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FEDERAL TAX CONSEQUENCES OF VIRTUAL WORLD TRANSACTIONS

G. Martin Bingisser¹

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Abstract

This article discusses the tax consequences of transactions involving Massive Multiplayer Online Role Playing Games (“MMORPGs”). MMORPGs have recently grown in popularity and developed significant economic activity. Virtual goods used in these games are traded for both real and virtual currency. While few dispute that a sale of virtual goods for real currency is a taxable event, more complex tax issues arise concerning transactions that occur solely within virtual worlds. This article analyzes the tax consequences and policy issues surrounding such transactions.

Table of Contents

[Introduction](#)

[General Background of MMORPGs](#)

[Tax Treatment of Virtual World Transactions](#)

[Exchanges of Virtual Property for Virtual Property](#)

[Tax Treatment of Barter Exchanges](#)

[Like-Kind Exchanges](#)

[Transfers of Virtual Property for Virtual Currency](#)

[Policy Implications](#)

[Conclusion](#)

[Practice Pointers](#)

INTRODUCTION

<1>Both the amount of revenue generated through Massive Multiplayer Online Role Playing Games (“MMORPGs”) and their membership numbers have increased significantly over the past five years.² These online games create virtual worlds in which users may interact with one another. In those games, individuals develop virtual goods such as clothing for their characters (called “avatars”) to use within the virtual world.

Users then exchange the goods in both real and virtual world transactions. Users will enter into barter and sale transactions. While many games explicitly prohibit the use of "real" money to purchase virtual goods and services, this article will focus on the many games that promote such activity. So far, the Internal Revenue Service ("IRS") has not taken a position on whether or not transactions within the virtual world are taxable. It appears that such transactions would be subject to taxation under certain circumstances, and taxation is consistent with the policy of the Internal Revenue Code. This article begins by briefly explaining the phenomenon of MMORPGs, before analyzing the likely tax consequences under current law of transactions involving such games and discussing some of the practical policy issues arising from such tax consequences.

GENERAL BACKGROUND OF MMORPGS

<2>Video and computer gaming has grown enormously over the past thirty years. Simple games, such as the vintage paddle game PONG, have evolved into complex games involving three-dimensional graphics, complex story lines, and increased interaction. The growth of interactive games over the past decade has led to the development of MMORPGs. Only recently, however, have massive internal economies emerged within these games. Edward Castronova, professor of telecommunications at Indiana University, was one of the earliest researchers to study and widely publicize such economic activity. Professor Castronova first discussed the presence of full-fledged economies within these games in 2002 when he noted the virtual economies shared several features with real economies, most importantly floating exchange rates and specialization of labor.³

<3>MMORPGs are a departure from what is traditionally thought of as a game. Unlike most games, no winner is declared. Some games also do not even have specific goals that users must seek to achieve. Rather than utilizing a traditional story line, Second Life and similar games merely provide a framework within which individuals interact. In the games, the individuals often make friends, accumulate resources, and live as normal individuals would live. Users can often create buildings, attend lectures, and dictate other details of their character and life; the game creates a blank slate upon which users can develop nearly anything they can imagine. While many online games have user agreements that explicitly prohibit the use of "real" money in trading for virtual goods,⁴ other games promote such economic activity. The latter category of games will be referred to as unstructured MMORPGs, and they are the focus of this Article.

Second Life, developed by software developer Linden Lab, is one such game.⁵ Users, or “residents,” of Second Life retain the intellectual property rights to their digital creations and may sell or trade them to other users.⁶ Virtual currency, called the Linden Dollar, is used by Second Life gamers to purchase virtual goods developed by other users. Users also trade virtual goods with others. The goods transferred in the economy range from developed real estate to virtual clothing and other accessories.⁷

<4>In addition to sales and trades made within the game, there is also a vibrant market for these goods outside the game. Many individuals will sell or auction virtual land and other property in exchange for real world currency.⁸ Upon completion of the transaction, the users meet inside the game to virtually deliver the property. The limited supply of Linden Dollars has resulted in the creation of markets to exchange Linden Dollars for actual currency. Linden Lab itself runs one currency exchange: the LindeX Market. Despite that fact that Linden Lab acts as the central bank and can create new currency at its will, the floating exchange rate is fairly stable and has recently hovered around 270 Linden Dollars per one U.S. Dollar.⁹

<5>The apparent scale of the economies within virtual games is impressive. The GDP of Second Life was recently estimated at \$64 million U.S. Dollars.¹⁰ Roughly 3,000 individuals earn more than \$20,000 USD in income each year through their activities within the game.¹¹ One user reportedly has accumulated virtual holdings estimated to be worth over \$1 million U.S. Dollars.¹² Cory Ondrejka, chief technology officer at Linden Lab, predicted in January 2007 that a Second Life property development company would surpass one hundred employees during the calendar year.¹³ However, others cast doubt on the purported scale of activity within MMORPGs. Clay Shirky, an expert and professor on the social and economic effects of Internet technologies, argues that the growth rate and number of users in Second Life are both overstated. He notes that “[w]ere the press to shift to reporting [the number of users recently logged in] as their best approximation of the population, the number of reported users would shrink by an order of magnitude; were they to adopt industry-standard unique users reporting (assuming they could get those numbers), the reported population would probably drop by two orders.”¹⁴

<6>The increased economic activity has attracted the attention of several various branches of government. The Joint Economic Committee¹⁵ began studying the issue in the fall of 2006, but has yet to issue a report on the matter. Then committee

chairman Congressman Jim Saxton (R-NJ) was concerned that the IRS might issue regulations requiring that transactions occurring within the virtual economies be subject to taxation in the real world.¹⁶ More recently, the Taxpayer Advocate Service discussed this issue for thirteen pages in its annual report to Congress and recommended more guidance in the area.¹⁷ Specifically, the report concluded that “the IRS could at least make an administrative pronouncement about how taxpayers should treat these transactions in the interim as it studies the issues.”¹⁸ The IRS responded that it has provided guidance on similar issues in the past and expects to continue to address such issues in the future.¹⁹ If the IRS were to publish guidance, it also would not be the first country to do so. In 2008, China, Sweden, and South Korea all clarified that some virtual world transactions are taxable under the laws of each country.²⁰

TAX TREATMENT OF VIRTUAL WORLD TRANSACTIONS

<7>The most heated discussion in the debate over virtual world taxation has focused on the tax treatment of exchanges within virtual worlds. Primarily, this is because while most individuals have conceded that a taxable event occurs when a virtual good is sold for real world currency,²¹ the taxation of exchanges of virtual goods for other virtual goods or virtual currency remains uncertain. Some individuals, such as Congressman Saxton and Linden Lab’s Cory Ondrejka, do not believe that a transaction within the game creates a taxable event.²² Professor Leandra Lederman is among those who believe a transaction within the game is taxable in certain scenarios.²³ Both argue that no tax should be assessed on virtual exchanges until the virtual currency or property received in an exchange is converted into real-world currency.²⁴ Intuitively, it seems someone cannot be taxed on the transaction because no real-world currency is received in such transactions. However, as explained further below, real money need not be received for a taxable event to exist. Under current federal tax law, it is likely that virtual world transactions create a taxable event in most situations.

Exchanges of Virtual Property for Virtual Property

Tax Treatment of Barter Exchanges

<8>It is a well-established principle of taxation that money need

not be received in exchange for property or services in order for a taxable event to occur. For instance, tax is due when a taxpayer sells his services in exchange for another's services; the taxpayer is taxed on the consideration he received (i.e. the value of the other person's services) even though he did not receive cash. Such transactions are referred to as direct-barter transactions. For tax purposes, every direct-barter transaction is hypothetically treated as two different transactions.²⁵ First, the taxpayer is treated as having sold his services for an amount equivalent to the fair market value of his services.²⁶ The taxpayer is then treated as having used the hypothetical amount received to purchase the other person's services. The gain realized on an exchange of property, with some exceptions discussed below, must be included in a taxpayer's gross income.²⁷

<9> Individuals opposing the taxation of transactions occurring in virtual worlds often state that there is no "realization" of income in a barter exchange of virtual property. In order for a taxpayer to have income on a transaction, he or she must receive some right or asset that is sufficiently distinct from the property.²⁸ This is known as realization. In games where users do not have any property rights in the items they create, there is a strong argument that no realization occurs upon the transfer of goods within the virtual world. As Lederman argues, in that scenario, the users do not have a legally-distinct entitlement to the goods they "possess" both before and after the transaction. Since their position is the same both before and after the transaction, there is no taxable event. However, in unstructured games such as Second Life, users do in fact have property rights in the items they hold, such as the virtual goods and currency.²⁹ Thus, since the user receives an object with a legally-distinct entitlement, realization occurs when the user trades property for new property and the exchange is taxable.

<10> To summarize, the fact that no cash is received in a virtual barter does not prevent the transaction from being taxable. As interpreted under the Internal Revenue Code, a barter transaction is treated as if the taxpayer receives cash in exchange for the bartered good or service. As demonstrated by sales of virtual goods on eBay, virtual property does have a fair market value in real currency.³⁰ Furthermore, a user realizes this income because he receives property with a legally-distinct entitlement. Therefore, the transaction would be taxable unless some non-recognition provision in the Internal Revenue Code is applicable.

Like-Kind Exchanges

<11> One type of non-recognition provision is section 1031, which provides for non-recognition in the case of like-kind exchanges.³¹ Under section 1031, the Internal Revenue Code allows taxpayers to defer recognizing gain when they exchange an item for substantially the same or similar property and the section's two requirements are met. First, the property exchanged must be held for business or investment purposes by the taxpayer.³² If the property is held for personal purposes, the section is inapplicable and gain must be recognized.³³ Second, the qualified property must be exchanged for property of a "like-kind."³⁴ Property is generally of a like-kind if the nature or character of the rights underlying the property relinquished is the same as the nature and character of the rights underlying the property received.³⁵ Like-kind treatment would obviously be available in some transactions arising in the virtual world. For instance, when a virtual shirt is exchanged for another virtual shirt, a like-kind exchange has clearly taken place. The gain on the exchange is not recognized, but is instead deferred. The basis in the original property would be transferred to the newly acquired property so that any inherent gain is preserved.³⁶ The built-in gain would be realized when the owner disposes of the new property.

<12> However, non-recognition is less certain when varying forms of virtual property are traded for one another. For instance, take the example of virtual goods exchanged for virtual land. While Treasury Regulations narrowly define the scope of the section, they neglect to go into much detail concerning how section 1031 applies to the exchange of intangible property. As mentioned above, the regulations simply state that section 1031 non-recognition is available to exchanges of intangible personal property when the properties exchanged are of a "like-kind."³⁷ The regulations then present two characteristics to look at when determining if property is of a like-kind: (1) the nature or character of the rights involved (e.g. a patent or a copyright); and (2) the nature or character of the underlying property to which the intangible personal property relates.³⁸ To illustrate, the regulations establish that a trade of copyright on a novel for a copyright on a different novel would qualify for non-recognition.³⁹ However, a trade of a copyright on a novel for a copyright on a song would not qualify for non-recognition.⁴⁰

<13> A recent IRS Technical Advice Memorandum provides further guidance on section 1031 exchanges of intangible property. Among many examples, it states that a drawing or design for a

coated gas welding rod is not of a like-kind to a drawing or design for a wind turbine.⁴¹ The form of the designs is the same: computer designs of undeveloped property. However, both designs represent different underlying property. The underlying properties—a gas welding rod and a wind turbine—are not of a like-kind, and therefore the designs are not of a like-kind.

<14>When looking at virtual property, it is clear that the nature or character of the intellectual property rights involved is of a like-kind. For example, an exchange of one item of virtual property for another is essentially an exchange of copyrights and other intellectual property rights. The issue then becomes whether the nature or character of the underlying property is of a like-kind. To examine this issue, take an example of virtual land being exchanged for a virtual automobile. The fact that the underlying properties—an automobile and real property—are not of a like-kind means that such properties would be ineligible for non-recognition under section 1031. However, this conclusion does not prevent all virtual world transactions from qualifying for non-recognition. If the underlying property is of a like-kind, then the gain on the transaction could be deferred. One example, mentioned above, is the exchange of a virtual shirt for another virtual shirt. This would meet the requirements for non-recognition under section 1031.

Transfers of Virtual Property for Virtual Currency

<15>Tax is more likely to be due when virtual property is exchanged for virtual currency. The structure of these transactions is strikingly similar to how barter clubs operate. Barter clubs enable individuals to sell their services in exchange for another's services, thus avoiding the receipt of cash. Barter clubs establish directories and enable members to list services they provide in the directories. Members earn "trade units" through offering their own services. Unlike a typical barter transaction, individuals receive trade units in return for the services they provide. The trade units can then be redeemed for other goods and services found in the directory. In MMORPGs, rather than using trade units, users are given an initial amount of virtual currency when they sign up for the account and they can use real currency to purchase additional virtual currency at later times. Individuals also receive virtual currency in exchange for virtual property they create and own.

<16>A short history of the tax treatment of barter clubs is necessary before proceeding. During the 1970s, such clubs were promoted as a way to avoid paying income tax on services

provided. In the late 1970s and early 1980s, the IRS and Congress began cracking down on tax avoidance created by barter club activity. Pursuant to traditional barter transaction rules, a taxable event exists every time barter club members received reciprocal services. However, the IRS struggled in determining when the tax was actually due. Two possibilities existed: (1) the transaction was taxable when the individual received trade units; or (2) the transaction was taxable when the trade units were in fact redeemed for additional services.

<17>The IRS adopted the first of those two possibilities. In a Revenue Ruling, the IRS took the position that a member of a barter club receives income for his services upon receipt of trade units.⁴² The IRS's reasoning states that the receipt of trade units is the receipt of valuable property, since those trade units can be converted into goods or services at any time.⁴³ Therefore, the IRS concluded that the receipt of trade units is a taxable event.

<18>In addition, the IRS addressed the liquidity of barter club trade units. If the units are not liquid, then they do not have a real fair market value and are therefore not taxable upon receipt. The IRS specifically noted that it does not matter that the club does not guarantee that a member will be able to use all of his trade units or redeem any unused credits.⁴⁴ Furthermore, limitations on the use of the trade units did not affect the IRS's conclusion.⁴⁵ The IRS simply noted that a member's trade units can in fact be used immediately to purchase goods or services offered by other members of the club and are therefore taxable upon receipt.⁴⁶

<19>Professor Robert Keller has also argued that, in the context of barter clubs, a member should have income when he or she receives the trade units.⁴⁷ His argument, however, is founded on the constructive receipt doctrine. Keller has stated that there is generally only one instance in which a taxpayer does not receive reportable income upon the receipt of non-cash consideration: when he or she receives a non-assignable promise in return for goods or services performed.⁴⁸ In that instance, there is no taxable event since the consideration received is non-transferable and therefore has *no* real fair market value. The limitations normally placed on using the trade units do not rise to the level of a "substantial limitation or restriction" that would preclude the trade units from being included in the taxpayer's income.⁴⁹ Keller noted that trade units did not fall into this non-assignable exception because they represented more than a mere promise by the individual who received the benefit of the services.⁵⁰

<20> Both the actual receipt or constructive receipt doctrine would apply to transactions involving virtual currency. The IRS's reasoning for actual receipt doctrine applies to virtual currency because the virtual currency has a real world fair market value. The reasoning used for taxation under the constructive receipt doctrine also applies. While Second Life does reserve some rights over virtual property and virtual currency,⁵¹ none of the restrictions placed on Linden Dollars rises to the level of "substantial limitations or restrictions." A taxpayer must therefore include the fair market value of virtual currency received when calculating the gain realized on a sale of virtual property. As mentioned above, trading virtual property is also a taxable transaction, with some exceptions for like-kind exchanges.

POLICY IMPLICATIONS

<21> Lederman notes that the IRS does not always fully enforce the Internal Revenue Code.⁵² She cites two useful examples to demonstrate her point. First, the IRS currently does not enforce tax due on the receipt of frequent flier miles. Because frequent flier miles have a readily ascertainable fair market value, they should be taxable upon receipt. However, the IRS has not enforced the tax. After a public outcry following an attempt to levy a tax on frequent flier miles, the IRS publicly noted that "[a]lthough frequent flyer benefits have technically always been taxable . . . we are not launching any special enforcement program into this area."⁵³

<22> A second example illustrates how the IRS chose not to tax baseball fans that caught record-breaking home run balls during the 1998 season. If an individual finds \$1 million lying on the street, he would be taxed on the receipt of that money because the Internal Revenue Code defines income as coming "from whatever source derived."⁵⁴ Technically, catching and keeping a baseball worth \$1 million would be a taxable event. However, political problems arose when one fan caught a valuable ball and then immediately donated the ball back to the team. If he were taxed on the receipt of \$1 million and then never sold the ball, he would have no assets from which to pay the tax. The IRS Commissioner stated that the IRS would not tax the fan in such a scenario.⁵⁵ Lederman's examples demonstrate how public policy and politics can affect the IRS's enforcement of tax laws.

<23> Public policy also plays an important role in the context of MMORPGs since there are several factors that might lead the IRS to decline to enforce the tax code in this area. First, even if

the virtual world dealings could be easily monitored, the IRS would run into valuation problems. Unless virtual or real currency is involved, it is often difficult to determine the fair market value of virtual property. While virtual goods are frequently sold through mediums such as eBay, the sample size may be too small to obtain an accurate estimate of an item's fair market value. Furthermore, each good is very unique in nature, thereby making accurate valuation even more difficult. Second, the logistics of auditing virtual world transactions could be too costly to both game developers and the IRS. To determine the extent of an individual's virtual world dealings would require the game developers to keep detailed records and cooperate closely with the IRS. Such a requirement would be similar to those currently imposed on barter clubs by Internal Revenue Code section 6045.⁵⁶ While this approach is feasible and has been successfully utilized by barter clubs, it may not be practical to impose such obligations on the developers of games if the games are not in fact producing as much economic activity as has been recently reported. Given these factors, it is likely that compliance costs may outweigh any potential tax benefit for the government.

<24> For these reasons, it is a real possibility that the IRS will not tax trades of virtual property despite having the legislative authority to do so. However, valuation difficulties and logistical problems are not insurmountable when virtual property is sold for virtual currency. Compared to virtual property, virtual currency has a more readily-determinable value. Furthermore, it would likely be easier for the IRS to track the transfer of virtual currency. For instance, if Congress put reporting requirements on MMORPGs similar to the reporting requirements now in place for barter clubs, the burden would not be as severe. As more and more brick-and-mortar companies open virtual storefronts in MMORPGs, the virtual economies in these games will continue to grow and preferable tax treatment becomes less likely. While taxing a mere game may seem foolish to the average person, the taxation of an online marketplace seems natural when brand names stores are participating.

CONCLUSION

<25> Transactions involving virtual property used in MMORPGs may, and often will, be subject to federal income taxation. When virtual property is sold for cash, the gain on the sale must be recognized for income tax purposes. Furthermore, with some exceptions for like-kind exchanges, trading virtual property is a taxable transaction. Finally, selling virtual property for virtual currency is also likely subject to federal income tax.

<26>While it is conceptually difficult to grasp how or why such transactions should be taxed, the fact that both virtual currency and property have real world fair market values makes it difficult to assert that no tax should be levied on virtual world transactions. However, the practicality of a tax and relatively small amount of economic activity in MMORPGs may lead the IRS to avoid taxing such transactions at this time. Either way, taxpayers should be aware of potential tax consequences of virtual world transactions. While the IRS has not publicly enforced tax on such transactions, it could do so in the future, especially if virtual economies continue to grow in size and exposure.

PRACTICE POINTERS

- Practitioners should be aware that virtual world transactions could result in real world tax consequences even though no real money is exchanged.
- Clients engaging in virtual world business should maintain detailed records of their transactions in case the Internal Revenue Service audits their activities.
- Both clients and practitioners should continue to monitor developments in this area. The Joint Economic Committee has been researching this area of law and the National Taxpayer Advocate has recommended that the IRS provide more guidance on the issue. As virtual world transactions continue to grow, even more attention will be given to the taxation of virtual world transactions.

[<< Top](#)

Footnotes

1. G. Martin Bingisser is a member of the New York State Bar. He earned his J.D. and LL.M. (Taxation) in 2008 from the University of Washington School of Law. He thanks Professors Jane Winn and Sam Donaldson of the University of Washington School of Law for their comments on earlier versions of this draft as well as Chris Bowers, partner at McKee Nelson LLP in Washington, D.C.
2. Mmogchart.com has attempted to track the growth of MMORPGs. As of May 2008, the site estimated the

current number of MMORPG users to be over sixteen million. In July 2001 that number totaled less than three million. MMOGChart.com, Total MMORG Active Subscriptions, <http://www.mmogchart.com/Chart4.html> (last visited May 31, 2008).

3. Jason Whiting, *Online Game Economies Get Real*, WIRED, Mar. 27, 2007, <http://www.wired.com/news/games/0,2101,55982,00.html>. Castronova has since published a book detailing the intricate elements of the thriving economies within these virtual worlds. EDWARD CASTRONOVA, *SYNTHETIC WORLDS: THE BUSINESS AND CULTURE OF ONLINE GAMES* (University of Chicago Press 2006).
4. For example, Blizzard Entertainment, Inc.'s World of Warcraft, World of Warcraft Terms of Use Agreement, July 29, 2008, <http://www.worldofwarcraft.com/legal/termsofuse.html> (stating that users "may not sell items for 'real' money or otherwise exchange items for value outside of the Game").
5. Linden Labs, Second Life Terms of Service, § 1.5, <http://www.secondlife.com/corporate/tos.php> (last visited March 27, 2007).
6. *Id.* § 3.2 ("You retain copyright and other intellectual property rights with respect to Content you create in Second Life, to the extent that you have such rights under applicable law.")
7. Annalee Newitz, *Your Second Life is Ready*, POPULAR SCIENCE, Sept. 2006, at 74.
8. Many times this is done through such common mediums as eBay. See Jullian Dribbell, *Dragon Slayers or Tax Evaders?*, LEGAL AFFAIRS 47, Jan.-Feb. 2006, available at http://www.legalaffairs.org/issues/January-February-2006/feature_dibbell_janfeb06.msp.
9. Linden Labs, LindeX Market Data, <http://secondlife.com/whatis/economy-market.php> (last visited May 10, 2008).
10. Newitz, *supra* note 7.
11. *Id.*
12. Clive Thompson, *The Virtual Taxman Cometh*, WIRED,

- Dec. 18, 2006,
<http://www.wired.com/news/columns/0,72317-0.html>.
13. Cory Ondrejka, *Open Source and Open Predictions*, TERRA NOVA, Jan. 8, 2007,
http://terranova.blogs.com/terra_nova/2007/01/open_source_and.h
. By the end of 2007, Odrejka noted that three solution providers exceeded 100 employees. Cory Ondrejka, *2007 Predictions Review*, TERRA NOVA, Dec. 29, 2007,
http://terranova.blogs.com/terra_nova/2007/12/2007-prediction.html.
 14. Clay Shirky, *A Story Too Good To Check*, VALLEYWAG, Dec. 12, 2006, <http://valleywag.com/tech/second-life/a-story-too-good-to-check-221252.php>.
 15. The Joint Economic Committee is a bicameral Congressional Committee whose primary purpose is to study matters relating to the economy. The committee holds hearings, performs research, and advises members of Congress.
 16. Adam Reuters, *Virtual Economy Tax Would Be a Mistake – U.S. Rep.*, SECOND LIFE NEWS CENTER, Oct. 18, 2006,
<http://secondlife.reuters.com/stories/2006/10/18/virtual-economy-tax-would-be-a-mistake-us-rep>.
 17. 1 TAXPAYER ADVOCATE SERVICE, NATIONAL TAXPAYER ADVOCATE 2008 ANNUAL REPORT TO CONGRESS 225 (2008), available at <http://www.irs.gov/advocate/article/0,,id=202276,00.html> (follow “Volume I, Section One” hyperlink) (last visited Jan. 12, 2009). The National Taxpayer Advocate is an independent office within the IRS which has among its responsibilities the duty to identify problems taxpayers are facing in dealing with the IRS.
 18. *Id.*
 19. *Id.*
 20. Flora Graham, *Slapping a Tax on Playtime*, BBC NEWS, Nov. 25, 2008,
<http://news.bbc.co.uk/2/hi/technology/7746094.stm>.
 21. Dribbell, *supra* note 8. Dribbell explores the issue of taxation in the virtual world, but assumes that taxation on transactions outside the virtual world is

- appropriate. The consensus is that such an event is taxed because the income earned in such a transaction qualifies as taxable income under the code's liberal definition of income. See I.R.C. § 61(a) (2008). For two recent articles that have also analyzed the legal issues discussed in this article, see Dribbell, *supra* note 8; Leandra Lederman, *Stranger Than Fiction: Taxing Virtual Worlds*, 82 N.Y.U. L. REV. 1620, 1650 (2007); Bryan Camp, *The Play's The Thing: A Theory of Taxing Virtual Worlds*, 59 HASTINGS L.J. 1, 44-45 (2007).
22. See Reuters, *supra* note 16; Odrejka, *supra* note 13.
 23. Lederman, *supra* note 21.
 24. *Id.*
 25. Treas. Reg. § 1.61-2(d)(1) (as amended in 2003); Rev. Rul. 79-24, 1979-1 C.B. 60. See also Robert Keller, *The Taxation of Barter Transactions*, 67 MINN. L. REV. 441 (1982). Basically, the transaction is treated as if the individual received cash for his property and then turned around and used the cash to purchase another's property. This analysis stems from the language of section 61 defining "gross income" as income "from whatever source derived." I.R.C. § 61(a) (2006). According to the code, the income must be in the form of currency.
 26. *Id.*
 27. Treas. Reg. § 1.61-6(a) (1957).
 28. See Treas. Reg. § 1.1001-1(a) (as amended in 1996); *Eisner v. Macomber*, 252 U.S. 189 (1920).
 29. Linden Labs, *supra* note 5 at § 3.2. There is significant debate as to whether or not users have property rights independent of those explicitly granted to them in the terms of service. See, e.g., Woodrow Barfield, *Intellectual Property Rights in Virtual Environments: Considering the Rights of Owners, Programmers and Virtual Avatars*, 39 AKRON L. REV. 649 (2006).
 30. Sales of virtual goods on eBay were so widespread that eBay now delists virtual property coming from games in which users do not own the intellectual property underlying virtual goods. See eBay, *A Guide to Virtual (Video Game) Items on eBay*, Dec. 27, 2008, <http://reviews.ebay.com/Buying-and-Selling->

31. I.R.C. § 1031(a)(1) (2008).
32. *Id.*
33. *Id.*
34. *Id.*
35. Treas. Reg. § 1.1031(a)-2(c)(1) (as amended in 2005).
36. I.R.C. § 1031(d) (2008).
37. Treas. Reg. § 1.1031(a)-2(c)(1).
38. *Id.*
39. Treas. Reg. § 1.1031(a)-2(c)(3).
40. *Id.*
41. I.R.S. Tech. Adv. Mem. T.A.M. 2006-02-034 (Jan. 13, 2006). A technical advice memorandum is merely advice given to an Internal Revenue Service field agent on the application of U.S. tax law to the specific facts in a case presented to the IRS. While the Memorandum does give taxpayers an idea of the Service's stance on the issue, it may not be relied on as controlling precedent. I.R.C. § 6110(k)(3) (2008).
42. Rev. Rul. 80-52, 1980-1 C.B. 100. A barter club credited or debited its members' accounts with trade units for goods or services provided or received. The IRS held that the value of the trade units was includable in members' incomes for the taxable year in which the units were credited to their accounts. A later revenue ruling also determined that barter club activity is taxable when the taxpayer receives services. Rev. Rul. 83-163, 1983-2 C.B. 26. The Commissioner held that the taxpayer receives a claim of right over the income at the time of receipt and therefore it represents advance compensation taxable upon receipt.
43. Rev. Rul. 80-52, 1980-1 C.B. 100.
44. *Id.*
45. *Id.* Many barter clubs required authorization prior to any transaction.

46. *Id.*
47. Keller, *supra* note 25.
48. *Id.* at 494 (citing BORRIS BITTKER & JAMES EUSTICE, FEDERAL INCOME TAXATION OF CORPORATIONS AND SHAREHOLDERS § 105.2.2 (4th ed. Warren Gorham & Lamont 1979)).
49. See Treas. Reg. § 1.451-2(a) (as amended in 1979) (stating that “income is not constructively received if the taxpayer’s control of its receipt is subject to substantial limitations or restrictions”).
50. Keller, *supra* note 25, at 494.
51. Among the rights that Second Life reserves is the right to interrupt service and the right to revoke the use of the service for failure to comply with the terms of service. See Linden Labs, *supra* note 5 at §§ 1.6, 3.1. Also, the prospective difficulties in finding a potential buyer are similar to those addressed regarding barter clubs.
52. Lederman, *supra* note 18, at 1658.
53. Dominic L. Daher, *The Proposed Federal Taxation of Frequent Flyer Miles Received from Employers: Good Tax Policy But Bad Politics*, 16 AKRON TAX J. 1, 15 (2001).
54. I.R.C. § 61(a) (2006).
55. Press Release, Internal Revenue Service, IR-98-56 (Sept. 9, 1998), <http://www.irs.gov/pub/irs-news/ir-98-56.pdf>.
56. Section 6045 requires barter clubs to show the name and address of each customer and also include details about each customer’s proceeds with respect to his or her business. I.R.C. § 6045(a) (2006).