**Halachot of** **itcoin**: Dinnei Mammonot in a Cryptocurrency World

# Kiddushei Kessef

*Does the halacha recognize something like bitcoin as worth anything? If we look at it from the perspective of kiddushei kessef, we can see that it might. The halacha is that if you try to be mekadesh a woman by saying “I am mekadesh you with the money I’ll get from a debt that someone owes me”, even if you do it in front of 3 people, it’s a machloket if it works. The mefarshim explain that according to the opinion that it does not work, it’s because the woman is not sure that you won’t cancel the loan at some point. Even if she says she wants it anyway, we don’t listen to her.*

*What if you try to be mekadesh a woman with Bitcoin? If we assume that what she’s interested in is the cash that she could sell it for, then can she be sure that she will be able to sell it at all? The answer seems to be yes, as many people have sold bitcoin successfully (myself included).*

**שולחן ערוך אבן העזר הלכות קידושין סימן כח סעיף ח**

**ח** אמר לה: התקדשי בשטר חוב, ונתנו לה, שמין הנייר, אם יש בו שוה פרוטה, מקודשת. ואם לאו, הרי היא ספק מקודשת.

**יג** היה לו חוב ביד אחרים, ואמר לה: הרי את מקודשת לי בחוב שיש לי ביד זה, במעמד שלשתן, הרי זו מקודשת, וי"א שאינה מקודשת. אבל אם לא אמר לה במעמד שלשתן, אפי' היא מלוה בשטר והקנה לה השטר כראוי בכתיבה ובמסירה, אינה מקודשת אלא בספק.

**בית שמואל סימן כח ס"ק לו**

לו וי"א שאינה מקודשת - הטעם דהיא לא סמכה דעתה שמא ימחול וס"ל דיכול למחול ומשמע אפילו אם אמרה דסמכה דעתה לא מהני ועיין בח"ה סי' ס"ו ובסי' קכ"ו שם פסק דא"י למחול וכאן לענין איסור חיישינן לדעת הפוסקים דס"ל דיכול למחול:

**חלקת מחוקק סימן כח ס"ק כב**

(כב) וי"א שאינה מקודשת - אע"ג דבח"ה בסי' ס"ו סעיף כ"ט פסק דבמעמד ג' אינו יכול למחול הכא משום חומרא דקדושין יש לחוש לדעת האומר דאף במעמד ג' יכול למחול ולא סמכא דעת האשה וע"כ אינה מקודשת

*What about the fact that the price fluctuates? At a wedding, the groom uses a plain ring without a precious stone, because the woman may not be able to evaluate the real price of the stone. What about using Bitcoin? In a way, Bitcoin is much better since you can look up the price of Bitcoin at any time. However, Bitcoin’s value fluctuates rapidly, so she doesn’t know what it will be worth in even a day’s time. In the end, this doesn’t matter, as many commodities fluctuate rapidly. As long as she knows the current price, Bitcoin can be used for kiddushin.*

**שולחן ערוך אבן העזר הלכות קידושין סימן לא סעיף ב**

י"א שאם קדשה בדבר שאין בקיאין בשומתן ופעמים טועים בהם הרבה, כגון אבנים טובות ומרגליות וכיוצא בהם, ואמר לה: התקדשי לי באבן זו ששוה נ' זוז, צריך שומא, דלא סמכה דעתה. ויש מי שאומר שאפילו קידש באבן סתם, ולא אמר לה ששוה נ' זוז, צריכה שומא, ולכך נהגו לקדש בטבעת שאין בה אבן.

# Loans and Interest

*If Reuven lent Shimon 10 bitcoins in 2013, what does Shimon give back to Reuven in 2017? The “value” of the Bitcoin (vis-à-vis a dollar/shekel) has risen tremendously. Does Shimon give back 10 bitcoins even though it’s “worth” much more and might constitute ribbit/interest, or does he give back the dollar/shekel value of 10 bitcoins in 2013?*

*The gemara in Bava Metzia 44-45 distinguishes between currencies (פירא) and commodities (טיבעא) with regard to many halachot, including ribbit. When you borrow a currency (like shekel), you pay back the exact amount of the currency – 10 shekel in 2013 is the same as 10 shekel in 2017, and the same as 10 shekel 2027. However, when you borrow a commodity (such as 100 cartons of milk), you pay back the value of the commodity when you borrowed it (the value of 100 cartons of milk in 2017).*

*In the eyes of halacha, the value of a local currency never changes – the cost of goods in a certain country merely goes up and down. If you can buy 12 eggs for 10 shekel on Monday, but you can only buy 6 eggs for 10 shekel on Tuesday, the value of the shekel did not go down, the price of eggs went up.*

**Bava Metzia 44**

It may be proved that it is R. Johanan who holds that it may not be redeemed thus.  For R. Johanan said: A *denar* may not be lent for a *denar* [to be returned].[1](http://halakhah.com/babamezia/babamezia_45.html#45a_1)  Now, which *denar* is meant? Shall we say, a silver *denar* for a silver *denar* [to be repaid]: but is there any view that it does not rank as money even in relation to itself?  Hence it must obviously mean a gold *denar* for a gold *denar*. Now, with whom [does this ruling agree]? If with Beth Hillel — but they maintain that it ranks as coin! Therefore it must surely be in accordance with Beth Shammai, thus proving that it was R. Johanan who held that such redemption is not permissible! — No. In truth, I may assert that R. Johanan ruled that such redemption may be made, but a loan is different. For since the Rabbis treated it as produce in reference to buying and selling,[3](http://halakhah.com/babamezia/babamezia_45.html%22%20%5Cl%20%2245a_3)  as we say that it is that [sc. gold] which appreciates or depreciates,[4](http://halakhah.com/babamezia/babamezia_45.html#45a_4)  it ranks as produce in reference to loans too. This is reasonable too. For when Rabin came,  he said in R. Johanan’s name: Though it was ruled that a *denar* may not be lent for a *denar* [to be repaid], yet the second tithe may be redeemed therewith. This proves it.

*In fact, the Mishna says that you may not borrow a commodity with the intention of paying back with the same commodity (called “se’ah be-se’ah”). This is an issur derabonon because Chazal were concerned that you would make a mistake and pay back with the exact same amount, regardless of the monetary value of the commodity.*

**Bava Metzia 75a**

***MISHNAH***. A MAN MAY NOT SAY TO HIS NEIGHBOUR, 'LEND ME A *KOR* OF WHEAT AND I WILL REPAY YOU AT HARVEST TIME;'[3](http://halakhah.com/babamezia/babamezia_75.html#75a_3)  BUT HE MAY SAY, 'LEND ME UNTIL MY SON COMES, OR UNTIL I FIND THE KEY.'[4](http://halakhah.com/babamezia/babamezia_75.html#75a_4)  HILLEL, HOWEVER, FORBADE [EVEN THIS.] AND THUS HILLEL USED TO SAY: A WOMAN MUST NOT LEND A LOAF TO HER NEIGHBOUR WITHOUT FIRST VALUING IT, LEST WHEAT ADVANCES AND THUS THEY [THE LENDER AND BORROWER] COME TO [TRANSGRESS THE PROHIBITION OF] USURY.

*All of this leads to the question: is Bitcoin a commodity or a currency?*

*The Rema writes in Shulchan Aruch that gold should be considered a currency during his time. This seems to be because it was accepted everywhere. What about Bitcoin?*

*I believe that the proponents of Bitcoin want it to be a currency. They hope for a world where you can pay with Bitcoin in every type of market, and it will be accepted as an international form of currency. When/if that happens, we will have to figure out if it fits the criteria of “currency” according to halacha. For the time being, however, we are nowhere close to that. Most people do not use Bitcoin to purchase their groceries or to pay their employees. They buy Bitcoin so they can sell it on the market (hopefully for a profit). Likewise, at the moment the options for purchasing things with Bitcoin are extremely limited (some forward-thinking websites allow it -* [*https://www.lifewire.com/big-sites-that-accept-bitcoin-payments-3485965*](https://www.lifewire.com/big-sites-that-accept-bitcoin-payments-3485965)*).*

**שולחן ערוך יורה דעה הלכות רבית סימן קסב סעיף א**

 אסור ללוות סאה בסאה, אפילו לא קצב לו זמן לפרעון. וכן כל דבר, חוץ ממטבע כסף היוצא בהוצאה, דשמא יתייקרו ונמצא שנותן לו יותר ממה שהלוהו, אם לא שיעשנו דמים שאם יתייקרו יתן לו אותם הדמים. ואם לא עשהו דמים, ונתייקרו, נותן לו הדמים שהיו שוים בשעת הלוואה, ואם הוזלו נותן לו הסאה שהלוהו. **הגה**: יש מי שכתב דבזמן הזה מטבע של זהב דינו ככסף ולוין זהוב בזהוב, וכן נוהגין להקל ואין למחות בידם, כי יש להם על מי שיסמוכו. (פסקי מהרא"י סי' נ"ד) יש מי שאומר דמותר ללוות ככר לחם בככר לחם, כמטבע של כסף, דמאחר דדבר מועט הוא לא קפדי בני אדם להדדי בזה. (הטור והרבה פוסקים ועב"י). וכן נוהגין להקל.

*One of the criteria of a currency is that it has to be accepted by people and by the government. Almost by definition, Bitcoin is not looking to be accepted by a government. Nevertheless, it seems that if people would use universally use Bitcoin it would become a currency – provided that it was not merely used as an exchange for other currencies.*

**שולחן ערוך חושן משפט הלכות מקח וממכר סימן רג סעיף ח**

מעות הרעות שפסלתן מלכות או מדינה, או דינרים שאין יוצאים באותה מדינה ואין נושאין ונותנין בהם עד שמשנים אותם למטבע אחר, הרי הם כפירות לכל דבר, ונקנין בקנין, ומתחייבין על ידי משיכתן לתת מעות שפסקו, ואם נטלו כנגדן מעות, לא נקנו. **הגה**: וי"א דאלו מעות הרעות שלא נפסלו לגמרי, רק שאינן יוצאין בהוצאה להדיא, נקראו מטלטלין (טור ונ"י פרק הזהב והמגיד פ"ז דמכירה), וכן נראה עיקר.

**שולחן ערוך יורה דעה הלכות רבית סימן קסב סעיף ג**

היה לאותו מין שער בשוק, קבוע וידוע לשניהם, מותר ללוות סאה בסאה. **הגה**: וע"ל סימן קע"ה איזה מקרי שער קבוע. והא דיכול ללוות על שער שבשוק, היינו דהלוה יכול לפרוע לו אימת שירצה, אבל אם התנה שלא יקבל פרעון עד שעת היוקר, אסור. (הרא"ש בתשובתו וסמ"ק וכל בו).

*For the moment at least, the IRS considers Bitcoin to be a commodity. You have to pay capital gains taxes when you sell it for a profit.*

[**https://www.bloomberg.com/news/articles/2014-03-25/bitcoin-is-property-not-currency-in-tax-system-irs-says**](https://www.bloomberg.com/news/articles/2014-03-25/bitcoin-is-property-not-currency-in-tax-system-irs-says)

The U.S. government will treat Bitcoin as property for tax purposes, applying rules it uses to govern stocks and barter transactions, the Internal Revenue Service said in its first substantive ruling on the issue.

**http://businesshalacha.com/en/folder-money-matters/laws-interest**

Yatza hasha’ar: Some authorities suggest that since NIS are readily available on the foreign currency exchange, it should be considered as yatza hasha’ar. However, most disagree, because the exchange rate fluctuates constantly (The Laws of Ribbis, 14:14).

**ברית יהודה כ:ט**



*What if you mine bitcoin on Shabbos? Two issues: 1) Your computer is working for you. 2) You are making money on Shabbos.*

*It would seem that neither is a problem. The process is completely automated, and even more importantly, it works 24/7. You are not specifically trying to mine on Shabbos, you just happen to get lucky then. If you turned your computer on only on Shabbos, that might be an issue.*

https://www.investopedia.com/tech/how-does-bitcoin-mining-work/

In order to earn Bitcoin, you need to meet two conditions. One is a matter of effort, one is a matter of luck.

1) You have to verify ~1MB worth of transactions. This is the easy part.

2) You have to be the *first* miner to arrive at the right answer to a numeric problem. This process is also known as a [proof of work](https://www.investopedia.com/terms/p/proof-work.asp).

# Shabbos Issues

*What about trading Bitcoin on Shabbos? One of the Bitcoin clones, Ethereum, allows you to create a smart-contract, which could theoretically be used to create a contract which causes you to programmatically perform a transaction (buying or selling) specifically on a certain date/time. It would seem that setting this up to happen, even before Shabbos, would be a problem.*

<http://bitcoinist.com/cryptocurrency-goes-kosher-new-bitcoen/>

Viacheslav Semenchuk plans on the Bitcoen adhering to the Torah, thus becoming the world’s first kosher cryptocurrency. This adherence to faith will take several forms. The first is that ten percent of the currency’s earnings will be set aside for the Jewish community in the form of no-interest loans. The second aspect of the cryptocurrency following Jewish law is that trading on the Shabbat (the Jewish Sabbath) will be fully automated since handling money on that day is prohibited.