



Report to the Committee on Finance,
U.S. Senate

May 2013

VIRTUAL ECONOMIES AND CURRENCIES

Additional IRS
Guidance Could
Reduce Tax
Compliance Risks

GAO Highlights

Highlights of [GAO-13-516](#), a report to the Committee on Finance, U.S. Senate

Why GAO Did This Study

Recent years have seen the development of virtual economies, such as those within online role-playing games, through which individual participants can own and exchange virtual goods and services. Within some virtual economies, virtual currencies have been created as a medium of exchange for goods and services. Virtual property and currency can be exchanged for real goods, services, and currency, and virtual currencies have been developed outside of virtual economies as alternatives to government-issued currencies, such as dollars. These innovations raise questions about related tax requirements and potential challenges for IRS compliance efforts.

This report (1) describes the tax reporting requirements for virtual economies and currencies, (2) identifies the potential tax compliance risks of virtual economies and currencies, and (3) assesses how IRS has addressed the tax compliance risks of virtual economies and currencies.

To accomplish these objectives, GAO reviewed tax laws, IRS guidance and program documents, federal program internal control guidance, and interviewed IRS officials and knowledgeable experts on the topics.

What GAO Recommends

GAO recommends that IRS find relatively low-cost ways to provide information to taxpayers, such as on its website, on the basic tax reporting requirements for virtual currencies. In commenting on a draft of this report, IRS agreed with our recommendation.

View [GAO-13-516](#). For more information, contact James R. White at (202) 512-9110 or whitej@gao.gov.

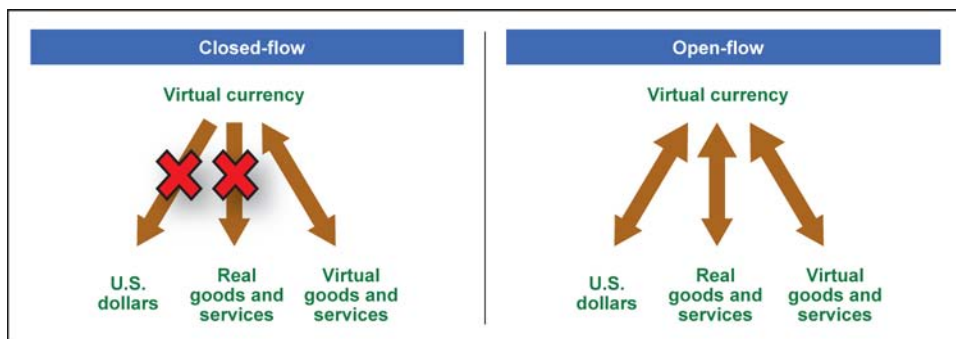
May 2013

VIRTUAL ECONOMIES AND CURRENCIES

Additional IRS Guidance Could Reduce Tax Compliance Risks

What GAO Found

Transactions within virtual economies or using virtual currencies could produce taxable income in various ways, depending on the facts and circumstances of each transaction. For example, transactions within a “closed-flow” virtual currency system do not produce taxable income because a virtual currency can be used only to purchase virtual goods or services. An example of a closed-flow transaction is the purchase of items to use within an online game. In an “open-flow” system, a taxpayer who receives virtual currency as payment for real goods or services may have earned taxable income since the virtual currency can be exchanged for real goods or services or readily exchanged for government-issued currency, such as U.S. dollars.



Source: GAO.

Virtual economies and currencies pose various tax compliance risks, but the extent of actual tax noncompliance is unknown. Some identified risks include taxpayers not being aware that income earned through virtual economies or currencies is taxable or not knowing how to calculate such income. Because of the limited reliable data available on their size, it is difficult to determine how significant virtual economy and currency markets may be or how much tax revenue is at risk through their usage. Some experts with whom we spoke indicated a potential for growth in the use of virtual currencies.

Beginning in 2007, IRS assessed the tax compliance risks from virtual economies, and in 2009 posted information on its website on the tax consequences of virtual economy transactions. However, IRS has not provided taxpayers with information specific to virtual currencies because of other priorities, resource constraints, and the need to consider the use of these recently-developed currencies, according to IRS officials. By not issuing guidance, IRS may be missing an opportunity to address virtual currency tax compliance risks. Given the uncertain extent of noncompliance with virtual currency transactions, formal guidance, such as regulations, may not be warranted. According to IRS officials, formal guidance requires extensive review, which adds to development time and cost. However, IRS may be able to develop more timely and less costly informal guidance, which, according to IRS officials, requires less extensive review and can be based on other existing guidance. An example is the information IRS provides to taxpayers on its website on the tax consequences of virtual economy transactions. Posting such information would be consistent with IRS's strategy for preventing and minimizing taxpayers' noncompliance by helping them understand and meet their tax responsibilities.

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Abbreviations

EBEI	Electronic Business and Emerging Issues
IRS	Internal Revenue Service
MMORPG	massively multiplayer online role-playing game

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May 15, 2013

The Honorable Max Baucus
Chairman
The Honorable Orrin Hatch
Ranking Member
Committee on Finance
United States Senate

Recent years have seen the development of virtual economies, such as those within online role-playing games, through which individual participants can earn and exchange virtual goods and services. Within some virtual economies, virtual currencies have been created as a medium of exchange for goods and services. Virtual property and currency can have economic value outside of virtual economies, such as when individuals trade these virtual goods for dollars or other government-issued currencies. More recently, virtual currencies have been developed outside of virtual economies as alternatives to government-issued currencies to exchange for real-world goods and services. These innovations raise questions about their related tax requirements and whether their increased adoption could pose challenges for the Internal Revenue Service (IRS) in its efforts to ensure tax compliance.

You asked us to review virtual economies and currencies and IRS's approach to addressing their tax implications. This report's objectives are to (1) describe the tax reporting requirements for virtual economies and currencies, (2) identify the potential tax compliance risks of virtual economies and currencies, and (3) assess how IRS has addressed the tax compliance risks of virtual economies and currencies.

To describe reporting requirements for virtual economies and currencies, we reviewed the Internal Revenue Code and applicable IRS regulations, including relevant sections of the Internal Revenue Manual, and interviewed IRS officials. We also reviewed academic articles and interviewed academics whose research focuses on virtual currencies and taxation of virtual transactions, as well as tax practitioners and representatives from the American Institute of Certified Public Accountants. We selected academics to interview based on criteria including the recognition and citations of their research in the relevant literature. We selected tax practitioners and representatives based on

their association with an organization with widely-recognized expertise in federal tax matters.

To identify potential compliance risks associated with virtual currencies and virtual economies, we reviewed and analyzed legal and academic literature and government reports, including the National Taxpayer Advocate's 2008 Annual Report to Congress and the European Central Bank's October 2012 report on virtual currencies. We then discussed these compliance risks with knowledgeable experts, including the Bitcoin Foundation, a virtual currency user group; tax professionals, including members of the American Institute of Certified Public Accountants; representatives from a company that publishes a virtual economy platform; and academics who have written about virtual currencies and taxation of virtual economy transactions. We selected experts based on criteria including their recognition and citations in the literature, and their expertise and recognition in representing taxpayers in federal tax matters or in representing virtual economy or currency concerns. We interviewed IRS officials knowledgeable on virtual economies and currencies and overall IRS tax compliance enforcement efforts. We also performed Internet searches to see what information was circulating for determining the proper tax treatment of virtual economy and currency transactions.

To assess how IRS has addressed compliance risks, we reviewed IRS documentation, including training manuals, examination guides, and internal reports detailing compliance challenges posed by virtual economies. We also interviewed knowledgeable IRS staff on the agency's efforts to learn about virtual economies and currencies and address them through compliance efforts. We compared IRS's efforts to federal program management guidance on gathering and monitoring information to identify and assess program risks, including the internal control standards for federal government and our *Internal Control Management and Evaluation Tool*.¹ Such guidance stipulates that agencies should have adequate mechanisms to identify risks to agency programs arising from external factors and that agencies should consider and, if appropriate, address the risks associated with technological advancements and developments and risks resulting from business and economic changes, among other types of changes. We also reviewed

¹GAO, *Internal Control Management and Evaluation Tool*, [GAO-01-1008G](#) (Washington, D.C.: August 2001).

general IRS procedures and plans for providing information to taxpayers to help them comply with tax requirements included in IRS's Taxpayer Assistance Blueprint and related progress reports to Congress.²

We conducted this performance audit from September 2012 to May 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

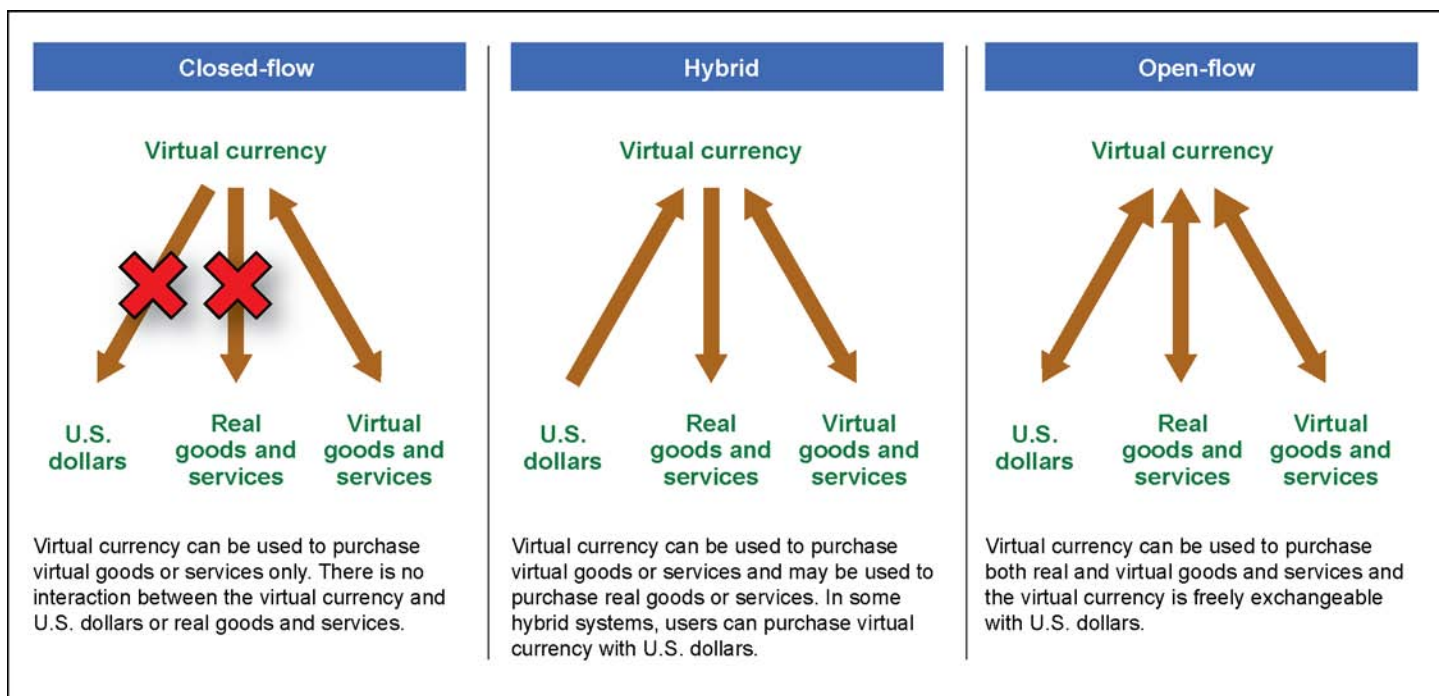
Background

There are no legal definitions for a virtual economy or currency, but generally, a virtual economy is comprised by the economic activities among a community of entities that interact within a virtual setting, such as an online, multi-user game. Virtual economies can be closed, meaning the economic activities and units of exchange used within the community do not interact with the real economy outside of the virtual environment setting, or they can be open, with some economic activity occurring in both the virtual setting and the real economy. A virtual currency is, generally, a digital unit of exchange that is not backed by a government-issued legal tender. Virtual currencies can be used entirely within a virtual economy, or can be used in lieu of a government-issued currency to purchase goods and services in the real economy. Some virtual economies may function similarly to barter exchanges,³ where bartering is the exchange of goods or services in lieu of monetary payments. For example, a carpenter may build a desk for a dentist in exchange for dental work. Barter transactions are taxable transactions, and taxpayers must report the fair market value of the good or service received on their tax returns. Some of the variations in virtual currencies and their interaction with the real economy are shown in figure 1.

²The 2007 Taxpayer Assistance Blueprint—a 5-year strategic plan for improving service to taxpayers—is a collaborative effort of IRS, the National Taxpayer Advocate, and the IRS Oversight Board. Congress has received annual update reports on the implementation of the blueprint.

³The term “barter exchange” means any organization of members providing property or services who jointly contract to trade or barter such property or services. 26 U.S.C. § 6045.

Figure 1: Types of Virtual Currency Systems



Source: GAO.

In a “closed-flow” virtual currency system, a virtual currency can be used only within a game or virtual environment to purchase virtual goods or services, such as additional tools to use within a game. Virtual tools amassed by players can be traded in a game for other in-game assets or to advance to higher play levels, but they hold no value outside of the game and cannot be cashed out for dollars or other government-issued currencies.

In a hybrid system, one or more of the flows between the virtual currency and real dollars or goods and services is closed. For example, participants can purchase virtual currency with real dollars or earn virtual currency by completing tasks, such as taking surveys, and then use the currency to purchase real or virtual goods and services. However, the virtual currency might not be exchangeable back into real dollars. An example of a hybrid system is some massively multiplayer online role-playing games (MMORPG). MMORPGs allow users to create avatars, or graphical representations of themselves, that exist within a digital world and interact with other avatars around the globe to carry out tasks. Some MMORPGs operate as a closed-flow system, but some of these closed-

flow systems can leak into the real economy via third-party transactions. Some MMORPGs, like World of Warcraft®, a large MMORPG, have third-party exchanges that allow users to exchange virtual goods for real dollars. This interaction between the virtual and real economies can be limited by the game's distributor through terms of use agreements.

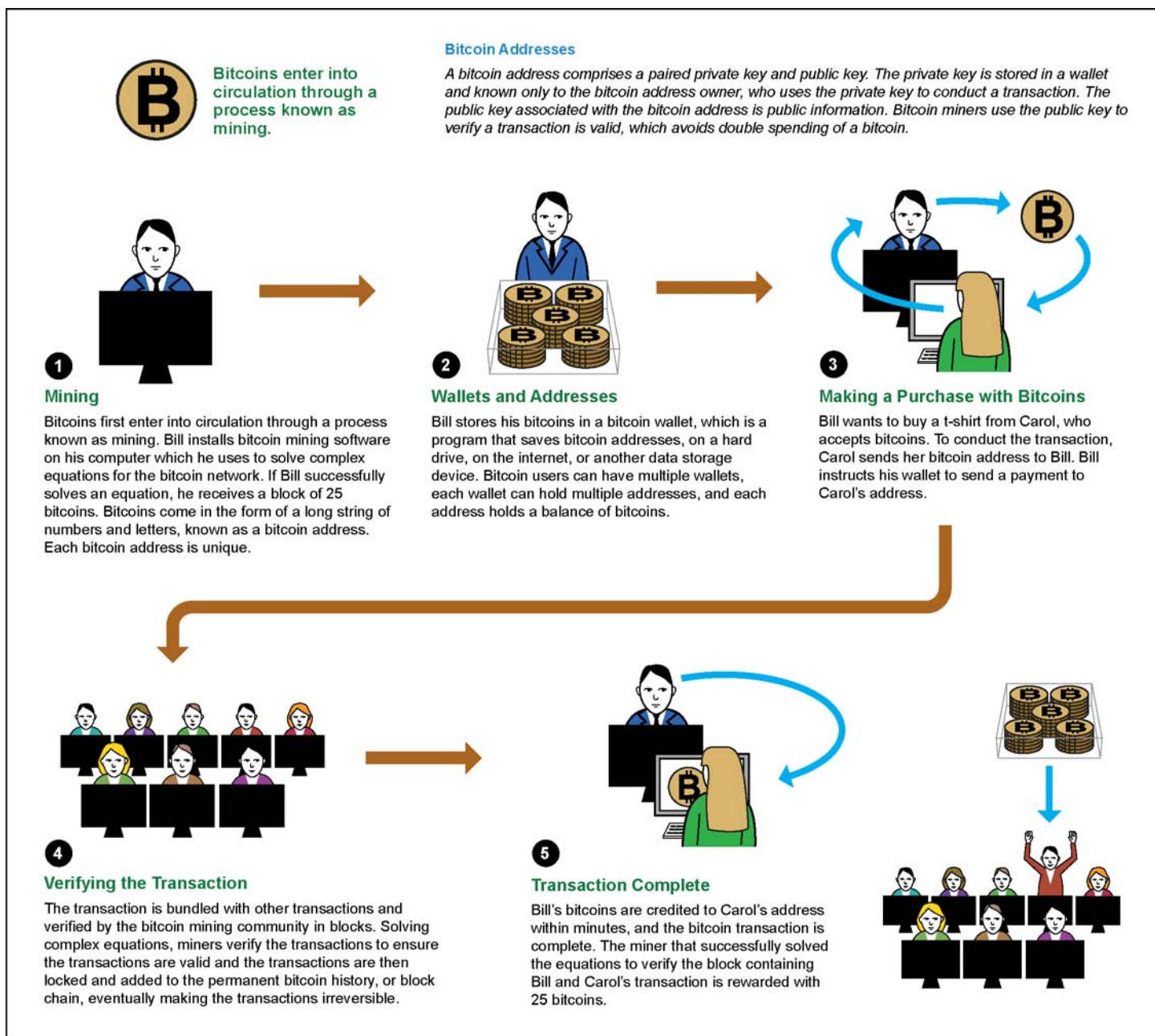
In an “open-flow” system, virtual currencies can be used to purchase both real and virtual goods and services, as well as be readily exchanged for government-issued currency, such as U.S. dollars. One example of an open-flow currency designed primarily for use in a virtual economy is Second Life® Linden™ dollars. Second Life, a product of Linden Lab®, is a virtual economy created in 2003 that has its own virtual currency. “Residents” of Second Life create avatars and interact with other avatars in a user-defined and user-created environment. Within Second Life, residents can create virtual assets, such as buildings that they rent or sell to other residents, or operate virtual businesses, such as virtual clothing stores that sell virtual goods to other residents. Transactions taking place within Second Life use Linden Lab's virtual currency, Linden dollars. Second Life residents can sell their Linden dollars to other residents for U.S. dollars through the LindeX™ exchange, which uses third-party payment networks to process the payments and allows residents to cash out of the Second Life world.

An open-flow currency can also be developed and designed primarily to be used to purchase real goods and services outside an online game virtual economy. An example is bitcoin, a decentralized digital currency that uses a peer-to-peer computer network to move bitcoins around the world. Developed in 2009 by an anonymous programmer or programmers, bitcoin is a privately-issued digital currency that exists only as a long string of numbers and letters in a user's computer file. Bitcoins use cryptography to secure and safeguard against counterfeiting. Unlike U.S. dollars and other currencies, bitcoin is not government issued and does not have a physical coin or bill associated with its circulation, such as a Federal Reserve note. Bitcoin has grown in popularity since its introduction and, according to academics and user groups with whom we spoke, is the most widely circulated virtual currency available. Bitcoins act as a real world currency in that users pay for real goods and services, such as coffee or web development services, with bitcoins as opposed to U.S. dollars or other government-issued currencies. Third-party exchanges allow bitcoin users to exchange their bitcoins back to government-issued currencies, such as U.S. dollars, euro, or yen.

Bitcoins are created and entered into circulation through a process, called mining, that members of the bitcoin network perform. To perform the work of mining, bitcoin miners download free bitcoin software that they use to solve complex equations. These equations serve to verify the validity of bitcoin transactions by grouping several transactions into a block and mathematically proving that the transactions occurred and do not represent double spending of a bitcoin. When a miner's computer solves an equation, the bitcoin network accepts the block of transactions as valid and creates 25 new bitcoins and awards them to the successful miner.⁴ By the bitcoin program's design, there will be a maximum of 21 million bitcoins in circulation once all bitcoins have been mined, which the program's design projects to be in the year 2140. In addition to mining new bitcoins, users can also acquire bitcoins already in circulation by purchasing them on third-party exchanges or accepting bitcoins as gifts or payments for goods or services. Figure 2 shows an example of how bitcoins enter circulation and how an individual can use bitcoins to pay for real goods or services.

⁴According to bitcoin's design, the number of bitcoins issued to successful miners will halve every time the network reaches 210,000 blocks, or approximately every four years. From inception through November 2012, rewards were 50 bitcoins. In 2016, rewards are expected to halve again to 12.5 bitcoins.

Figure 2: How Bitcoins Enter Circulation and Are Used in Transactions



Source: GAO.

Bitcoin transactions can be anonymous, since all that is needed to complete a transaction is a bitcoin address, which does not contain any personal identifying information. Only the private key holder knows the identity of the bitcoin address owner.

The size of the virtual economy and currency markets is unclear due to limitations in available data. For example, some companies that offer virtual economy platforms are private firms and do not report statistics about their virtual worlds' activities. Further, due to the global nature of the Internet, borderless transactions, and an individual's ability to have multiple virtual economy or currency accounts, we did not find reliable data available indicating the use of virtual economies or currencies by individuals or exclusively by U.S. taxpayers.⁵ Even with these limitations, some data exist that may provide some context for the size of virtual economy and currency markets.

- According to bitcoin's peer-to-peer-network-generated statistics,⁶ as of May 1, 2013, approximately 11 million bitcoins were in circulation.⁷ Bitcoin exchange rates against the U.S. dollar historically have been volatile. From May 2012 through February 2013, prices ranged between \$5 and \$20 for 1 bitcoin. Prices increased through March 2013, and then from April 1, 2013, to May 1, 2013, ranged between \$79 and over \$237 for 1 bitcoin.⁸ In the same time period, the number of bitcoin transactions per day ranged from approximately 8,000 to 70,000 transactions per day.
- As of December 31, 2012, there were over 9.6 million active users of World of Warcraft, a large MMORPG, according to Blizzard Entertainment®, the company that develops and publishes the World of Warcraft games.

⁵Given these limitations, we did not test the reliability of data, such as the data generated from the bitcoin network, but are providing some figures to provide context for the possible size of these markets.

⁶<http://blockchain.info>. (Date accessed May 1, 2013.)

⁷Due to data limitations, it is difficult to calculate the velocity, or the rate at which bitcoins are spent, and the number of transactions between unique users in a given time period.

⁸<https://mtgox.com>. (Date accessed May 1, 2013.) <https://mtgox.com> operates the largest bitcoin exchange. The site has daily and monthly limits on how many bitcoins may be exchanged back to U.S. dollars or other virtual or government-issued currencies. These limits may be raised if users provide additional documentation confirming their identity.

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- According to Linden Lab, creators of Second Life, residents exchanged more than US\$150 million worth of Linden dollars within Second Life's economy in the third quarter of 2010.

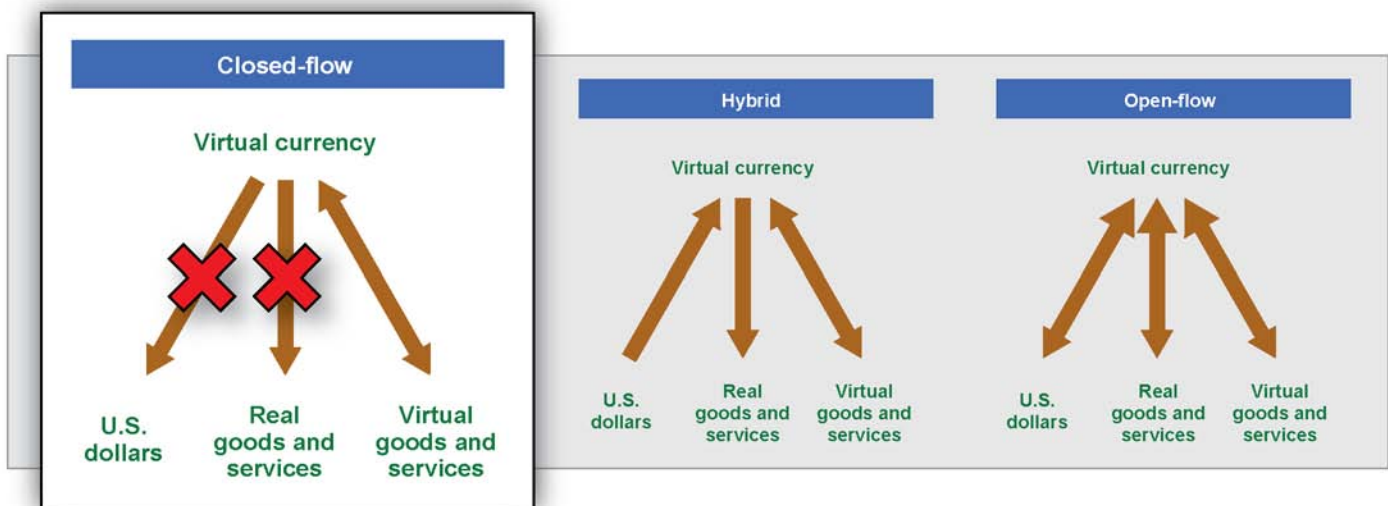
IRS is responsible for ensuring taxpayer compliance for all economic areas, including virtual economies and currencies. One mechanism that assists IRS in enforcing tax laws is information reporting, through which third parties report to IRS and taxpayers on certain taxpayer transactions. For example, subject to certain thresholds, third-party settlement organizations are required to report on Form 1099-K payments in settlement of third-party network transactions.⁹ A common example of a third-party settlement organization is an online auction-payment facilitator, which operates as an intermediary between buyers and sellers by transferring funds between their accounts in settlement of purchases. Another type of third-party information reporting is performed by barter exchanges, which, generally, are organizations that facilitate barter transactions among exchange members. Such barter exchanges are required to report on Form 1099-B each member's barter transactions proceeds. Third-party information reporting is widely acknowledged to increase voluntary tax compliance, in part because taxpayers know that IRS is aware of their income.

Likewise, in its role in administering the tax code, IRS must implement the laws Congress enacts through detailed guidance. To accomplish this responsibility, IRS publishes several forms of guidance, such as regulations, revenue rulings and procedures, and notices. IRS also provides more informal guidance on its website based on factors such as perceived need, media coverage, or IRS staff identifying an emerging tax compliance issue. As outlined in IRS's Taxpayer Assistance Blueprint and related reports, a key part of IRS's strategy for preventing and minimizing noncompliance is to outreach to taxpayers to help them understand and meet their tax responsibilities. One of the guiding principles of this approach is to enhance IRS's website so that it becomes the first choice of taxpayers for obtaining the information they need to comply.

⁹Third-party settlement organizations must file Form 1099-K if gross payments to a payee exceed \$20,000 and there are more than 200 transactions with the payee in a given tax year.

Virtual Economy and Currency Transactions May Be Taxable If They Produce Income

Transactions within virtual economies or using virtual currencies could produce taxable income in a number of ways depending on their specific facts and circumstances. U.S. tax laws and regulations generally require taxpayers to report and pay taxes on all income, regardless of the source from which the income was derived;¹⁰ there are no additional rules specific to virtual currencies or economies. For example, similar to cash transactions, there are no third-party reporting requirements specific to virtual economy or currency transactions, as there are with some other types of electronic funds transactions, such as with transactions conducted through third-party payment networks. Taxpayers are required to account for any taxable income, including income that is not subject to third-party information reporting. The following examples show how some taxpayers may incur a tax liability when using a virtual currency for the three types of virtual currency systems described in the background of this report. We discussed these examples with IRS officials, who agreed with how we characterized the potential tax implications.

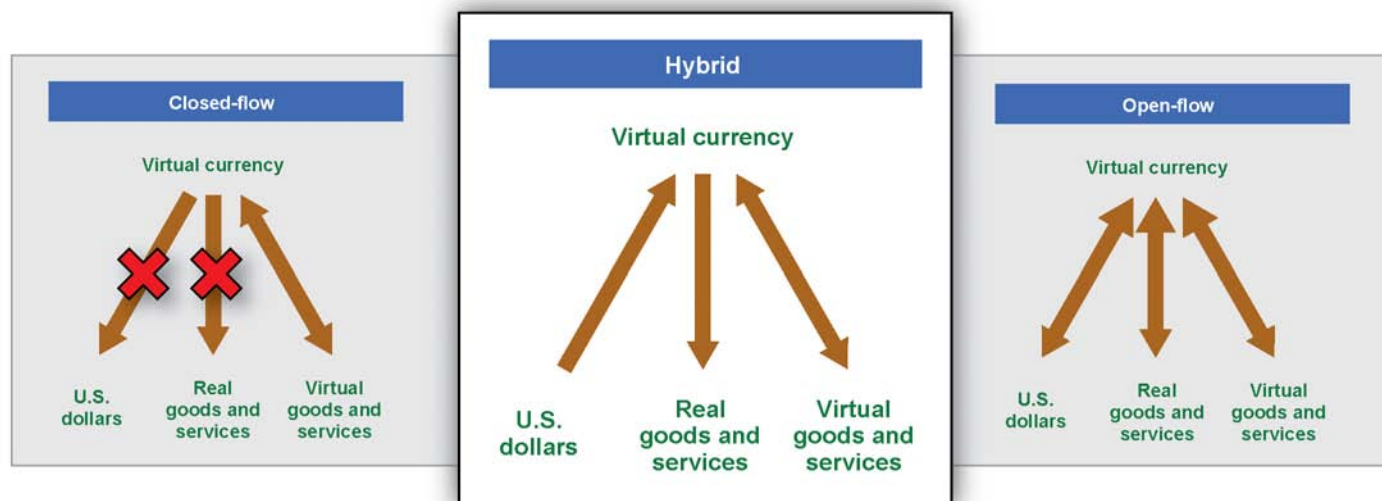


Source: GAO.

- David plays an online game through which he is issued money that he can use to purchase properties within the game. These properties

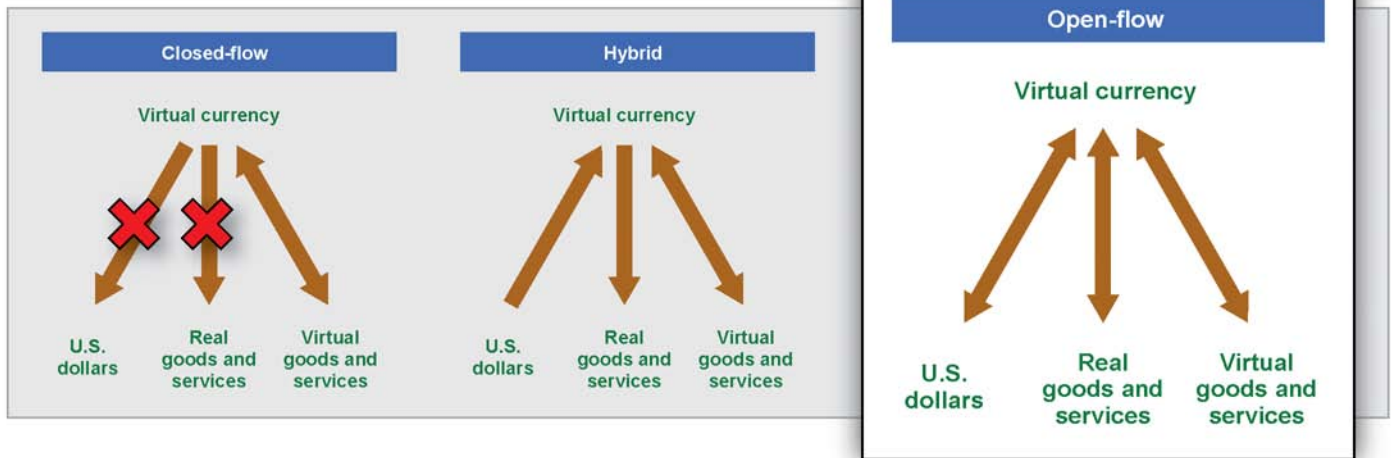
¹⁰For federal tax purposes, all income is taxable, although the tax code excludes some items from income, such as gifts or inheritances, subject to exceptions, while it allows other items to be deducted to reduce taxable income, subject to limitations and restrictions, such as trade or business expenses.

have no value outside the game and David cannot exchange his online money for U.S. dollars. David has not engaged in a taxable transaction.



Source: GAO.

- Ann plays an online game and amasses virtual tools that are valuable to her avatar. The online game does not allow users to directly exchange their virtual tools for U.S. dollars, but rather they can do so using a third-party, making this a hybrid system. Ann uses a third-party exchange not affiliated with the online game to coordinate the transfer of her virtual tools to another player in exchange for U.S. dollars. The transfer is conducted by the third-party exchange and payment is mediated by a third-party payment network. Ann may have earned taxable income from the sale of these virtual tools.



Source: GAO.

- John is a resident of Second Life. He rents virtual property to other residents who pay him in Linden dollars. At the end of the year, John exchanges his Linden dollars for U.S. dollars and realizes a profit. John may have earned taxable income from his activities in Second Life.
- Bill is a bitcoin miner. He successfully mines 25 bitcoins. Bill may have earned taxable income from his mining activities.
- Carol makes t-shirts and sells them over the Internet. She sells a t-shirt to Bill, who pays her with bitcoins. Carol may have earned taxable income from the sale of the t-shirt.

Virtual Economies and Currencies Pose Various Tax Compliance Risks, but the Extent of Noncompliance Is Unknown

IRS, tax experts, academics, and others have identified various tax compliance risks associated with virtual economies and currencies, including underreporting, mischaracterization, and evasion. These risks are not unique to virtual economies and currencies, as they also exist for other types of transactions, such as cash transactions, where there are not always clear records or third-party tracking and reporting of transactions. The tax compliance risks we identified for virtual economies and currencies are described below.

- **Taxpayer lack of knowledge of tax requirements.** Income is generally defined as any undeniable accessions to wealth, clearly

realized, and over which the taxpayers have complete dominion.¹¹ The unsophisticated taxpayer may not properly identify income earned through virtual economies or currencies, such as virtual online game assets exchanged for real word currency, as taxable income. If taxpayers using virtual currencies turn to the Internet for tax help, they may find misinformation in the absence of clear guidance from IRS. For example, when we performed a simple Internet search for information on taxation of bitcoin transactions, we found a number of websites, wikis, and blogs that provided differing opinions on the tax treatment of bitcoins, including some that could lead taxpayers to believe that transacting in virtual currencies relieves them of their responsibilities to report and pay taxes.

- **Uncertainty over how to characterize income.** Even if taxpayers are aware that they may have a tax liability, they may be uncertain about the proper tax treatment of virtual transactions, according to tax experts, including academics and tax practitioners with whom we spoke. For example, characterization depends on whether the virtual economy activity or virtual currency unit is to be treated as property, barter, foreign currency, or a financial instrument. According to some experts with whom we spoke, some virtual currency transactions could be considered barter transactions, which may not be an obvious characterization to unsophisticated taxpayers.¹² This characterization could result in noncompliance with requirements for reporting and paying tax on barter income.
- **Uncertainty over how to calculate basis for gains.** Income earned from virtual economy or currency transactions may not be taxable if it is equivalent to that from an occasional online garage sale, meaning occasional income from selling goods for less than their original purchase price. It may be difficult for individuals receiving income from virtual economies to determine their basis for calculating gains. For example, some online games require players to pay a monthly fee in exchange for use of the game and a monthly allowance of virtual currency. If a player then sells a virtual tool gained in the game for real money, calculating the basis for any taxable gain may be difficult for the unsophisticated taxpayer.

¹¹ *Commissioner v. Glenshaw Glass Co.*, 348 U.S. 426 (1955).

¹² 26 U.S.C. § 6045 addresses barter exchanges and barter transactions.

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- **Challenges with third-party reporting.** Third-party information reporting requirements do not apply specifically to transactions using virtual economies or currencies. Virtual economy or currency transactions may be subject to third-party information reporting to the extent that these transactions involve the use of a third-party payment network to mediate the transaction and the taxpayer meets reporting threshold requirements.¹³ Because virtual economy and currency transactions are inherently difficult to track, including identifying the true identities of the parties to the transaction, third-party information reporting may be difficult or prohibitively burdensome for some virtual economy and currency issuers to administer.
 - **Evasion.** Some taxpayers may use virtual economies and currencies as a way to evade taxes. Because transactions can be difficult to trace and many virtual economies and currencies offer some level of anonymity, taxpayers may use them to hide taxable income.

Because of the limited reliable data available on their size, it is difficult to determine how significant virtual economy and currency markets may be or how much tax revenue is at risk through their usage. Some experts with whom we spoke indicated that there is potential for growth in the use of virtual currencies. Additionally, the European Central Bank recently issued a report on virtual currencies, acknowledging their potential for future growth and interaction with the real economy.¹⁴ If the use of virtual economies and currencies expands, it can be expected that associated revenue at risk of tax noncompliance will grow.

¹³26 U.S.C. § 6050W and applicable regulations define third-party payment networks.

¹⁴European Central Bank, *Virtual Currency Schemes* (Frankfurt am Main, Germany: October 2012).

IRS Has Provided Some Guidance on Tax Reporting Requirements for Virtual Economies but Not for Virtual Currencies Used Outside of Virtual Economies

IRS has assessed the tax compliance risks from virtual economies and virtual currencies used within those economies, and developed a plan to address them in a manner consistent with internal control standards. Beginning in 2007, IRS's Electronic Business and Emerging Issues (EBEI) policy group identified and surveyed internal and external information sources, gathered data on the industry, and collect trend information, among other efforts. EBEI determined that virtual economies presented opportunities for income underreporting and developed (1) a potential compliance strategy, including initiating a compliance improvement project to gather research data and analyze compliance trends, and (2) a potential action plan for specific compliance activities. According to IRS compliance officials, IRS ultimately decided not to pursue these actions in light of available IRS resources and other higher priority needs. Also, IRS did not find strong evidence of the potential for tax noncompliance related to virtual economies, such as the number of U.S. taxpayers involved in such activity or the amount of federal tax revenue at risk.

However, in November 2009, based on EBEI having determined the need, IRS posted information on its website on the tax consequences of virtual economy transactions. The web page points out that, in general, taxpayers can receive income in the form of money, property, or services from a virtual economy, and that if taxpayers receive more income than they spend, they may be required to report their gains as taxable income. The page further states that IRS has provided guidance on the tax treatment of issues similar to online gaming activities, including bartering, gambling, business, and hobby income, and provides links to IRS publications on those topics. IRS officials who were involved in issuing this guidance reported it cost less to make an online statement pointing taxpayers to existing guidance than it would have cost to develop and publish new guidance specific to virtual economies.

IRS has not assessed the tax compliance risks of open-flow virtual currencies developed and used outside of virtual economies. These types of currencies, generally, were introduced after IRS's last review of compliance related to virtual economy transactions. According to IRS compliance officials, IRS would learn about tax compliance issues related to virtual currencies as it would any other tax compliance issue, such as IRS examiners identifying compliance problems during examinations or taxpayers requesting guidance on how to comply with certain tax requirements. To date, these processes have not resulted in IRS identifying virtual currencies used outside of virtual economies as a compliance risk that warrants specific attention.

Likewise, IRS has not issued guidance specific to virtual currencies used outside of virtual economies due to competing priorities and resource constraints, and because the use of virtual currencies is a relatively recent development that requires further consideration before guidance can be issued, according to IRS's Office of Chief Counsel and compliance officials.¹⁵ As previously discussed, taxpayers may be unaware that income from transactions using this type of virtual currency may be taxable, or if they are aware, uncertain on how to characterize it. By not issuing guidance, IRS may be missing an opportunity to address these compliance risks and minimize their impact and the potential for noncompliance. Given the uncertain extent of noncompliance related to virtual currency transactions, formal guidance, such as regulations, revenue rulings, or revenue notices, may not be warranted at this time. According to officials from IRS's Office of Chief Counsel, these types of guidance require extensive review within IRS and the Department of the Treasury and, in some cases, public comment, which add to the time and cost of development. However, IRS may be able to develop informal guidance, which, according to Chief Counsel officials, requires less extensive agency review and can be based on other existing guidance. As such, IRS can develop informal guidance in a more timely and less costly manner than formal guidance, according to the officials. An example of such informal guidance is the information IRS provides to taxpayers on its website on the tax consequences of virtual economy transactions. Posting such information to its website would be consistent with IRS's strategy for preventing and minimizing taxpayers' noncompliance by helping them understand and meet their tax responsibilities, as outlined in IRS's Taxpayer Assistance Blueprint.

Conclusions

Virtual economies and the use of virtual currencies intended as alternatives to government-issued currencies are a recent phenomenon, and the extent to which their use results in tax noncompliance is unknown. Given this uncertainty, available funding, and other priorities, IRS made a reasoned decision not to implement a compliance approach specific to virtual economies and currencies. However, IRS did see value

¹⁵Although IRS has not issued guidance, another Department of the Treasury agency, the Financial Crimes Enforcement Network, recently issued interpretive guidance clarifying the treatment of persons creating, obtaining, distributing, exchanging, accepting, or transmitting virtual currencies. However, such guidance does not discuss the tax treatment of virtual currency transactions. FIN-2013-G001

in providing taxpayers with information on the tax consequences of virtual economy transactions, a low-cost step to potentially mitigate some of the noncompliance risk associated with such transactions. The uncertainty about the extent virtual currencies are used in taxable transactions and any associated tax noncompliance means that costly compliance activities are not merited at this time. However, the fact that misinformation is circulating and the possibility of growth in the use of virtual currencies outside virtual economies suggest that it would be prudent to take low-cost steps, if available, to mitigate potential compliance risks. The type of information IRS provided about virtual economy transactions is one model.

Recommendation for Executive Action

To mitigate the risk of noncompliance from virtual currencies, the Commissioner of Internal Revenue should find relatively low-cost ways to provide information to taxpayers, such as the web statement IRS developed on virtual economies, on the basic tax reporting requirements for transactions using virtual currencies developed and used outside virtual economies.

Agency Comments and Our Evaluation

We sent a draft of this report to the Acting Commissioner of Internal Revenue for comment. In written comments, reproduced in appendix I, IRS agreed with our recommendation and stated it would provide information to taxpayers on the basic tax reporting requirements for transactions involving virtual currencies by linking to existing relevant guidance. IRS noted that it was aware of the tax compliance risks associated with virtual currencies and was taking other steps, such as developing training resources for agents, to address them. IRS also provided technical comments on our draft report, which we incorporated, as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to interested congressional committees, the Secretary of the Treasury, the Acting Commissioner of Internal Revenue, and other interested parties. In addition, the report also will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-9110 or whitej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

A handwritten signature in black ink that reads "James R. White". The signature is written in a cursive, flowing style.

James R. White
Director, Tax Issues
Strategic Issues

Appendix I: Comments from the Internal Revenue Service



DEPUTY COMMISSIONER

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

May 3, 2013

Mr. James R. White
Director, Tax Issues
Strategic Issues Team
U.S. Government Accountability Office
441 G. Street NW
Washington, DC 20548

Dear Mr. White:

Thank you for the opportunity to review your draft report entitled, "VIRTUAL ECONOMIES AND CURRENCIES: Additional IRS Guidance Could Reduce Tax Compliance Risks" (GAO 13-516). We are pleased your report acknowledges the Service's efforts to provide taxpayers with information on the tax consequences of virtual economy transactions by posting information on our website and providing links to existing IRS guidance on bartering, gambling, business, and hobby income.

As your report notes, we began evaluating the tax compliance risks associated with virtual economies and virtual currencies in 2007. Although the Service did not specifically use the term "virtual currency," which was not well-defined at the time, this evaluation included all types of electronic payment systems. The systems evaluated included what is now covered by the term "virtual currency" whether used inside or outside the virtual world.

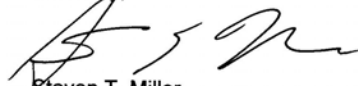
The Service is aware of the potential tax compliance risks posed by off-shore and anonymous electronic payment systems, and we are working to address these risks. Our efforts have included discussions with other federal agencies, evaluating our agents' expertise, developing continuing professional education curricula, providing on-line and classroom training, and creating lead sheets and questionnaires for agent use during examinations.

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We agree that providing taxpayers with information on the basic tax reporting requirements for transactions involving virtual currencies could further aid our efforts. The enclosed response addresses your recommendation.

If you have questions, please call me, or members of your staff may contact Faris Fink, Commissioner, Small Business/Self Employed Division at (202)622-0600.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. T. Miller', is written over the typed name.

Steven T. Miller
Deputy Commissioner for Services and Enforcement

Enclosure

Enclosure

GAO Recommendation and IRS Response to GAO Draft Report
VIRTUAL ECONOMIES AND CURRENCIES: Additional IRS Guidance Could Reduce
Tax Compliance Risks (GAO-13-516)

Recommendation

To mitigate the risk of noncompliance from virtual currencies, the Commissioner of Internal Revenue should find relatively low-cost ways to provide information to taxpayers - such the Web statement IRS developed on virtual economies - on the basic tax reporting requirements for transactions using virtual currencies developed and used outside virtual economies.

Comment

We will provide information to taxpayers on the basic tax reporting requirements for transactions involving virtual currencies by linking to existing relevant guidance.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

James R. White, (202) 512-9110 or whitej@gao.gov

Staff Acknowledgments

In addition to the contact named above, Jeff Arkin (Assistant Director), David Dornisch, Lois Hanshaw, Richard Hung, Ronald W. Jones, Donna Miller, Ed Nannenhorn, Danielle N. Novak, and Sabrina Streagle made key contributions to this report.

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