 2007, 12:50) (analyzing the sizes and sources of virtual markets and extrapolating the total value of the “Real-Money Trade” virtual market).

2. See generally Daniel Terdiman, *Second Life: Don't Worry, We Can Scale*, CNET NEWS.COM, June 6, 2006, [http://www.news.com/Second-Life-Dont-worry,-we-can-scale/2100-1043\\_3-6080186.html?tag=nefd.lede](http://www.news.com/Second-Life-Dont-worry,-we-can-scale/2100-1043_3-6080186.html?tag=nefd.lede) (last visited Mar. 20, 2008) (recognizing *Second Life*'s 2,579 computer servers housed in San Francisco, each server holding about sixteen acres of virtual *Second Life* land and objects).

3. See Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1048–50 (2005) (detailing the three main reasons why computer code in virtual worlds should be treated as virtual property rather than intellectual property, namely because it is rivalrous, persistent, and interconnected). See generally Charles Blazer, *The Five Indicia of Virtual Property*, 5 PIERCE L. REV. 137, 161 (2006) (concluding that virtual property rights must be preserved and recognized by courts, especially in light of their individualized characteristics).

4. Compare *Second Life, Economic Statistics*, [http://secondlife.com/whatis/economy\\_stats.php](http://secondlife.com/whatis/economy_stats.php) (last visited Apr. 16, 2008) (placing the number of *Second Life* residents at 13,286,548), with Siam Choudhury, *MindArk: Marketing and Brand Awareness to Attract 150 Million Users to Entropia*, MMO GAMER, June 11, 2007, <http://www.mmogamer.com/06/11/2007/mindark-marketing-and-brand-awareness-to-attract-150-million-users-to-entropia> (interviewing the CIO of *Entropia Universe*, one of *Second Life*'s competitors, who seeks to raise the current total of registered users from approximately 600,000 individuals to 150 million).

5. *Second Life, IP Rights*, [http://secondlife.com/whatis/ip\\_rights.php](http://secondlife.com/whatis/ip_rights.php) (last visited June 13, 2008); see also *Second Life, Terms of Service*, <http://secondlife.com/corporate/tos.php> (last visited June 13, 2008) (acknowledging that users have intellectual property rights in their creations to the extent that applicable law permits, but that such rights come at the cost of certain license rights, forbearances, and indemnifications to Linden Lab—*Second Life*'s owner—and other users).

6. The question of determining which virtual items are legal property is beyond the scope of this Comment. See generally Leandra Lederman, “*Stranger Than Fiction*”: *Taxing Virtual Worlds*, 82 N.Y.U. L. REV. 1620, 1631–39 (2007) (addressing various factors that affect the treatment of virtual property with regard to legal entitlements, including end user license agreements, as well as the differences between game worlds and unscripted worlds); see also Theodore J. Westbrook, Comment, *Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779, 781 (2006) (“[T]here is ample room to argue for such rights within established property theories ranging from Lockean natural law labor

commentators that virtual items do indeed constitute property and further argues that virtual item transactions should be subject to taxation under U.S. law.

Even without any conclusive recognition of such property rights, or perhaps because of it, virtual commerce has been growing at an unprecedented pace.<sup>7</sup> Currently, even conservative estimates place the value of virtual transactions at over \$880 million.<sup>8</sup> Virtual economies are therefore comparable to, and in some cases surpass, economies of real-world industrialized nations.<sup>9</sup> If economic growth increases at the current rate, virtual commerce could achieve a value of \$250 billion by 2010.<sup>10</sup>

Tax law in the United States does not currently cover virtual transactions—either virtual-to-real transactions or virtual-to-virtual transactions.<sup>11</sup> It is debatable whether these transactions represent taxable events,<sup>12</sup> and even under which theory governments could or should tax

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theory to Hegelian personality theory.”). *But see* Allen Chein, *A Practical Look at Virtual Property*, 80 ST. JOHN’S L. REV. 1059, 1088 (2006) (“Despite the fact that virtual world residents think of virtual goods in the same way as tangible properties and that the relative equities favor these residents, reasons abound why a court would not treat virtual items as property.”) (footnote omitted).

7. *See* The Secondlife Newspaper, *U.S. Congress Ponders Taxing Virtual Commerce*, July 4, 2007, <http://sl-newspaper-bnc.blogspot.com/2007/07/us-congress-ponders-taxing-virtual.html> (citing industry growth predictions of around 10%–15% a month, while Linden Lab reports figures at approximately 140% since November 2006). For further predictions, see Daniel Terdiman, *IRS Taxation of Online Game Virtual Assets Inevitable*, CNET NEWS.COM, Dec. 3, 2006, [http://www.news.com/IRS-taxation-of-online-game-virtual-assets-inevitable/2100-1043\\_3-6140298.html?tag=item](http://www.news.com/IRS-taxation-of-online-game-virtual-assets-inevitable/2100-1043_3-6140298.html?tag=item) (last visited Mar. 20, 2008) (citing a senior economist with the Joint Economic Committee of Congress). For growth statistics, see Second Life, *Economic Statistics: Graphs*, <http://secondlife.com/whatis/economy-graphs.php> (last visited June 13, 2008) (providing graphical evidence of tremendous growth between the middle of 2006 and the middle of 2007).

8. *See* The Secondlife Newspaper, *supra* note 7 (estimating a value based upon virtual sales and transaction values occurring in a virtual world alone).

9. *See* Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* 33 (CESifo, Working Paper No. 618, 2001), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=294828](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828) (explaining that the GNP of Norrath, a virtual nation in the game *Everquest*, is comparable to that of Russia or Bulgaria, and higher than that of China or India).

10. *See* The Secondlife Newspaper, *supra* note 7 (using growth predictions from Dan Miller, a senior economist with the Joint Economic Committee and expert on virtual economies). While it is unrealistic to contend that the growth rates will continue in perpetuity, substantial amounts of capital would elude taxation even under significantly lower rates of growth.

11. Virtual-to-real transactions are those involving real money or property exchanged for virtual money or items. Virtual-to-virtual transactions involve only the sale or exchange of virtual property and virtual money. These two types of transactions can be treated the same in assessing tax liability, as the issue turns on whether virtual activity is taxable and not how virtual activity intersects with the real world.

12. *See* Lederman, *supra* note 6, at 1651–52 (recognizing that although the Supreme Court does seem to include virtual transactions in the scope of taxable transactions, the issue has not been definitively decided); *cf.* *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 566 (1991) (“[A]n exchange of property gives rise to a realization event so long as the

them. Due to potentially significant amounts of lost tax revenue associated with virtual transactions, the Joint Economic Committee of Congress has launched an investigation into the public policy considerations that virtual economies raise.<sup>13</sup> Interestingly, at the outset of the study, the majority of the committee expressed the opinion that the government should not tax the receipts and profits of virtual worlds.<sup>14</sup>

This Comment discusses the reasons for and against the Internal Revenue Service's (IRS) controlling, regulating, and taxing online exchanges of virtual currency and property. Part II describes the experiences users encounter while participating in the virtual world. Although there are several such worlds, this Comment focuses on *Second Life*—an unscripted virtual environment with no set storyline or specific goals.<sup>15</sup> The world allows individuals to create online personae, live out whatever dreams they wish, and interact with the millions of others in the environment. Part II also lays out the context for virtual transactions and the reasons for their development. Part III discusses the current state of U.S. tax law as it relates to online transactions and property regulation, while comparing it with similar laws governing real property. Part IV explores both the needs and benefits of imposing tax regulations on virtual environments. Additionally, this Part examines the drawbacks and complications that would result from IRS application of such regulations. Part V proposes two methods the IRS could use to regulate and tax virtual transactions: the imposition of either a capital gains tax or a sales tax. This Comment concludes by arguing that there is a need for new regulations of both virtual-to-real and virtual-to-virtual transactions. It further concludes that the IRS should employ a modified form of a sales-and-use tax by which the agency could best achieve its revenue-collecting purpose while

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exchanged properties are 'materially different'—that is, so long as they embody *legally distinct entitlements*.”) (emphasis added). By leaving the definition of legal entitlements vague, the Supreme Court has allowed ambiguity as to whether virtual property represents a legal entitlement subject to tax when exchanged.

13. See, e.g., Stephen Foley, *U.S. Taxman Targets Virtual World Booming on the Internet*, INDEPENDENT (UK), Oct. 20, 2006, available at <http://www.independent.co.uk/news/business/news/us-taxman-targets-virtual-world-booming-on-the-internet-420891.html> (noting the current congressional probe into virtual environments). At the time of this writing, the investigation is still ongoing and the final report has yet to be released.

14. See Press Release, Joint Econ. Comm., *Virtual Economies Need Clarification, Not More Taxes* (Oct. 17, 2006), available at <http://www.house.gov/jec/news/news2006/pr109-98.pdf> (“‘There is a concern that the IRS might step forward with regulations that start taxing transactions that occur within virtual economies. This, I believe, would be a mistake,’ Chairman Jim Saxton said today.”).

15. See Daniel C. Miller, Note, *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, 22 REV. LITIG. 435, 436–37 (2003) (“In this [type of world], users create virtual lives by building houses, publishing newsletters, and creating alter egos. They spend hours upon hours creating their existence.”) (footnotes omitted).

avoiding many of the pitfalls of virtual regulation—including enforcement, evaluation, and liquidity problems.

### I. A NEW ECONOMIC WORLD

For ease of understanding, this Comment will focus on *Second Life*—one of several virtual worlds—as an exemplar of virtual environments and economies.<sup>16</sup> *Second Life* is an ideal model for evaluating new regulations because it represents a good cross section of the other environments, incorporating many of the same elements and principles, such as a fixed currency and property rights.<sup>17</sup>

Linden Research, Inc. (Linden Lab), the creator of *Second Life*, declares that its product is a “3-D virtual world entirely built and owned by its Residents.”<sup>18</sup> To access the environment, a user registers on the *Second Life* homepage by creating a character and downloading the application,<sup>19</sup> which under the basic membership plan is free of charge.<sup>20</sup> The user may then access the virtual world, which possesses many real-world qualities, such as weather, natural topography, cities, and town squares where people congregate and interact.<sup>21</sup> Individual users have created nearly all the objects in *Second Life*, from the clothing to the gardens and even the buildings themselves.<sup>22</sup> Because, at least according to Linden Lab, users

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16. This Comment does not purport to declare *Second Life* as better or worse than other virtual worlds. Rather, it focuses on *Second Life* because its economy has been thoroughly studied, and enough data exists to apply findings on tax liabilities and solutions to other virtual worlds. See, e.g., Mark Methenitis, *A Tale of Two Worlds: New U.S. Gambling Laws and the MMORPG*, 11 GAMING L. REV. 436, 437–38 (2007) (noting that by its nature, *Second Life* lends itself to use as a virtual world model for developing future regulations).

17. See Viktor Mayer-Schonberger & John Crowley, *Napster's Second Life?: The Regulatory Challenges of Virtual Worlds*, 100 NW. U. L. REV. 1775, 1804–10 (2006) (recognizing *Second Life* as one of the premier virtual economies due to its policy of granting intellectual property rights—one of the many features that competitors seek to emulate).

18. *Second Life*, *What Is Second Life?*, <http://secondlife.com/whatis> (last visited June 13, 2008); see also Bettina M. Chin, *Regulating Your Second Life: Defamation in Virtual Worlds*, 72 BROOK. L. REV. 1303, 1303 (2007) (describing the visual setting and personalized feel of *Second Life*).

19. See *Second Life*, *FAQ*, <http://secondlife.com/whatis/faq.php> (last visited June 13, 2008) (describing the subscription process and noting its simplicity). The process requires very little time and effort: the author registered, created an avatar (a 3-D computer model that represents an individual user), and was exploring the world in less than fifteen minutes.

20. See *Second Life*, *Memberships, Land, and Pricing*, <http://secondlife.com/whatis/pricing.php> (last visited June 13, 2008) (describing the two membership plans: a free basic membership and a premium membership which costs \$9.95 per month and allows the user to own land and receive extensive support).

21. See generally *Second Life*, *What Is Second Life?*, *supra* note 18 (advertising a free-reign world teeming with people, entertainment, experiences, and opportunity).

22. See Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the Metaverse*, 49 N.Y.L. SCH. L. REV. 81, 87 (2004) (noting that individual users, and not Linden Lab (the site owner and administrator), have created nearly all of the objects in the

maintain property rights in the objects they create, they are free to sell these objects to others.<sup>23</sup> In the virtual economy of *Second Life*, users buy and sell objects with a virtual monetary unit—the Linden dollar.<sup>24</sup>

### A. The Linden Dollar

The Linden dollar (named after the environment's creator, Linden Lab) is the digital currency that forms the backbone of *Second Life*'s virtual economy.<sup>25</sup> An actual currency exchange, the Linden Dollar Exchange (LindeX), allows users to fund their characters and increases flexibility for world markets.<sup>26</sup> The creators have made the Linden dollar a floating currency.<sup>27</sup> Because the Linden dollar has an exchangeable real currency value, each sale by a user can potentially reap a profit, leading some users to turn to *Second Life* as their entire source of income.<sup>28</sup> As an extreme example, Ailin Graef, better known in *Second Life* as Anshe Chung, has become a virtual world icon by declaring a net worth of over one million U.S. dollars, all earned from her *Second Life* business.<sup>29</sup> This represents a

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environment).

23. See *Second Life*, *IP Rights*, *supra* note 5 (recognizing a resident's right to "retain intellectual property rights in the original content they create in the *Second Life* world, including avatars, clothing, scripts, textures, objects and designs"). This right is enforceable and applicable both in-world and offline. The implications of this right are unknown, as there has yet to be a challenge to it. However, regardless of the rights that the virtual world provides, the courts and legislature have not yet followed suit.

24. See *Second Life*, *What Is Second Life?*, *supra* note 18 ("The Marketplace currently supports millions of [U.S.] dollars in monthly transactions. This commerce is handled with the in-world unit of trade, the Linden dollar, which can be converted to [U.S.] dollars at several thriving online Linden dollar exchanges.").

25. See *id.* (declaring the Linden dollar the only permitted currency in *Second Life*).

26. See generally *Second Life*, *LindeX Market Data*, <http://secondlife.com/whatis/economy-market.php> (last visited June 13, 2008) (listing the LindeX's past exchange rates for the Linden dollar against the U.S. dollar and providing graphs of past usage and exchange rates).

27. A floating currency has a flexible exchange rate that is allowed to fluctuate according to the foreign exchange market. See CNNMONEY.COM, *How Real Money Works in Second Life*, [http://money.cnn.com/2006/12/08/technology/sl\\_lindex/index.htm](http://money.cnn.com/2006/12/08/technology/sl_lindex/index.htm) (last visited June 13, 2008) (interviewing the CFO of Linden Lab to analyze how virtual currency works, including his opinions on why it is important to leave the Linden dollar as a floating currency); see also *Second Life*, *LindeX Market Data*, *supra* note 26 (providing daily market history, including the current exchange rate of 264 Linden dollars to one U.S. dollar).

28. See generally JULIAN DIBBELL, *PLAY MONEY: OR, HOW I QUIT MY DAY JOB AND MADE MILLIONS TRADING VIRTUAL LOOT* (2006) (relaying the author's experiment in becoming a virtual currency trader and earning the equivalent of a \$47,000 annual salary).

29. See Rob Hof, *Second Life's First Millionaire*, *BUSINESS WEEK*, 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) (relating the career successes of Ailin Graef, who, from an initial investment of \$9.95, arranged a business whereby she would buy virtual land, subdivide it, and either rent or resell it for a profit).

milestone in the business world—a company has derived the entirety of its real-world profits and revenue solely through virtual transactions.<sup>30</sup>

At any time they choose, users are free to utilize the LindeX or various other methods to exchange their real currency for Linden dollars, and vice-versa.<sup>31</sup> With a little start-up capital and the right investments, or just an industrious business sense, it is quick and easy to earn a sizable amount of Linden dollars.<sup>32</sup> Users can exchange Linden dollars for real currency, effectively turning each profitable virtual transaction into a potential real-world gain.<sup>33</sup>

### B. A Virtual Future

*Second Life* is an exemplary representation of an entire industry that is quickly expanding at an increasing rate.<sup>34</sup> While *Second Life* has nearly ten million registered users, there are as many as thirty million people participating in virtual environments.<sup>35</sup> Data indicate that virtual environments of all types, not just *Second Life*, will continue to play an

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30. While sales of nontangibles occur quite frequently in the real world, as in the sale of a copyright, patent, or trademark, these are equivalent to thoughts and ideas, which are intangible by their nature. While the land and goods in *Second Life* may be more analogous to real property—the most tangible of commodities—*Second Life* land is not tangible at all. For more information, see *supra* note 3 and accompanying text.

31. See *Second Life, FAQ*, *supra* note 19 (explaining that in addition to the LindeX, there are many ways to exchange U.S. dollars and Linden dollars, including third party websites and virtual ATMs).

32. See *Second Life, Business Opportunities*, <http://secondlife.com/whatis/businesses.php> (last visited June 13, 2008) (discussing the potential opportunities for both innovation and profit, such as creation and sale of items, conducting land transfers, and performing various services for other users—including party and wedding planners, theme park developers, vacation resort owners, custom animation creators, and automotive manufacturers).

33. See Edward Castronova, *A Cost-Benefit Analysis of Real-Money Trade in the Products of Synthetic Economies*, 8 INFO 51, 52 (2006) (recognizing in-game items and currency as having real-world value even if never removed from the virtual environment, and using the example of a hypothetical dungeon key, which has both a supply curve and a demand curve, and hence an implicit economic value).

34. Many other environments exist as part of the virtual industry, which has flourished in recent years. Not only are there unscripted worlds such as *Second Life*, *Sims Online*, and *There*, but game worlds as well, such as *World of Warcraft*, *City of Heroes*, and *Everquest*, where there are specific objectives for each user to complete. Tax questions apply differently to game worlds, which were created purely for entertainment and without market forces and economic situations in mind. Although game worlds fall outside the scope of this Comment, it is important to note that *Second Life* is merely one of many similar environments. See *supra* note 7 and accompanying text.

35. See *Second Life, Economic Statistics*, *supra* note 4 (noting population and usage, land sale figures, and a variety of statistics concerning the Linden dollar, such as average monthly spending, number of business owners with positive cash flow, and the primary sources of the Linden dollar). See generally Castronova, *supra* note 33, at 52 (reporting approximately twenty million users over a year ago, leading to the possibility of nearly forty million users today, given current rates of expansion).

increasing role in modern society as more and more users join and bring increasing amounts of capital into the online world.<sup>36</sup> There has already been a dramatic move to virtual worlds by banking, retail, telecommunications, and general business industries.<sup>37</sup>

## II. THE CURRENT STATE OF VIRTUAL TAXATION

Assuming that users maintain a legitimate real property interest in their virtual items, it is easy to discern the real-world value of such items. According to current federal income tax laws, the gross income from any source is taxable.<sup>38</sup> However, ambiguity exists about whether a virtual property transaction is equivalent to a real-world acquisition or sale.<sup>39</sup>

In the real world, when people exchange property for a value different from their basis in that property, tax liability may arise.<sup>40</sup> Determining basis depends on how the owner acquired the property in question; for property acquired by purchase or contract, the basis is the original cost.<sup>41</sup> The difference between the amount realized from the sale or other disposition and the basis constitutes gain or loss.<sup>42</sup> This value, taken in conjunction with the associated deductions, is the adjusted gross income, and ultimately becomes taxable.<sup>43</sup>

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36. See Castronova, *supra* note 9, at 39 (stating that the impact of virtual worlds is difficult to overestimate, and even predicting that most, if not all, real-world communication, family interaction, and commerce will be replaced by virtual-world analogues). See generally Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2044–45 (2004) (concluding that virtual worlds are very likely to become important spaces for innovation and free expression, and proper legislation should reinforce and protect these important values).

37. See, e.g., Alan Rappeport, *When Virtual Crises Turn Real*, CFO.COM, Aug. 16, 2007, [http://www.cfo.com/article.cfm/9670900/1/c\\_9644880?f=home\\_todayinfinance](http://www.cfo.com/article.cfm/9670900/1/c_9644880?f=home_todayinfinance) (examining a real banking crisis that occurred in one of *Second Life*'s virtual banks, and noting that what draws banks into *Second Life* also draws others companies, including IBM, Coca-Cola, and Best Buy).

38. See 26 U.S.C. § 61(a) (2000) (stating that taxable income includes, but is not limited to, the purchase or sale of any property with a discernable value, gross income derived from businesses, compensation for services, and gains derived from dealings in property).

39. See *supra* note 12 and accompanying text.

40. See generally 26 U.S.C. § 1001 (2000) (explaining both how to recognize a gain or loss and the proper method of determining that amount). Liability may arise in a myriad of other circumstances, but this Comment only deals with this type of exchange.

41. See 26 U.S.C. § 1012 (2000) (“The basis of property shall be the cost of such property, except as otherwise provided . . .”).

42. See 26 U.S.C. § 1001(a) (2000) (“The gain from the sale or other disposition of property shall be the excess of the amount realized therefrom over the adjusted basis . . . and the loss shall be the excess of the adjusted basis provided in such section for determining loss over the amount realized.”).

43. See 26 U.S.C. § 1001(c) (2000) (“[T]he entire amount of the gain or loss, determined under this section, on the sale or exchange of property shall be recognized.”).



A simple change in basis will not immediately incur tax liability.<sup>44</sup> There must be a taxable event, currently characterized as “the gain or loss realized from the conversion of property into cash, or from the exchange of property for other property differing materially either in kind or in extent,” which “is treated as income or as loss sustained.”<sup>45</sup>

Whether virtual property is taxable thus turns on whether it falls under this second depiction of property. The fact that an item is not tangible does not defeat this characterization; for tax purposes, the exchange of intellectual property can constitute a taxable event.<sup>46</sup> As users retain intellectual property rights in their unique creations, a virtual sale could be viewed as exchanging two distinct and dissimilar intellectual property rights, which is a taxable transaction.<sup>47</sup> From this view, there is a strong argument that an exchange of a virtual car for a virtual house would constitute a taxable event, as each item possesses a distinct and dissimilar market value.<sup>48</sup>

If a transaction of real-world goods or services occurs online, it could be taxable under current law.<sup>49</sup> However, the IRS is silent about how it intends to handle virtual transactions.<sup>50</sup>

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44. See 26 U.S.C. § 1031 (2000) (excluding like-kind exchanges from tax recognition, as in the case of a taxpayer selling and receiving items used for business purposes who will not be taxed on any gains up to the amount of non-like-kind property received).

45. 26 C.F.R. § 1.1001-1(a) (2007).

46. See generally Xuan-Thao N. Nguyen & Jeffrey A. Maine, *Taxing the New Intellectual Property Right*, 56 HASTINGS L.J. 1, 35 (2004) (analogizing the tax treatment of intellectual property transactions, such as an exchange of copyrights and patent rights, to those of real property transactions).

47. See generally *id.* (providing background information on the taxability of intellectual property rights). For a discussion on the treatment of virtual property, as well as *Second Life*'s observance of creators' rights, see *supra* notes 3, 5–6 and accompanying text.

48. See Castronova, *supra* note 33, at 52 (“Economics sees value wherever humans decide that some construct of theirs has utility but is scarce. Synthetic world goods have utility and are scarce; thus they have value that can be measured in terms of real dollars.”).

49. See generally 26 U.S.C. § 61(a) (2006) (providing the legal basis to tax online retailers, such as eBay, by defining gross income as income through any source derived, not limited to real-world activity). This definition is incredibly broad and can be interpreted to include nearly anything as income. However, most of the tax code constitutes exceptions to the general rule represented in this section.

50. While there has been no attempt to require tax payments resulting from virtual activity, such regulation does not appear to be outside the scope of the IRS's authority under its enabling legislation. Because the tax code defines income broadly enough to encompass any source of income, the IRS would not exceed its rulemaking authority by promulgating additional regulations specifically governing virtual economies. See *infra* note 54 and accompanying text. The IRS could impose reporting requirements so long as the IRS interprets the existing statutory provisions to be broad enough to encompass virtual transactions. If not, Congress would need to issue an amendment to force third parties to report their income and costs, as is currently required of banks, mutual funds, other financial institutions, and many employers, through the W-2 form. Cf. Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. 695, 697 (2007) (“As is well known, in a variety of situations, the federal government requires third

### III. NEW TAX REGULATIONS FOR VIRTUAL ECONOMIES

While the current U.S. tax code does not provide the IRS with a vehicle to tax transactions that occur entirely in a virtual environment, there are several reasons why regulation is not only desirable, but also necessary. However, the IRS must exercise extreme care in forming new regulations, as there are numerous pitfalls in attempting to regulate such new and fragile worlds, each having the potential to kill virtual economies in their infancy.

#### *A. The Need for Regulation*

Because the current enabling legislation is arguably broad enough to tax virtual transactions, the IRS need only announce a new interpretation and provide guidelines. There are many reasons for the IRS to promulgate rules governing virtual transactions, including (1) elimination of the potential for tax evasion; (2) prevention of legal ambiguities that would result in unintentional noncompliance; and (3) fleeting opportunity to incorporate regulations into a fledgling economy while it is still both feasible and practical.

The first reason to regulate virtual transactions is that if virtual economies remain untaxed, a real-world vendor could sell goods or services through *Second Life*, taking in untaxed virtual money in exchange for items in the real world.<sup>51</sup> By avoiding taxes, the vendor could lower prices, thereby gaining a market advantage over vendors selling only in real-world markets.<sup>52</sup> This would result in negative economic effects whereby vendors operating in good faith would lose business as a direct result of their good faith, eventually forcing a significant portion of vendors to operate in the underground economy solely to stay competitive. The consequences would be not only a significant loss of revenue to the government, but a major blow to the economy as a whole.

The second reason to impose new regulations is to avoid creating ambiguity or uncertainty regarding the treatment of taxable, real-world income vendors earn along with untaxed, virtual income. By exchanging virtual money for real goods and vice versa,<sup>53</sup> businesses and individuals

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parties to report to the government, with a copy to the taxpayer, amounts the payor transferred to the taxpayer.”).

51. While this market advantage is primarily a theoretical harm, the situations in which it could materialize are already occurring. *See infra* note 53 and accompanying text (detailing one instance of a business accepting virtual money for real goods).

52. *See* Lederman, *supra* note 6, at 1666–69 (advancing the theory that the intentional tax avoidance resulting from an untaxed sector is a reason to tax the sale of virtual items).

53. Such trade between virtual and real economies has already occurred. A few sites have begun to allow visitors to purchase goods using Linden dollars. *See, e.g.*, Press

may easily become confused about their tax liabilities. A vendor might believe that by accepting virtual currency for its real-world services, its income would not be taxed, despite current laws to the contrary.<sup>54</sup> This could have the unfortunate consequence of leading the government to create a society of unintentional tax cheats.<sup>55</sup>

The third reason for a new regulation is the extreme growth potential of virtual economies.<sup>56</sup> Already, more than fifty major real-world companies have created official virtual presences within the *Second Life* environment.<sup>57</sup> With the current rate of expansion, a measurable percentage of the U.S. economy will soon be engaged in virtual transactions, with many occurring entirely within such environments.<sup>58</sup> The IRS has a unique opportunity to promulgate regulations and observe their effects before so much of the real economy becomes invested in the virtual world that it is difficult to make a significant change.<sup>59</sup> However, as important as these regulations are in a virtual world, there may also be

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Release, *Pizza Enters the Virtual World of Second Life*, FASTPITCH (Apr. 21, 2007), available at [http://www.fastpitchnetworking.com/pressrelease\\_pdf.cfm?PRID=8734](http://www.fastpitchnetworking.com/pressrelease_pdf.cfm?PRID=8734) (recognizing that *Second Life* users are now able to order real pizzas with Linden dollars from virtual-world locations, to be delivered to real-world locations).

54. See 26 C.F.R. § 1.61-1(a) (2007) (“Gross income includes income realized in any form, whether in money, property, or services. Income may be realized, therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.”). While virtual currency is not specifically mentioned, it could be included in the list of potential income sources based on even the most conservative interpretation of the regulation.

55. See Lederman, *supra* note 6, at 1667–68 (speculating that if the government declared its intent not to tax virtual currency, the confusion it would likely cause would result in unintentional noncompliance).

56. See *supra* note 7 and accompanying text (presupposing that greater than expected growth rates will eventually lead to a high value economy).

57. See Frank Rose, *How Madison Avenue Is Wasting Millions on a Deserted Second Life*, WIREd, July 24, 2007, [http://www.wired.com/techbiz/media/magazine/15-08/ff\\_sheep?currentPage=all](http://www.wired.com/techbiz/media/magazine/15-08/ff_sheep?currentPage=all) (evaluating the efficacy of major companies opening official virtual offices in *Second Life* and concluding that it would be a poor business decision). Nevertheless, Coca-Cola, IBM, Coldwell Banker, Adidas, H&R Block, Sears, Nissan, Pontiac, CNET, Reuters, the MLB and NBA, and AOL have all begun conducting virtual business in *Second Life*. *Id.*

58. See *Second Life, Economic Statistics: Graphs*, *supra* note 7 (showing that while around seven million dollars were exchanged on the LindeX in each month of 2007, the virtual economy has a value approximately five times as high, leading to the inference that the majority of the money involved in *Second Life* remains in the virtual world).

59. While reporting regulations have their difficulties now, in a few years it will be immeasurably more difficult to impose a new tax structure, as virtual environments will not be able to accommodate such changes without severe detriment to their nature. It is difficult to accurately predict the point at which such regulations will no longer be feasible, as this is uncharted legal territory. Most, if not all, methods of taxing such transactions will require significant infrastructure changes on the part of the virtual-environment provider. To reduce the resistance from providers, the government should impose requirements early, which will require the least retrofitting of code and allow start-up companies to consider reporting requirements from the start.

downsides to establishing regulations in a nascent economy—an issue to which this Comment now turns.<sup>60</sup>

### *B. Difficulties in Regulation*

There are several disadvantages to the taxation of virtual transactions, including compliance difficulties, liquidity problems, and the danger of overregulation. It would be difficult and unrealistic to require all individual users to manually keep track of each transaction in which they participate.<sup>61</sup> Given these administrative difficulties, it would be advantageous for the IRS to require virtual-world owners<sup>62</sup> to report transaction data to the government, essentially grafting the third-party reporting regime onto the virtual world.<sup>63</sup> These requirements would be fundamentally the same as those currently imposed on the mutual fund and investment industries.<sup>64</sup> Fortunately, reporting requirements would not require the data servers to record any more information than they already do.<sup>65</sup> A virtual transaction, in essence, is merely moving a segment of data containing the asset from one location on an Internet server to another, and that process is already naturally recorded by virtue of its taking place.<sup>66</sup>

A policy of imposing taxes after the receipt of virtual goods would be unworkable, considering the nature of such items. An item that has great value to a single user may have little or no value to other users, thus

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60. See *infra* notes 69–71 and accompanying text (acknowledging potential downsides such as overregulation and destroying user incentives).

61. This is especially evident since many of the transactions are valued at one Linden dollar, for which the current real-world equivalent is about \$0.003. For a hypothetical sales situation, such manual requirements would make a user record the basis, the purchase price of the item, the exchange rate at the time, and the parties to the trade. For any user engaging in multiple trades per day, with some engaging in hundreds of daily transactions, this is an unworkable requirement. The only way for reporting requirements to succeed is through automatic reports by owners.

62. Virtual-environment owners are those who provide the virtual framework and maintain the online servers. While item and property ownership rights rest with individual users, rights to the environment as a whole do not. For example, *Second Life* is owned by Linden Lab, a California-based corporation. *Entropia Universe* is owned by MindArk, a Swedish company.

63. See Charles P. Rettig, *Nonfilers Beware: Who's That Knocking at Your Door?*, 8 J. TAX PRAC. & PROC. 9, 9–10 (2006) (comparing amounts subject to third party reporting with similar amounts not subject to reporting, and finding that those without reporting requirements have a significantly lower rate of proper tax reporting and compliance, averaging around 46.1%).

64. See IRS Instruction Mem., *2008 Instructions for 1099-B* (instructing brokers on how to correctly file the 1099-B form, which reports any gains or losses that a taxpayer makes).

65. See Rappeport, *supra* note 37 (noting that every transaction within *Second Life* may be observed and tracked, with large transactions flagged automatically).

66. See *id.* (quoting CFO John Zdanowski, who says that “unlike [monitoring in] the real world, in [*Second Life*] it just so happens that we know everything that happens”).

eliminating the potential for resale.<sup>67</sup> However, taxing a user upon receipt or through continuing possession of such an item, such as via a property or use tax, would present difficulties. If the would-be taxpayers have no liquid funds with which to pay the tax and no way to rid themselves of the item, they would be forced into the unfortunate situation of indebting themselves to meet their tax obligations.<sup>68</sup>

Notwithstanding the many reasons to act, the IRS must use extreme care in promulgating rules designed to govern virtual economies. There is a very fine line between effective regulation and overregulation: the more liability imposed upon participants for their actions in the virtual economy, the less attractive such actions become.<sup>69</sup> Overregulation would likely result in the immediate decline of the virtual economy, lowering its total economic value, and therefore lowering the total federal revenue expected from the regulations.<sup>70</sup> The government can create the proper balance by promulgating regulations that do not burden the user in terms of filing or recording transactions, but that still generate enough tax income to make the regulations worthwhile.<sup>71</sup>

#### IV. POTENTIAL SOLUTIONS

In creating a new tax system, it is crucial to account for major taxation policy considerations. The “provision[s] should be equitable, give rise to minimal deadweight loss, and be possible for the government to implement and enforce.”<sup>72</sup> In light of such policy dictates, this Comment analyzes two

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67. Hypothetically, User A could conscript User B to design and create a particular item, one which only User A would desire to own. *See, e.g.*, RESTATEMENT OF CONTRACTS § 346 illus. 4 (1979) (contemplating a fountain so ugly that the property value decreases and fewer buyers are interested in the land). If such an object were delivered and taxed upon receipt, the user, if presumed to have no liquid capital, would be forced to sell the object just to pay the taxes. However, since the object would be unsalable, the user would become an unintentional tax evader.

68. *See generally* Dustin Stamper, *Taxing Ones and Zeros: Can the IRS Ignore Virtual Economies?*, 114 TAX NOTES 149, 151 (2007) (noting the similar problems that arise in the case of some virtual goods and valuable home run baseballs when taxes are imposed on these items after receipt but before sale).

69. *See* Mayer-Schonberger & Crowley, *supra* note 17, at 1819–21 (2006) (elaborating on the idea that with increasing regulation on virtual worlds and providers, the attractiveness of such worlds decreases, and with such drawbacks, the virtual environment will change significantly in membership and policy—potentially dooming the world to failure).

70. *See id.* (implying that once users cease to participate in the virtual economy, the value will drop such that it would no longer be beneficial for the IRS to regulate).

71. While this task would be difficult to accomplish, an appropriate balance is essential. Too little regulation would not be cost-effective, as the costs to users and providers in reporting transactions and to the agency in policy changes would not be met by an equivalent amount of tax revenue. Overregulation will bring in more tax revenue, but may deter users from virtual economies, eventually negating the need for regulations altogether.

72. Lederman, *supra* note 6, at 1658 (citing Milka Casanegra de Jantscher,

practical solutions: a capital gains tax and a sales tax for the virtual economy.

### A. Capital Gains Tax

The most obvious method of taxing virtual land and property transactions is through a capital gains tax, which is the scheme the IRS uses to tax real-world property sales. While using current capital gains formulas would effectively allow the IRS to tax virtual profits, it would also create a slew of evaluation issues that do not exist in the real world.

A capital gains tax is a tax on gains after accounting for costs and expenses.<sup>73</sup> Before computing capital gains, the final basis must be determined to allow for a calculation of net gain or loss.<sup>74</sup> When a user creates an item in the online world with no costs associated with the creation, the basis is zero.<sup>75</sup> The service fees paid for use of the environment do not enter into the equation.<sup>76</sup>

The IRS could introduce a regulation requiring individuals to declare any income earned in virtual environments on their tax returns, similar to the way that investment profits are currently declared. To aid enforcement, reporting regulations would be a necessary accompaniment to the new law, forcing virtual-environment owners to send details of all transactions to the IRS, which would allow the IRS to compare the figures to an individual's tax returns.<sup>77</sup>

This method would likely result in an extraordinary amount of work for both the IRS and the providers, requiring them to spend a great deal of time documenting transactions that amount to little more than one or two dollars. While this method is extremely accurate for collecting the taxes

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*Administering the VAT*, in VALUE ADDED TAXATION IN DEVELOPING COUNTRIES 179 (Malcolm Gillis, Carl S. Shoup & Gerardo P. Sicat eds., 1990)).

73. See BLACK'S LAW DICTIONARY 1496 (8th ed. 2004) (defining capital gains tax as "[a] tax on income derived from the sale of a capital asset" and stating that "[t]he federal income tax on capital gains typically has a more favorable tax rate"). For example, the current rates are 5% for taxpayers in the 10 or 15% bracket and 15% for taxpayers in the 25, 28, 33, or 35% tax brackets.

74. For a discussion on the determination of basis, see *supra* notes 40–42 and accompanying text (describing the formula used in basis determination, including with regard to gross income).

75. See 26 U.S.C. §§ 212–224 (2000) (discussing potential deductible expenses). Because nothing on the list pertains to the creation of a virtual item, the basis must be set at zero.

76. See Lederman, *supra* note 6, at 1649–50 (concluding that monthly and licensing fees must not be used in establishing basis because it would require a constant reevaluation of expenses, and would not reflect the particularized worth of each individual asset).

77. The industry as a whole is likely to resist the establishment of reporting requirements. However, such requirements would not be impossible to administer, nor would they be beyond the scope of the IRS's current enabling legislation. For a more detailed discussion on this issue, see *supra* notes 61–65 and accompanying text.

due, it is unlikely to be the most cost-effective. This Comment proposes it only because it is the technically correct way to tax such transactions, since the IRS analyzes and taxes property exchanges through a capital gains analysis. However, for the purposes of taxing virtual property exchanges, while a capital gains analysis is workable and manageable, it is not nearly as viable a solution as a sales tax.

### *B. Sales-and-Use Tax*

A system in which the virtual environment automatically deducts a percentage of each transaction and routes the money directly to the IRS would be an efficient and effective solution to the ambiguity in current tax law. A sales tax is one “imposed on the sale of goods and services, usually measured as a percentage of their price.”<sup>78</sup> Traditionally, the buyer pays the tax at the time of sale and the seller remits the tax to the appropriate authorities.<sup>79</sup> Most jurisdictions also impose a “use” tax which functions to capture lost sales tax revenue when transactions occur in a different jurisdiction than that of the collecting agency.<sup>80</sup> An example of this imposition is when a resident of State A buys an item in State B: he incurs use tax liability whether he brings the item into State A himself or has it shipped. Generally, the use tax is self-assessed by the buyer, unless the seller also operates in the taxing jurisdiction, in which case the state will again impose a collection duty upon the seller.<sup>81</sup>

The IRS could seek to change its enabling legislation to allow for a federal sales-and-use tax when there is no other jurisdictional nexus. In essence, the IRS could require that for each transaction where Linden dollars change hands, the computer framework will withhold a certain

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78. BLACK'S LAW DICTIONARY 1498 (8th ed. 2004). *See also* 68 AM. JUR. 2D SALES-AND-USE TAX § 1, at 13 (1993) (“While . . . the economic burden of [a retail] sales tax falls upon the consumer, the seller has the statutory duty to collect the tax for the taxing jurisdiction.”).

79. *See* Hal R. Varian, *Taxation of Electronic Commerce*, 13 HARV. J.L. & TECH. 639, 640 (2000) (noting that sales taxes apply only to purchases in which the seller and buyer are located in the same jurisdiction).

80. *See* Sales Tax Institute, *Sales Tax Concepts Made Easy for You*, [http://salestaxinstitute.com/sales\\_tax\\_rates.php](http://salestaxinstitute.com/sales_tax_rates.php) (last visited June 13, 2008) (listing each state and accompanying sales tax percentage, as well as whether a use tax exists). Forty-five of the fifty states, plus the District of Columbia, impose a sales tax. Only Alaska, Delaware, Montana, New Hampshire, and Oregon do not impose sales or use taxes. *Id.*

81. *See* Sidney S. Silhan, *If It Ain't Broke Don't Fix It: An Argument for the Codification of the Quill Standard for Taxing Internet Commerce*, 76 CHI.-KENT L. REV. 671, 674–76 (2000) (outlining the basic elements of both sales and use taxes, particularly with regard to the methods employed to collect the use tax); *see also* Varian, *supra* note 79 (reviewing the process by which states collect use taxes from firms and consumers, as well as the difficulties they face in doing so).

percentage during the transfer for remittance to the government.<sup>82</sup> This method fulfills major policy considerations underlying taxation: fairness, minimization of deadweight loss, and ease of implementation and enforcement.<sup>83</sup> It would be just as fair as any state or local version of a sales-and-use tax, as it would be passive and automatic, and would minimize loss. In addition, because the virtual environment would apply the tax automatically to every transaction, compliance theoretically would be one hundred percent.

The sales-and-use tax method would require eliminating any requirements of reporting and taxing cash-out amounts,<sup>84</sup> as this practice would result in double taxation in most instances.<sup>85</sup> While a “cash-out” policy would serve to collect revenues both easily and efficiently, it would not capitalize on the significant amount of transactions whose value will never leave the virtual world, rendering such a system less effective than a sales-and-use tax applied throughout the virtual economy.

#### CONCLUSION

By all indications, virtual worlds are here to stay and will in all likelihood continue to grow in both usage and influence. It is up to Congress to analyze the law and public policy to determine whether transactions occurring in such environments—both virtual-to-real and virtual-to-virtual—should remain untaxed. There are many reasons to change the current policy and begin taxing such economic activities, but there are also significant difficulties in doing so. Nonetheless, by applying sales-and-use taxes to virtual transactions, the IRS would meet the major requirements for an equitable and efficient tax policy while avoiding most of the pitfalls associated with virtual regulation. There is a demonstrable need for regulation, as evidenced by the increasingly significant value of virtual economies, and a sales-and-use tax—properly applied—will meet this need.

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82. The remittance process would take the form of any other sales-and-use tax application, with the added ease of automatic collections. *But see* Silhan, *supra* note 81, at 701 (concluding that Congress should adopt stricter standards for determining what constitutes a nexus for tax purposes). If Congress adopted stricter standards, it would have to include an exception for virtual economies to enable the taxation of such environments, since by their nature they have no physical nexus in any real-world location.

83. *See supra* notes 6, 72 and accompanying text.

84. A “cash-out” policy would apply a tax liability to any money taken out of the virtual environment over the amount put in, regardless of the amount gained or lost while invested in the virtual world.

85. Double taxation in the virtual world—similar to the double taxation of corporate profits (once at the corporate level and again at the shareholder level)—would result if a sales tax were imposed on virtual-to-virtual transactions, in addition to a tax applied to income from virtual-to-real transactions. This result is undesirable and should be avoided.



The three primary reasons to tax virtual transactions stem from the same source: the importance of certainty in the law.<sup>86</sup> First, without proper regulations, the virtual environments could create a significant legal ambiguity, with some taxpayers using them to fraudulently avoid taxes. Second, other taxpayers may be incurring liabilities they never meant to assume. Third, this is an opportunity for the IRS to incorporate structure and regulation into the growing virtual economy before it would be unfeasible to retrofit the new regulations to the virtual world.

The drawbacks to regulation are also significant.<sup>87</sup> Like many taxation fields, there are a great number of valuation, liquidity, and enforcement concerns. Because of the very nature of virtual money and items, they are difficult to price, and oftentimes just as difficult to resell. There is also a chance that overregulation will prove to be a bigger detriment than the economies are willing, or even able, to handle. Whichever regulations the government may choose to institute, its principal concern must be to avoid overburdening both the owners of the virtual environments and the individual users who populate them.

While a capital gains approach to the taxation of virtual transactions may result in higher tax revenue, it would also create several problems that could lead to the demise of the entire system. The sales-and-use tax application would allow for an equally efficient and equitable policy with few, if any, of the drawbacks of a capital gains tax. Reporting requirements would not be necessary, which would render the integration of the sales-and-use tax into the current tax system far easier. The only major change required to implement such a system would be to create and launch a computer program that automatically deducts a negligible percentage of virtual currency from each transaction and holds it for government collection.<sup>88</sup> The end result of implementing such a system would be a proper application of existing tax law and its underlying concepts, while avoiding a majority of its inherent disadvantages.

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86. For a discussion on the need to institute regulations, see *supra* notes 51–59 and accompanying text.

87. For a discussion on the drawbacks to regulation, see *supra* notes 60–71 and accompanying text.

88. Such a program would be a simple adjustment to the infrastructure of the virtual environment. Each time the computer transferred Linden dollars from one user's account to another, the program would siphon a set percentage of that amount to another location in escrow for the government.