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The Bitcoin GRAT

A new funding source—if the grantor has a healthy tolerance for risk

On Jan. 1, 2013, a single bitcoin would have cost you a little over $13. Presuming you didn't spend it on a pizza in the meantime, by early December 2013, your bitcoin would have increased in value by over $1,000, only to fall back to around $400 by the middle of April 2014 (then shooting back up to around $650 by early June).

This volatility imperils the use of bitcoins for payment of day-to-day expenses because yesterday's pizza could be tomorrow's fortune and vice versa. However, their potential for dramatic gain, along with the ease with which they can be transferred, makes bitcoins attractive as a funding source for grantor retained annuity trusts (GRATs), provided the grantor has a healthy tolerance for risk.

On March 25, the Internal Revenue Service issued Notice 2014-21[1] (the Notice) which concludes that virtual currencies, including bitcoins, are to be treated as property for tax purposes, rather than currency. The Notice allows practitioners, with some initial degree of certainty, to begin determining best practices for executing and reporting bitcoin estate-planning transactions.

Bitcoin Basics

The Bitcoin system ("Bitcoin" is capitalized when referring to the overall network or concept but is left uncapitalized when referring to a unit of currency) is maintained by a decentralized, peer-to-peer payment network. Anyone who installs the requisite software can become a "node" on the network and participate in maintaining the public record (known as the "block chain") of each and every bitcoin transaction. These nodes, acting by consensus, relay bitcoin transactions to be added to the block chain. Thereafter, a public record of the transaction is available for all to see, although the identities of the two transacting parties are kept anonymous.[2] Because each transaction is recorded in the block chain, it's impossible for any owner to sell the same bitcoin to multiple purchasers.

To own bitcoins, one needs at least one bitcoin address, consisting of a seeming jumble of 30 or so numbers and letters. The address is roughly akin to a routing number, and it's how to identify to whom bitcoins should be transferred. The addresses participating in any bitcoin transaction (of which there will be at least two—one for each of the transferor and the transferee) are made public on the block chain, which allows for a determination of how many bitcoins are associated with each address. This transparency is essential to the integrity of the Bitcoin system and is why, for instance, a site like *bitcoinrichlist.com* can provide a list of the 100 addresses that hold the largest number of bitcoins.

Each address has a corresponding "private key" that's known only to the owner, which she must use to authorize the transfer of any bitcoins associated with her address.

A bitcoin owner keeps track of her addresses in a "wallet," which can consist of a program on the owner's personal computer or smartphone or via an online wallet hosted through a third-party company. Because the wallet can contain both public addresses and private keys, for security reasons, many people prefer to keep their wallet disconnected from the Internet, such as by using a "paper wallet" (which, at its most basic, is a piece of paper with an address and private key printed on it).

Anyone who gains access to a private key can transfer the associated bitcoins wherever she wishes. A victim of a bitcoin theft will be able to see the transfer of the

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bitcoins on the block chain but will most likely have no way of determining who took the bitcoins. The irreversibility of bitcoin transactions is an intentional, fundamental component of Bitcoin design, and in this respect, bitcoins function exactly like cash. If a robber breaks into your house and steals both cash and your paper wallet, in neither case should you have any expectation of easily tracing and recovering your missing funds.

At present, roughly 12.8 million bitcoins have been introduced into circulation. As of early June 2014, each bitcoin was worth approximately $640, representing a total capitalization of around $8.2 billion. The number of bitcoins in circulation will gradually increase,

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reaching a predetermined maximum of 21 million bitcoins sometime around 2140. However, because the number of bitcoins added to circulation decreases by half every four years or so, 99 percent of those 21 million bitcoins will be in circulation by around 2030 (the process by which bitcoins are mined and added to circulation, although fascinating, is beyond the scope of this article).

If an owner loses her private key for any reason, she'll never again be able to access the coins held in the corresponding address. Those lost coins are effectively removed from circulation forever. So, although 21 million bitcoins will be released, the number available for circulation will slowly fall over time. However, because bitcoins can be transacted with up to eight decimal places of specificity, they are divisible into an effectively unlimited number of subunits (much the way dollars are divisible into cents). As such, proponents argue that the Bitcoin system will remain robust, regardless of the actual number of bitcoins available for use.

Bitcoins may be transferred without the participation of financial institutions or the oversight of governments and taxing authorities (although those authorities can see transactions on the block chain just like anyone else). This is even the case if bitcoins are being sold for cash, but such a transaction would generally require a buyer and seller to meet in person to make the exchange. However, the most common way of converting bitcoins to cash is to use an online exchange. Exchanges are, generally, for-profit businesses that connect buyers and sellers, and each exchange has its own continually changing buy and sell prices. To date, the largest of these exchanges are based overseas, in places such as Japan, Slovenia, Bulgaria and China. To use an exchange for any substantial transaction, cash will most likely need to be transferred to or from a bank account, which is the point at which bitcoins come most clearly onto the radar of the taxing authorities.

There's a variance in the prices offered from exchange to exchange. At present, the transaction costs of moving large sums of hard currency in and out of exchanges (which as likely as not are located in different countries from each other) limit the effectiveness of bitcoin arbitrage. Looking at the top three exchanges by volume, as of early June 2014, it isn't exceptional to see a price variance of up to 2 percent.

The price of bitcoins has had dramatic ups and downs, particularly over the last five months or so, as investors look for evidence of whether bitcoins have long-term viability as a currency. As one might suppose, prices tend to react negatively to indications that world governments will begin to regulate and tax bitcoins, such as in December when China prohibited banks and other financial institutions from participating in bitcoin transactions. Prices also dropped when the Japan-based Mt. Gox, at one point the world's largest bitcoin exchange, filed for bankruptcy and revealed that it had lost control of over 850,000 bitcoins (due to some as-yet-undetermined mixture of negligence and theft), then worth hundreds of millions of dollars. It did little to bolster the public's confidence when Mt. Gox announced a few weeks later that it had located 200,000 of the missing bitcoins in a wallet they had overlooked.

Best Practices

If a client decides to fund a trust with bitcoins, there's no real authority as to how the transfer should be memorialized for tax purposes. By looking up the transaction on a site that allows searching of the block chain (such

as *blockchain.info*), anyone will be able to see the time the transaction occurred, the bitcoin addresses of the sender and the recipient, the number of bitcoins transferred and any transaction fees involved.

As an example, we've selected at random one of the thousands of bitcoin transactions that took place as we wrote this article: 76a9343d668a2b9ac4edfe1d70c-cfd186e839a53099e9b95c5788c7991d95233. Looking up that transaction on the block chain reveals that at 2:32 pm GMT on April 2, 2014, a bitcoin address holding 80.05067484 bitcoins transferred 10 of those coins to a different address. This transaction technically consisted of three simultaneous transfers: (1) 10 bitcoins were transferred to the recipient, (2) 70.05057484 bitcoins were returned to the original owner (albeit to a new address) as change, and (3) .0001 bitcoins were retained by the Bitcoin system as a transaction fee.

Because the identity of the owner of each address is anonymous, it's possible that actually 70 or so bitcoins are being transferred, and 10 bitcoins are being received as change. However, this scenario seems unlikely, given that one transfer is for a round number of 10 bitcoins. It's also possible that no bitcoins are changing hands at all, and that the owner has merely decided to hold her bitcoins in two addresses rather than one. However, for our purposes, we'll presume that this transaction represents the funding of a GRAT with 10 bitcoins.

The record of this transaction will exist publicly in the block chain for as long as the Bitcoin system exists. Thus, bitcoins actually provide more accurate evidence of the date of transfer than many other possible funding sources (for instance, the transfer of an entity interest via an unnotarized assignment agreement). However, additional steps must be taken to prove what parties were involved in the transaction. To that end, in the transaction above, we would advise the grantor to send a contemporaneous email to her attorney (with a copy to the trustee), which provides the transaction ID and affirms that the grantor is the owner of both the input address where the 80 or so bitcoins originated and the output address for the 70 or so bitcoins received as change. As discussed below, we also recommend that the email provide evidence of the grantor's basis in the gifted bitcoins.

The trustee likewise should respond with an email confirming that the trust is the owner of the output address that received the 10 bitcoins. Similar emails should be sent each time the trust transfers bitcoins for any reason, such as to make annuity payments.

To avoid any argument that the gift is incomplete because the grantor retained control over the transferred bitcoins, the grantor shouldn't have any access to the trust's private keys (unless the grantor is also acting as trustee). So if the grantor isn't acting as the initial trustee of the GRAT, she shouldn't be the one who sets up the wallet for the trust. If the grantor is the initial trustee of the GRAT, at the end of the GRAT term, she should transfer any remaining bitcoins to a new address created and controlled by the remainderman (for instance, the trustee of a continuing trust for the benefit of the grantor's descendants). It isn't sufficient to simply provide the remainderman with the password to the GRAT's digital wallet (or to physically give the remainderman a piece of paper listing the relevant addresses and private keys) because in each case, the grantor could have retained a copy of the private keys, which she could use at any time thereafter to transfer the bitcoins back to herself.

Administering a Bitcoin GRAT

Administering a GRAT funded with bitcoins is undemanding, due to the ease with which bitcoins can be transferred back to the grantor to make annuity payments. Unlike a GRAT funded with stock, there's no need to open brokerage accounts or to issue annual instruction letters to transfer shares. The fee for each bitcoin transfer will be, at most, a few cents, and that fee doesn't scale up with the amount transferred. Essentially, the trustee can administer the GRAT from her laptop with only a few keystrokes.

However, we advise that the GRAT open up a basic bank account at the time of funding. This account will be useful for two purposes. First, in the event that the price of bitcoins soars, the grantor can lock in that value by using a power of substitution to exchange cash for bitcoins. Second, assuming bitcoins are to be valued for federal gift tax purposes using the mean between the day's high and low prices (as discussed below), it will be difficult to transfer bitcoins exactly equal to the annuity amount (because the mean between high and low won't be known until the end of the day). If the GRAT has a small cash account, it can pay the bulk of the annuity by bitcoins, and then once the value of the transferred coins is determined the next day, it can use cash to pay the balance.

If the grantor or trustee doesn't want to hold

bitcoins directly, there are investment funds that invest in bitcoins (such as the Bitcoin Investment Trust or the forthcoming Winklevoss Bitcoin Trust). Using such a fund takes the burden off of the trustees to make certain that any bitcoins are held securely, at the cost of fund fees and the greater administrative complexity of making annuity payments with fund interests. For instance, as per its website, the Bitcoin Investment Trust, which is only open to accredited investors mak-

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ing a minimum $25,000 investment, has a front-end fee of 0.5 percent, an annual administrative and safe-keeping fee of 2 percent and an early redemption fee of 1.5 percent if shares are redeemed within a year of purchase. The added expense of an investment fund may be reasonable in the eyes of the trustees, given the merest possibility of total loss of trust corpus due to lost or stolen private keys. Alternatively, to a grantor who's technically savvy, a bitcoin investment fund may seem a useless drain on trust assets. So, whether to hold bitcoins directly or through a fund will be a trust-by-trust decision. In the case of a GRAT, if the grantor owned bitcoins directly prior to funding the GRAT, it's likely she'll continue to be willing to hold them directly while acting as trustee. If the grantor intends to reacquire, for cash, any bitcoins remaining in the trust at the end of the GRAT term (to provide the remainderman with assets without any built-in gain), the grantor will never need to rely on any other trustee with respect to any bitcoin transaction.

Fiduciary Issues

Whether the trust holds bitcoins outright or through a fund, there's always the risk of a precipitous plunge in bitcoin value (including to zero, in the event the integrity of the Bitcoin system is someday compromised). To minimize the trustee's liability if bitcoins plummet in value, any trust that will hold bitcoins should opt out, to the greatest extent possible under the governing law, of any prudent investor standard or any fiduciary obligation to diversify trust assets. The trust agreement should also include comprehensive indemnification provisions for the trustee (although this will be of little use if the trust's assets are entirely wiped out in a major price plunge). In addition, it's advisable to include a provision specifically authorizing the trustees to hold bitcoins, even to the exclusion of all other assets, along with an acknowledgment by the grantor that this authorization is given with full awareness of the speculative nature of bitcoins.

If a trust holds bitcoins directly, there's also the risk of theft or the loss of the private keys associated with the trust's bitcoin addresses.

To minimize the possibility of theft, the trustee should be familiar with how bitcoin transactions work and the importance of keeping the trust's private keys confidential. The trustees should take steps to keep the private keys secure and should research the different wallet options available. If a paper wallet is used, it should be kept in a safe or other secure location controlled by the trustee.[3] While keeping multiple copies of a paper wallet increases the likelihood of theft, it may be advisable to avoid the possible loss of a single hard copy of the private keys due to fire, natural disaster or shoddy record keeping.

There's also the risk that the trustee will simply transfer the bitcoins to herself, and then claim that the bitcoins were stolen. Because bitcoin addresses are anonymous, there would be no immediate way to determine whether the bitcoins had been taken by the trustee or by some third party.

Given these concerns, the grantor must give great consideration as to who will act as trustee of the trust. At present, it may be difficult to find any bank or trust company that's willing to take on the liability associated with funding a trust with bitcoins. Likewise, it may be difficult to find any attorney or law firm that's willing to take on the responsibility of holding backup copies of private keys. So, the grantor will likely need to place great faith in one or more individual trustees.

Appointing multiple trustees can minimize the risk of the inadvertent loss of bitcoins, if each trustee retains separate access to the trust's wallet. That way, if one trustee dies or becomes incapacitated, there will still be a remaining trustee with access to the trust's private keys. If a sole trustee is to act, she should make

certain that the designated successor trustee, or some other trusted individual, knows where the wallet is located and how to access it in the event of the trustee's death.

The Bitcoin system also allows "multi-signature" transactions, meaning a single address can require multiple private keys to authorize a bitcoin transfer. Using multi-signature transactions would allow, for instance, a grantor to require any two of three private keys to be applied to authorize a transaction. If those three keys were distributed to three trustees, the trustees would de facto need to operate by majority to effect transactions (minimizing the risk of theft by the trustees), and there would be no total loss in the event one key was mislaid.[4] The possibility of theft by an outside party would also be reduced, because any thief would need to steal private keys from multiple trustees (who may each hold their key in a different form of wallet).

While multi-signature transactions aren't yet prevalent, they'll likely become more common as Bitcoin evolves. Likewise, an increasing number of online wallet providers likely offer a multi-signature security protocol.

Determining Bitcoin Value

Because the Notice concludes that bitcoins are property rather than currency, any gifted bitcoins are valued at the price at which the bitcoins would change hands between a willing buyer and willing seller as of the date of the gift, as provided in Treasury Regulations Section 25.2512-1. Publicly traded stocks and bonds are probably the closest analog to bitcoins under the property valuation rules, because each derives its value by reference to an exchange. Under Treas. Regs. Section 25.2512-2, gifts of stocks and bonds that are traded on a public exchange are valued at the mean between the highest and lowest selling prices on the date of the gift. If the stocks or bonds are listed on more than one exchange, then the value of the exchange where they're principally dealt should be used. If no records are available for any such principal exchange, the value can be based on the public records of a composite listing of combined exchanges.

Anyone who wishes to may create a bitcoin exchange, without needing the consent of any central Bitcoin authority. So, there's no single or principal exchange that sets value. Accordingly, the best approach is likely to take a weighted average of the mean between the highest and lowest bitcoin prices on a variety of the most popular exchanges.

The trick is in selecting which exchanges to include in the reference group and how many to use. That decision will change from day to day, as exchanges wax and wane in reputation and popularity. For instance, up until its ignoble demise, Mt. Gox was one of the largest and most successful exchanges. The safest option is probably to take into consideration only those exchanges that trade bitcoins for U.S. dollars and have the highest trading volume on the day of transfer.

In looking at prices across varying exchanges, one may note that the prices offered by ▮▮▮▮ are higher than the others. This discrepancy exists because that site connects individuals who want to conduct a one-on-one transfer of bitcoins for dollars outside of the auspices of an exchange, such as by a face-to-face meeting between buyer and seller (so, in many ways, it operates more like a brokerage service than an exchange). The average sell prices on ▮▮▮▮ tend to be higher than on other exchanges, possibly due to the increased value to the participants of conducting a cash transaction without the necessity of involving any bank, exchange or other financial institution. Given the safety and logistical concerns of arranging a one-on-one transfer for the large sums with which a trust will likely be funded, it may be reasonable to eliminate ▮▮▮▮ from the list of referenced exchanges.

A gift of property will only be adequately disclosed for federal gift tax purposes if it meets the requirements of Treas. Regs. Section 301.6501(c)-1(f), which requires the grantor's federal gift tax return to include either: (1) a detailed description of the method used to determine the fair market value (FMV) of the transferred property, or (2) an appraisal prepared by a qualified appraiser. If the gift is adequately disclosed, then the filing of the return commences the statute of limitations period during which the IRS can object to the valuation of the transferred bitcoins.

Given that there are public exchanges where bitcoins can be converted into cash at an ascertainable and recorded value, it's not obvious that any particular valuation discount should apply when valuing gifted bitcoins (except, conceivably, a blockage discount in the case of a gift of a massive number of bitcoins).

A qualified appraisal, then, will likely rely on the same procedure discussed above, namely taking a weighted average of the mean daily value of a variety of reputable bitcoin exchanges. The focus of the appraisal might be a rationale for analogizing bitcoins to stock and bonds for

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valuation purposes and then a justification of which (and how many) exchanges were selected as the sample group.

Absent the prospect of a valuation discount, there may be no need to incur the expense of a qualified appraisal, because the client can simply provide a detailed description of the gifted bitcoins under Treas. Regs. Section 301.6501(c)-1(f)(2)(iv), setting forth the method used to determine FMV. That description should list which exchanges were referenced, give their high and low values on the day of the transfer and provide a brief description of why those exchanges were selected.

For example, on April 2, 2014, the date of transfer of the 10 bitcoins described above, here are the relevant values in U.S. dollars of one bitcoin, as per the three largest exchanges by volume:

Exchange	High	Low	Mean
Bitstamp	$494.98	$430.00	$462.49
Bitfinex	$496.20	$431.20	$463.70
BTC-e	$498.70	$420.00	$459.35
			$461.85

While many bitcoin exchanges provide copious charts and data on historic prices, others don't. And, it may be that the historic prices aren't presented in a manner that makes it easy to determine the day's high and low prices. There are numerous third-party sites that collate the pricing data of various exchanges in a searchable format, but often one will have no idea who runs these sites or how accurate they are. For instance, we obtained the information above from ████████, for which we did no due diligence whatsoever. There are several sites that provide an updated bitcoin exchange rate by reference to multiple exchanges (such as ██████ or ███████), but their methodology should be investigated with care to see how it comports with the property valuation rules discussed earlier.

Given the lack of any rulings or cases discussing best practices for bitcoin valuation in the gift tax context, a client may wish to fund a trust with bitcoins via a defined value gift agreement. In the event that the value of the transferred bitcoins is adjusted on audit (for instance, if the IRS disagrees with the client's or the appraiser's selection of relevant exchanges), the agreement could provide that any bitcoins transferred in excess of the intended value will be paid to a designated party (for instance, the grantor) rather than retained by the donee trust.

Determining Bitcoin Basis

As per the Notice, an owner has a basis in her bitcoins, similar to any other property. Because gifted bitcoins will carry over the grantor's basis, it's important that the grantor provide a statement to the trustee of what that basis is and how it was calculated. Otherwise, it may be impossible for the trust to prove its basis on any future disposition, and the IRS may argue that a zero basis should apply.

Calculating basis is easy if the grantor originally purchased the bitcoins in a handful of transactions and has held them as a long-term investment. In that case, the grantor should provide the trustee with the relevant transaction IDs by which the bitcoins were originally purchased, along with a statement of what price she paid in dollars. If the grantor obtained the transferred bitcoins in a large number of transactions or by mining them, it will prove more difficult to calculate the relevant basis.

At present, the federal government has little ability to track each individual's bitcoin transactions. As such, any bitcoins reported on a gift tax return may be of particular interest to the IRS, because it's one of their few opportunities to receive detailed basis information. For that reason, it's imperative to be accurate when reporting the grantor's basis on Form 709.

Final Thoughts

Whether Bitcoin, in particular, flourishes in the long run, virtual currencies seem poised to become a permanent part of the financial landscape. Eventually, there will no doubt be rulings, regulations and additions to the Internal Revenue Code that provide clear guidance on how such currencies are to be treated in the context of estate-planning transactions.

Endnotes

1. Available online at www.irs.gov/pub/irs-drop/n-14-21.pdf.

2. More accurately, transactions are pseudonymous. If a third party is able to connect your name to your address, they'll be able to see all of your transactions related to that address, which may lead them to other addresses under your control.

3. While a safety deposit box may seem like a good solution, many banks won't allow one to be held in the name of a trust.

4. Multi-signatures also allow for escrow transactions, in which a third-party escrow agent can authorize the completion or cancellation of a bitcoin transaction between buyer and seller, depending on whether the purchased asset is delivered as promised.