TAXATION OF VIRTUAL ASSETS

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ABSTRACT

The development of vast social networks through Massively Multiplayer Online Role-Playing Games has created in-game communities in which virtual assets have real-world values. The question has thus arisen whether such virtual assets are legal subjects of taxation. This iBrief will detail and discuss the various exclusions to taxable income, and analyze their application to the possibility of creating potential tax liability based on in-kind exchanges of virtual assets.

INTRODUCTION

¶1 Massively Multiplayer Online Role-Playing Games (MMORPG's) have garnered growing interest in a number of academic fields due to the substantial opportunities for observing potential real world social interactions in a virtual environment.[2] The largest MMORPG, World of Warcraft (WoW), recently surpassed 10 million active subscribers,[3] and has been increasing its population by over one million subscriptions during each six month period since its creation.[4]

¶2 One area in which recent debate has been stirred is the tax consequences arising from the accumulation and exchange of virtual assets. These virtual assets have real-world values, sometimes substantial enough that individuals have accumulated vast amounts of money through their in-

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[2] For example, in order to better understand human responses to a potential massive viral outbreak in the real world, epidemiologists have looked at the Corrupted Blood plague that ravaged the citizens of World of Warcraft. For information on the incident, *see Viral and Virtual*, ECONOMIST, Aug. 25, 2007, at 81, *available at* http://www.economist.com/science/displaystory.cfm?story_id=9682597; *see also* Ran D. Balicer, *Modeling Infectious Diseases Dissemination Through Online Role-Playing Games*, 18(2) EPIDEMIOLOGY 260 (2007).

[3] Press Release, Blizzard Entertainment, World of Warcraft Reaches New Milestone: 10 Million Subscribers (Jan. 22, 2008), http://www.blizzard.com/us/press/080122.html (last visited Mar. 18, 2008).

[4] *See* http://www.mmogchart.com/Chart1.html (last visited Mar. 18, 2008).

game actions.[5] This income, although virtual in its origin, can easily be converted into US dollars.[6] Thus, although it is axiomatic that virtually any income may be taxed, it is far from a settled question whether virtual income may be taxed.

¶3 This iBrief will focus on the potential tax liabilities created by one type of MMORPG – those involving structured worlds.[7] It will proceed in three parts. The first will define a structured world and describe the relevant features and transactions of such worlds. The second will be a discussion of the standard analysis for the question of whether a given type of income will be taxed – focusing on the three standard operational limits to taxation. The final section will apply those operational limits to the question of whether the virtual asset acquisition described in section one should be taxed. It should also be noted that this discussion will not focus on the lengthy question of ownership of intellectual property rights in the virtual assets at issue.[8]

I. WHAT ARE VIRTUAL WORLDS?

¶4 A virtual world is a computer simulated 2D or 3D environment, ranging from the simple to the complex, which mimics reality and allows

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[5] Perhaps the most famous of these "virtual-millionaires" is Anshe Chung. Anshe was the first avatar to collect virtual assets worth over 1 million US dollars. *See* Wikipedia, *Anshe Chung*, http://en.wikipedia.org/wiki/Anshe_Chung (as of Mar. 18, 2008, 17:01 GMT).

[6] For example, the popular game Second Life allows the conversion of US dollars into Linden Dollars at a fluctuating rate usually between 260:1 and 320:1 (US dollars to Linden dollars). *See* Wikipedia, *Economy of Second Life*, http://en.wikipedia.org/wiki/Economy_of_Second_Life (as of Mar. 18, 2008, 17:01 GMT). Further, Sony's Station Exchange provides a similar service for their MMORPG Everquest. *See* Station Exchange, http://stationexchange.station.sony.com/ (last visited Mar. 25, 2008).

[7] A great deal of scholarly literature has been devoted to the issue of taxation of unstructured worlds – primarily due to the fact that unstructured worlds such as that in Second Life expressly allow their users to retain intellectual property rights in their virtual assets, while structured worlds such as that in WoW expressly disallow the vesting of such rights in the game user. For an in-depth discussion of the issue of taxation of virtual assets in the paradigmatic unstructured world of Second Life, *see* Timothy J. Miano, Virtual World Taxation: Theories of Income Taxation Applied to the Second Life Virtual Economy (2007) (unpublished manuscript, http://works.bepress.com/timothy_miano/1/ (last visited Mar. 25, 2008)).

[8] For an in-depth discussion of intellectual property as applied to MMORPG's, *see* Leancha Lederman, *Stranger than Fiction: Taxing Virtual Worlds*, 82 N.Y.U. L. REV. 1620 (2007); *see also* Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047 (2005).

social interaction between users.[9] These users are individuals typically represented by 'avatars,' a term that designates the graphical representation of a (usually) humanoid being.[10] The possible kinds of interaction vary based on the relative structure of the virtual world, though all allow, at a minimum, users to communicate with each other by typing or, as is frequently the case, speaking through VoIP technology.[11]

A. Structured Worlds v. Unstructured Worlds

¶5 Currently, the most popular virtual world is Blizzard Entertainment's World of Warcraft (WoW).[12] WoW is designed around a structured world, which is an impact-resistant[13] virtual world in which avatars may interact with each other and fulfill objectives programmed by the world's developers.[14]

¶6 In contrast, unstructured worlds like the world featured in Second Life are non-impact-resistant worlds[15] where avatars not only can interact with other avatars, but also actively change the world in ways not directly

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[9] Wikipedia, *Virtual World*, http://en.wikipedia.org/wiki/Virtual_world (as of Mar. 18, 2008, 17:27 GMT).
[10] *Id.*
[11] Voice over Internet Protocol technology is the real-time routing of voice conversations over the Internet or another IP medium. *See* Wikipedia, *Voice Over Internet Protocol*, http://en.wikipedia.org/wiki/VOIP (as of Mar. 18, 2008, 17:28 GMT).
[12] Other popular structured worlds include *Everquest*, *City of Heroes*, *City of Villains*, *Guild Wars*, and *Ultima Online*.
[13] By "impact-resistant" I mean that an individual avatar's actions cannot permanently influence the world's topography – only other avatars. For example, suppose that my avatar were to come across a bridge plant a land mine. The next avatar that came to the bridge would, most likely, die from the explosion although the bridge itself would remain completely unaffected by the blast.
[14] All descriptions of WoW come from the author's experience of the game, the official game guide, *see* World of Warcraft Game Guide, http://www.worldofwarcraft.com/info/ (last visited Mar. 25, 2008), and from the Wikipedia article related to WoW, *see* Wikipedia, *World of Warcraft*, http://en.wikipedia.org/wiki/World_of_Warcraft (as of Mar. 25, 2008, 03:40 GMT).
[15] By "non impact-resistant" I mean that an individual avatar's actions can permanently alter the world's topography. For example, although the game's developers may have programmed an area to appear as a lush forest, an avatar has the potential to clear the forest and build a shopping mall where it once stood. This shopping mall will persist indefinitely unless some other avatar intervenes.

foreseen and allowed by the world's developers.[16] Like the structured world of WoW, Second Life is increasingly popular as an online social marketplace[17] and is one of the most actively subscribed unstructured worlds.[18]

B. Virtual Asset Acquisition

¶7 In structured worlds, virtual assets may be acquired in one of three ways. The first, "loot drops," consists of an item being generated in-game, upon the completion of some series of events. The second, "in-world exchanges," includes any mechanism by which one avatar may trade one item for another. The third method, "real money transfers," (RMTs) occurs when real individuals use some medium of exchange to trade currency for an in-game item.[19]

1. Loot Drops

¶8 A loot drop typically occurs in one of two ways: the killing of a certain monster or the completion of a quest.[20] For example, an avatar may be given a quest to slay a dangerous monster that has been terrorizing a local village. Upon doing so, the creature will generate upon its corpse a piece of bristly fur. The avatar may then click on the corpse to pick up the bristly fur and return to the quest giver, who will reward the avatar with a powerful weapon for his troubles.

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[16] All descriptions of Second Life come from the official game FAQ, *see* Second Life – FAQ, http://secondlife.com/whatis/faq.php (last visited Mar. 25, 2008), and from the Wikipedia article related to Second Life, *see* Wikipedia, *Second Life*, http://en.wikipedia.org/wiki/Second_Life (as of Mar. 25, 2008, 03:45 GMT).

[17] Second Life recently surpassed 7 million active subscriptions. *See* Chad Vander Veen, *Reality Check*, GOV'T TECH., Jul. 1, 2007, at 20, *available at* http://www.govtech.com/gt/articles/125968.

[18] *See* http://www.mmogchart.com/Chart2.html (last visited April 16, 2008). Other popular unstructured worlds include *The Sims: Online* and *There*.

[19] Because real money transfers are often prohibited by a game's Terms of Service (TOS), most of the well-known internet auction houses have refused to engage in such transactions. However, smaller Auction Houses, such as IGE, and company-owned Auction Houses, such as Sony's "Station Exchange," continue to engage in RMT trading. *See* Daniel Terdiman, *eBay Bans Auctions of Virtual Goods*, Jan. 29 2007, NEWS.COM http://www.news.com/eBay+bans+auctions+of+virtual+goods/2100-1043_3-6154372.html (last visited Mar. 26, 2008).

[20] *See* Lederman, *supra* note ¶8, at 28.

2. Loot Trades

¶9 Loot trades occur when two avatars choose to transfer virtual items between them.[21] To expand the previous example, suppose that the powerful new weapon you were awarded for saving the previous village isn't as powerful as the one that you killed the pig with. To remedy this, you could find another player, one who needed a new weapon for his avatar, and agree on a price for it, such as 10 gold coins. You would then trade the items, each person satisfied with the transaction.

¶10 Note that loot trades are conducted entirely between avatars inside the game world, using entirely in-game assets. This contrasts with the final method of virtual asset acquisition.

3. Real Money Transfers

¶11 Real Money Transfers (RMTs), as their name implies, occur when a user sells his in-game virtual asset for real money.[22] To continue the story of the shiny new axe – suppose that, upon receiving your 10 gold coins for the axe, you decide that you would much rather have real money than virtual money. You could then go to an online auction site and put your 10 gold coins up for sale. An interested buyer would then pay you in real money for your promise to transfer the money in game.[23]

II. TAXATION THEORY

¶12 With few exceptions, the United States government possesses the power to tax nearly any form of income. 26 U.S.C. § 63(a) defines taxable income as "gross income minus the deductions allowed by this chapter" and, famously, § 61(a) defines "gross income" as "all income from whatever source derived."[24]

¶13 This broad statutory language has been interpreted equally broadly by Treasury Regulations[25] and the Supreme Court.[26] The classic

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[21] Bryan T. Camp, *The Play's the Thing: A Theory of Taxing Virtual Worlds*, 59 HASTINGS L.J. 1, 8 (2007).
[22] *Id.* at 11.
[23] It should be noted that there is a huge market in virtual "gold coins" which has led to concern about sweat shop conditions among those engaged in "gold farming," primarily in China. *See* David Barboza, *Ogre to Slay? Outsource it to Chinese*, N.Y. TIMES, Dec. 9, 2005, at A1, *available at* http://www.tian.cc/nytimes_gamingoutsource.pdf; *see also* Ben Hoyle, *Gamers' Lust for Virtual Power Satisfied by Sweatshop Workers*, THE TIMES, Sep. 23, 2006, at 9, *available at* http://technology.timesonline.co.uk/tol/news/tech_and_web/article648072.ece.
[24] 26 U.S.C. § 61(a) (2006).
[25] Treas. Reg. § 1.61-1(a) (1960) ("Gross income includes income realized in any form, whether in money, property or services. Income may be realized,

economist's definition of income, the Haig-Simons approach, defines income as "[t]he algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in value of the store of property rights between the beginning and the end of the period in question."[27] Thus, gross income may include any acquisition that increases the value of the rights held by an individual after engaging in some transaction. Yet, for operational reasons, legal income falls far short of this standard.

A. Operational Limits on Taxation

¶14 The Constitution imposes few limits on the government's ability to tax. In fact, the Constitution imposes no limits on what the government may tax, but instead imposes restrictions on how the government may exercise its taxation power.[28] For example, the government may not levy a tax that violates the Equal Protection Clause.[29] Despite the dearth of Constitutional restrictions on taxation, there nonetheless exist three restrictions which the IRS has drawn largely for practical reasons owing to the difficulty of administering a tax on income: (1) the valuation requirement, (2) the realization requirement, and (3) the imputed income exception.

1. Valuation

¶15 The first practical requirement for an item to be taxable is that it is capable of accurate valuation.[30] Taxpayers must report income based on its readily-ascertainable fair-market value, rather than an economic abstraction based on personal or subjective worth.[31] The valuation requirement is a dual idea, at times both epitomizing and conflating both "income" whose

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therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.").

[26] Comm'r of Internal Revenue v. Glenshaw Glass Co., 348 U.S. 426, 430 (1955) ("[This] Court has given a liberal construction to this broad phraseology in recognition of the intention of Congress to tax all gains except those specifically exempted.").

[27] RICHARD SCHMALBECK & LAWRENCE ZELENAK, FEDERAL INCOME TAXATION 23 (2nd ed. 2007) (citing HENRY SIMONS, PERSONAL INCOME TAXATION 50, 61–62, 206 (1938)).

[28] Camp, *supra* note 21, at 16.

[29] *See* Metro. Life Ins. Co. v. Ward, 470 U.S. 869, 878 (1985); *but see* San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 41 (1973) ("[I]n taxation, even more than in other fields, legislatures possess the greatest freedom in classification.").

[30] Camp, *supra* note 21, at 25.

[31] *Id.*; *see also* Treas. Reg. 1.61-21(b)(2) (1992) (Discussing the method of determining fair market value in the context of fringe benefits).

subjective value is in excess of its fair market value and "income" whose economic value is too difficult to discern to make taxation thereof practical.

¶16 To illustrate, suppose a young man named Gollum finds an unremarkable-looking gold ring at the bottom of a river. Although the ring may be so precious to Gollum that its value is beyond mere dollars and cents, this astronomical subjective value should not be reported on one's tax return. The valuation principle merely requires one to report the fair market value of an unadorned gold ring.

¶17 For a more practical explanation of the valuation requirement, one may turn to the tax treatment of frequent flyer miles.[32] Many business travelers receive personal frequent flyer miles as income from their employers. These miles can be exchanged for free personal travel (either in the form of an entirely free trip, or an upgrade to business or first class on an otherwise coach ticket), hotel rooms, rental cars, and other merchandise.[33] When these exchanges occur, a fair market value can be assigned to the frequent flyer miles based on what would otherwise be the price of the exchanged item.

¶18 However, short of cashing out, it is all but impossible to discern the exact fair market value of a frequent flyer mile. First, there is no exact mile-for-product exchange that creates a standard valuation of miles.[34] For example, a business-class flight from Duluth to St. Paul may cost 1,000 Frequent Flyer miles, and retail for a price of $500, while two days' use of a rental car also costs 1,000 Frequent Flyer miles, yet retails for only $200.

¶19 Second, even assuming that two similar products are exchanged for frequent flyer miles, the rate of exchange may vary based on a number of factors.[35] The aforementioned business class flight from Duluth to St. Paul may cost the same number of frequent flyer miles as another flight from Duluth to St. Paul, yet be worth hundreds of dollars more (or less) based on many factors that impact, and constantly change, market prices.

¶20 Third, there are no alternative methods of exchanging frequent flyer miles because most contracts make them inalienable.[36] The notion of a fair *market* value implies some form of market – yet a market cannot exist where the goods to be exchanged cannot be transferred from one individual to another.

[32] *See* Camp, *supra* note 21, at 26-28.
[33] For a representative program, visit Delta's SkyMiles page at http://www.delta.com/skymiles/index.jsp.
[34] *See* Camp, *supra* note 21, at 27.
[35] *Id.* at 28.
[36] *Id.*

¶21 Fourth, even if one decides on a strict valuation for a given quantity of frequent flyer miles, it is impractical to determine an individual's basis in her miles.[37] A flyer who receives her miles tax free from her employer has no basis in her miles; a flyer who receives them as part of some other form of contract (such as, for example, a credit card reward program) may have some basis in the form of a slightly higher interest rate; while a flyer who purchases them directly has an easily determined basis. Yet, to require such recordkeeping by airlines would be an administrative burden to them, easily prone to false reporting (as frequent flyer miles, like dollars, are wholly fungible) and would create economically unfeasible administration costs to record keepers.

¶22 Thus, although frequent flyer miles clearly have *some* economic value, and accumulation of them clearly creates *some* gross income, it would create a significant administrative burden to determine just how much gross income is created. Absent the ability to easily and accurately value one's increased income, a tax cannot be imposed upon speculative values.

2. Realization

¶23 In *Glenshaw Glass*, the Supreme Court interpreted "gross income" as consisting of "undeniable accessions to wealth, clearly realized, and over which the taxpayers have complete dominion."[38] This realization requirement is currently understood as an operational requirement which "has less to do with economic theory and more to do with finding an administrable legal concept of gross income."[39]

¶24 Yet, despite its current status as an operational requirement, realization was originally rooted as constitutional in nature.[40] In *Eisner v. Macomber*, the Court, borrowing from the speech of the time, noted that there were only two sources from which income could arise: labor and capital.[41] The Court then held that increases in wealth in the form of additional capital did not become income until the new wealth was "severed from the [original] capital."[42] In effect, new capital income did not become legal income until its holder "cashed out" and converted the paper gains into currency (the realization event).

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[37] *Id.*
[38] Comm'r of Internal Revenue v. Glenshaw Glass Co., 348 U.S. 426, 431 (1955).
[39] Camp, *supra* note 21, at 29.
[40] *Id.* at 18.
[41] Eisner v. Macomber, 252 U.S. 189, 207 (1920).
[42] *Id.*

¶25 However, this notion of realization was severely weakened in the Supreme Court's 1947 case of *Helvering v. Bruun*.[43] In *Helvering*, the taxpayer leased land to a tenant who built a building upon it.[44] When the tenant defaulted on the lease, the taxpayer took back the land, now with the building on it. The taxpayer then claimed that since the termination of the lease had not severed the building from the land, the taxpayer had not gained any new assets, but merely materialized a paper gain – in effect the land upon which the lease had been based had appreciated in value.

¶26 The Court found this argument unpersuasive, finding that the appreciation in value due to the building was realized income which must be reported as such.[45] Thus, realization events now began to take on a scope based more upon an appraisal of the actual conditions at operation in a transaction.

¶27 The Constitutional requirement of *Eisner* was demoted to an administrative requirement in the Court's 1991 decision in *Cottage Sav. Ass'n v. C.I.R.*. Here, the Court was faced with the question of whether a bank could swap a set of portfolios of equal value with another bank, when the transfer would give the taxpayer a favorable tax status without any loss in net value based on the asset transfer.[46]

¶28 In holding that the asset transfer did constitute a realization event, the Court held that the realization requirement of *Eisner* was a rule that is used for easy tax administration, rather than a constitutional requirement in its own right.[47] Thus, since there was an easily identified change in legal relationships created by the transfer in this case, a realization event had occurred.[48]

¶29 As one can see from *Cottage Savings*, the realization requirement does not rely on formalistic notions drawn from *Eisner*. Rather, it is now met so long as the taxpayer and the IRS are capable of easily determining the disposition of a good into taxable income.[49]

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[43] Camp, *supra* note 21, at 19.
[44] Bazley v. Comm'r of Internal Revenue, 331 U.S. 737 (1947).
[45] To alleviate the harshness of this ruling (harsh because such a sizable increase in wealth might not be met by a correspondingly high liquid wealth), Congress amended the Code such that a lessor of property need not include income (other than rent) obtained upon the termination of a lease in his tax return – yet this income cannot be included in basis when the lessor/taxpayer eventually disposes of the land. *See* 26 U.S.C. § 109 (2006). *See also* 26 U.S.C. § 1019 (2006).
[46] Cottage Sav. Ass'n v. Comm'r of Internal Revenue, 499 U.S. 554 (1991).
[47] *See id.* at 565 ("[T]he Commissioner's approach ill serves the goal of administrative convenience that underlies the realization requirement.").
[48] *Id.*
[49] *See id.*

3. Imputed Income

¶30 Imputed income, famously described as "a flow of satisfaction" from self-owned property or self-serving services, constitutes the third exception to the general rule under § 61(a) that all income is taxable.[50] This imputed income can come in many forms, from the vegetables you grow in your own private garden, to the housework you do on a daily basis, to the rental value of your owner-occupied housing.[51]

¶31 These disparate examples of imputed income are commonly linked together by one of two definitions of imputed income. The first, as noted above, is that imputed income stems from a flow of satisfactions related to the personal disposition of one's property and services.[52] The second definition of imputed income is the fair market values of these non-market activities.[53]

¶32 As noted by Professor Dodge, the first definition sheds little light on the reasons underlying the imputed income exclusion.[54] The latter definition is thus far more instructive, in that it defines the purpose of the imputed income exclusion in terms of the recognition that one should only be taxed on wealth to which one has actual access, not merely potential access.

¶33 The latter definition thus establishes that the imputed income exclusion, like the doctrines of valuation and realization, is primarily concerned with creating an easily administered tax system. One should not be taxed for the fair market value of a service that is produced outside the marketplace, is not intended by its creator to enter the marketplace, and in fact will not be entered into the marketplace by its creator.

¶34 Issues of fairness aside, attempting to do so would create a host of administrative headaches.[55] Taxing imputed income would disincentivize numerous daily activities and force them into an unnecessarily bloated

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[50] Note, *Taxation of Imputed Income*, 8 DUKE L.J. 476 (1959).

[51] *Id*. For a discussion of why the rental value of owner-occupied housing should not be excludable under imputed income, see Donald B. Marsh, *The Taxation of Imputed Income*, 58 POL. SCI. Q. 514, 530 (1943).

[52] *See Taxation of Imputed Income*, *supra* note 50, at 476.

[53] Joseph M. Dodge, *Accessions to Wealth, Realization of Gross Income, and Dominion and Control: Applying the "Claim of Right Doctrine" to Found Objects, Including Record-Setting Baseballs*, 4 FLA. TAX REV. 685, 692 (2000).

[54] *Id.* at 692 ("The flow-of-satisfactions definition is either so all-encompassing as to be worthless, or else it simply restates the distinction between intangible benefits (utility) and tangible benefits (such as accessions to wealth).").

[55] *See* Miano, *supra* note 7, at 38.

marketplace.[56] Further, a problem of valuation would occur, in that one would have difficulty tracking the correct market for the goods in question.[57] Finally, such a system of taxation is not feasible due to the practical impossibility of ensuring compliance.[58]

III. TAXATION OF VIRTUAL ASSETS

¶35 In examining whether virtual assets are taxable, one must remember that all virtual assets are not created equally. When analyzing virtual assets through the lens of taxation, they divide into two broad conceptual categories based on the type of exchange in which they participate. Real Money Transactions (RMTs) earn their own distinct category because they use both virtual and real-world assets in conducting their transactions, while In-Game Exchanges, which comprise both "Drops" and "Trades," use entirely virtual assets.

A. Taxation of Real Money Transactions

¶36 An individual may be taxed whenever he realizes an increase in gross income.[59] A realization event occurs when an individual exchanges cash, property or services with another individual.[60]

¶37 Such an event occurs in RMTs. Any time that an individual receives US dollars in exchange for a transfer of virtual assets, that event is either a sale of services or a transfer of property.[61] The event may be seen as a sale of services in that one person is contracting to acquire virtual assets, be they an avatar, an account, or currency. More specifically, the sale is one of advancement services.[62] Conversely, if one finds that an individual has property rights in a virtual asset, then a § 1001-type realization event has occurred.[63] For purposes of establishing a realization event, however, it does not matter whether the virtual asset being transferred is property or a service.

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[56] For example, why change your own engine oil and increase your tax liability when you can have someone else change it for you?
[57] For example, if I grow 100 pounds of corn in my garden, should I be taxed at the fair market value of ears of corn at a drive-by produce stand, or should I be taxed at the fair market value of ethanol?
[58] For example, if I reported 1 hour per week of housework when I actually engaged in 1 hour per day, how would the government know?
[59] Comm'r of Internal Revenue v. Glenshaw Glass Co., 348 U.S. 426, 431 (1955).
[60] Treas. Reg. § 1.61-2(d) (2003).
[61] Miano, *supra* note 7, at 27.
[62] Camp, *supra* note 21, at 44.
[63] *Id.*

¶38 Given that the realization requirement for accessions to wealth has been met, the question becomes whether RMTs are excused from creating potential tax liability under either the valuation or imputed income exceptions.

¶39 An RMT may not take advantage of the valuation exception for the obvious reason that it is very easily valued; the price is the cost of the virtual asset being traded. If two individuals contracted to sell 100 gold coins for $10, the price of the sale would be valued at $10. The realization event itself excludes an individual from claiming that the exchange meets the valuation exception.

¶40 Likewise, the realization event in an RMT suffices to establish that an individual cannot claim the transaction falls under the imputed income exception to taxation. When an individual converts their gold coins and avatars into US dollars, they destroy the self-serving nature of their virtual asset. In effect, they remove the imputation and convert their assets into income.

B. Taxation of In-Game Exchanges

¶41 For the purposes of analyzing whether in-game exchanges give rise to taxable events, it is immaterial whether the exchange constitutes a loot drop or a loot trade. The only distinction between these methods of virtual asset acquisition is source. In loot drops, the virtual asset is received from a computer, while in loot trades, the virtual asset is received from another avatar.[64] Thus, it would appear that a realization event occurs through in-game exchanges as surely as one occurs through RMTs – a service or property is being realized. To understand why this is not the case, one must look to the three exceptions below.

1. The Valuation Requirement

¶42 The first operational limit of which taxation of in-game exchanges runs afoul is the valuation requirement. In examining why, it is instructive to draw parallels based on the above discussion of the impracticability of taxing frequent flyer miles.

¶43 First, it should be noted that there are numerous auction houses which allow gold coins to be exchanged for US dollars.[65] Yet, the valuation

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[64] A realization event need not occur between two individuals by way of an exchange. Loot drops are often compared to "prizes" that an avatar "wins" for their in-game actions. *See* 26 U.S.C. § 74(a) (2006) (establishing that prizes and awards may constitute gross income).

[65] A quick Google search will reveal numerous sites offering gold-selling services at reasonably similar rates, thus establishing a good proxy for measuring the correct valuation of gold coins.

requirement applies not only to assets for which no valuation is possible, but also to assets for which no taxable income may reasonably be computed due to the administrative burdens associated with determining an individual's basis.[66]

¶44 Even if one decides on a strict dollar valuation for a given quantity of gold, it is impractical to determine an individual's basis in her in-game gold. Most loot drops are randomized – that is to say, there is a set chance for every monster killed to drop a certain type of item. A monster may have a .1% chance to drop a highly valuable item. Thus, there is exactly a 1/1000 chance of that item dropping – meaning that the ownership of that item could have a very low basis (if it dropped on the first kill, it would thus require little investment of time) or a very high basis (if it dropped after 3,000 kills, thus requiring an enormous investment of time).

¶45 To require tracking of the drop rates of certain items for certain players would be "an apocalypse for developers."[67] Game developers feel that the increased costs associated with tracking to ensure compliance, even if the players themselves were made responsible for self-reporting, would be "a ridiculous burden."[68]

2. The Realization Requirement

¶46 The ultimate determination of whether an individual engages in a realization event upon making an in-game exchange depends substantially on whether the individual's rights in their avatar are recognized as property rights or merely as license rights.[69]

¶47 If an individual is recognized as possessing property rights, it is fairly clear then that a realization event has occurred.[70] Whether the avatar receives a loot drop, or engages in a loot trade, the avatar is nonetheless realizing an increase in his gross income over which he possesses dominion.[71]

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[66] Camp, *supra* note 21, at 27.
[67] Daniel Terdiman, *Are Virtual Assets Taxable?*, http://www.news.com/Are-virtual-assets-taxable/2100-1043_3-6027212.html, (last visited Mar. 19, 2008) (quoting Matt Mihaly, CEO of MMORPG publisher Iron Realms, who notes that required developer-tracking of avatar trades would require such increased resource expenditures as to make MMORPG development unprofitable for all but the largest companies).
[68] *Id.*
[69] Lederman, *supra* note 8, at 38.
[70] *Id.*
[71] Comm'r of Internal Revenue v. Glenshaw Glass Co., 348 U.S. 426, 431 (1955).

¶48 The analysis becomes more difficult if, as is likely the case, it is found that an individual only possesses license rights in her avatar.[72] In such a case, any analysis must rely on the doctrine of constructive receipt. This doctrine holds that income placed within an individual's ability to exercise control is constructively received by him even if that income is not actually reduced to that individual's possession.[73] An individual in constructive receipt has then engaged in a realization event, notwithstanding his lack of any other possessory interest in the income at issue.[74]

¶49 However, one is not legally recognized as being in constructive receipt of an asset if that individual's ability to exercise *legal* control over that asset is substantially restricted.[75] Thus, the analysis turns on what one takes to be legal control over the asset in question. Assuming the bundle-of-sticks notion of property, one's control is limited by the developer's Terms of Service (TOS) for in-game purposes but not for out-of-game purposes.[76] However, taking this as the basis of one's analysis would quickly cause courts to reach an odd conundrum. If the relevant legal rights consist of the ability to use a virtual asset in-game, then receipt of a virtual asset is treated as a realization event with real world consequences. Conversely, if the relevant legal rights consist of the ability to engage in real world transactions with a virtual asset, then the individual is limited by the TOS, and in-game receipt of a virtual asset is an event that is only meaningful in the context of the game.

¶50 One possible way out of this apparent paradox that has been suggested by Professor Camp is the possibility that certain provisions of the TOS (namely, those affecting one's ability to engage in RMT transactions) are sham provisions that would not be upheld in court, and therefore would not operate as a substantial legal restriction on an individual's control over a virtual asset.[77] However, it is hard to consider restrictions on RMT to be sham provisions when Blizzard Entertainment deletes tens of thousands of accounts every month, and takes substantial sums of gold out of circulation

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[72] Lederman, *supra* note 8, at 39.
[73] Treas. Reg. § 1.451-2(a) (1979); for further discussion, *see* SCHMALBECK & ZELENAK, *supra* note 27, at 642; *see also* Camp, *supra* note 21, at 33.
[74] In WoW parlance, I have constructively received 10 gold coins if they are placed in my possession, even if the intellectual property rights in those gold coins remain at all times with Blizzard Entertainment.
[75] Camp, *supra* note 21, at 54.
[76] An individual's property rights, such as the right to transfer, the right to use, and the right to destroy, are often characterized as a "bundle of sticks."
[77] Camp, *supra* note 21, at 54.

in order to crack down on RMT traders and reverse the negative effects of inflation.[78]

¶51 Thus, although it seems unlikely that an individual under a license paradigm has constructive legal possession of virtual assets for the purposes of establishing a realization event, it remains an open question as to whether that individual could satisfactorily avoid potential tax liability.

3. The Imputed Income Exception

¶52 The central thesis in Professor Camp's article maintains that the most convincing reason why in-game exchanges should not be taxed is because they constitute a form of imputed income.[79] In his words "the play's the thing." An individual engaging in in-game exchanges is not trading items; he is engaging in a sophisticated, technologically complex act of role-playing. After all, WoW and games like it are called "role playing games" for a reason.

¶53 To illustrate this point, Professor Camp relies on a related area of "play" law that involves casino chips.[80] Casino chips, like gold coins, have readily ascertainable fair market values, but they are not viewed as cash equivalents for the purposes of taxation because their purpose is not to serve as a cash equivalent or an item for exchange, but to enable one to play a game.[81] Even if a poker player wins "chips" in excess of those he started with, his acquisition of the surplus chips is a mark of his own skill (much in the same way that an accomplished adventurer with the skill to slay a dangerous monster receives a valuable item for his troubles).

¶54 Further, this understanding of gold coins as analogous to casino chips draws a parallel to real life, according to which, the proper realization event for purposes of taxation is when an individual "cashes out" her gold coins in RMTs. As noted by Professor Camp, if an individual traded $20 for 20 casino chips, and after several hours of playing poker traded back 30 casino chips for $30, she would only be taxed on the $10 income received after the evening was over, even if she had accumulated 1,000 casino chips

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[78] *See, e.g.*, Patrick Caldwell, *Blizzard bans 59,000 WoW Accounts*, GAMESPOT, Jul. 26, 2006, http://www.gamespot.com/pc/rpg/worldofwarcraft/news.html?sid=6154708 (last visited Mar. 31, 2008); *see also Blizzard bans 76,000 Accounts and removes 11 Million Gold from World of Warcraft*, Oct. 16, 2006, http://www.playnoevil.com/serendipity/index.php?/archives/883-Blizzard-bans-76,000-accounts-and-removes-11-Million-Gold-from-World-of-Warcraft.html (last visited Mar. 31, 2008).

[79] Camp, *supra* note 21, at 56.

[80] *Id.* at 64; Zarin v. Comm'r of Internal Revenue, 92 T.C. 1084, 1100 (T.C. 1989), *rev'd on other grounds*, 916 F.2d 110 (3rd Cir. 1990).

[81] Camp, *supra* note 21, at 59-60.

at one point before losing all but 30.[82] Likewise, it would make little sense to tax a WoW player for the $1,000 worth of gold coins she possesses, unless she cashes out via RMT and receives US dollars for her activity.

¶55 This analysis has been critiqued, notably by Professor Lederman, on two grounds. First, loot drops do not fit under the imputed income rubric in that they require the efforts of a third party to receive them; and second, assuming that loot drops constitute property, they increase a player's wealth and are therefore not forms of imputed income.[83]

¶56 Although it is true that loot drops only exist because of the coding and web hosting activities of a game's developers, the same could be said of virtually any form of imputed income. Casino chips only exist in the context of a casino; you can only change your car's oil because the Subaru dealer sold you a car; you can only reap your own ears of corn because you purchased the seeds from which they were sown.

¶57 If one were to view Professor Lederman's first critique expansively, and apply it to loot trades as well as loot drops, the conclusion to be reached would remain the same. The presence of another individual willing to trade his gold coins for your shiny new axe does nothing to undermine the "units of play" discussion. But, even abandoning that model, one can see that the imputed status of one's "income" from a corn farm is still imputed, despite the fact that the seeds were purchased from another individual.

¶58 Finally, even assuming that loot drops constitute property that increase a player's wealth, the imputed income analysis remains the same. The corn which I grow in my garden is my property, and I am in a financially better position because of it (I don't have to buy corn at the farmer's market), yet this in no way threatens its status as imputed income.

CONCLUSION

¶59 This article has reached what is, I hope, a ruling that conforms with common sense and notions of fairness to both gamers and tax specialists.

¶60 Anyone who has played Monopoly knows that although games often simulate marketplaces and involve trade of virtual assets between players, the purpose of those games is the game itself, and not any items that may be acquired in the game. Should someone begin to value the virtual assets more than the game itself, be they Monopoly money, Gold

[82] *See id.* at 60–61 (explaining that the IRS treats all the transactions involved during the span of an evening gambling in Las Vegas separately from the end result – what happens in Vegas stays in Vegas).
[83] Lederman, *supra* note 8, at 30.

coins, or rare and unique in-game items, that person has stopped playing a game and has started seeing the outer trappings as a forum for their acquisitions and exchanges.

¶61 Anyone who has read the Tax Code knows that although it is an imperfect document written by imperfect men, at its heart it attempts to be fair and predictable. The myriad Sections and Regulations all work towards common goals – taxing income and excluding that which is not income.

¶62 I hope that this article has shed some measure of new light on a developing topic, and that the conclusion reached is in conformance with these converging ideals – that a game should not be taxed for being a game, and that new taxes should not be levied against sources which are not income.