

## BITCOIN AND BITCOIN FUTURES

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### First question

Are bitcoin holders holding bitcoin ‘for bitcoin’s sake,’ or for dollar’s sake and increasing dollar balances?

### Second question

How are insights into the first question changing?



With upcoming ‘dollar-settled’ bitcoin futures markets to complement already-existing ‘bitcoin-settled’ bitcoin futures markets, greater insight into these questions can be gained.

This note expands on just how that is done.



Chicago Mercantile Exchange (CME) announced that a dollar-settled bitcoin futures contract will be launched sometime in the fourth quarter of 2017. deribit.com already offers bitcoin futures and options already; however, this platform is ‘bitcoin-settled’ meaning dollars ‘cannot be sent’ to trade on deribit.com platform.

Since only bitcoin can be sent to platforms like deribit.com, this means that participants’ counting is implicitly done against bitcoin \*. Should such participants no longer wish to count against bitcoin, then their willingness to carry bitcoin disappears. Participants would only take bitcoin out of deribit.com if they needed dollars for bitcoin, which cannot be done with deribit.com

Since only dollars can be sent to CME, this means that participants’ accounting is done against dollars. Should participants no longer wish to account against dollars, then their willingness to carry dollars disappears. Participants would only take dollars out of CME if they needed bitcoin for dollars, which cannot be done with CME.

Interplay in bases between such differing-but-similar exchanges will give clues about how insights to the original question are evolving and this note shows how that is.

### Preliminaries

A *spot price* of bitcoin means quotation of bitcoin against United States dollars, with delivery or receipt of bitcoins within X days of trade. *Price* consists of a bid and offer.

A *futures price* of bitcoin means quotation of bitcoin against United States dollars, with delivery or receipt of bitcoins at the end of some month in a series of months. *Futures price* consists of a bid and offer just as with *price*.

<p><u>A. <b>Wishing to speculate with BITCOIN</b> on bitcoin falling in exchange against dollars</u></p>	<p><u>B. <b>Wishing to speculate with BITCOIN</b> on bitcoin rising in exchange against dollars</u></p>	<p><u>C. <b>Wishing to speculate with DOLLARS</b> on bitcoin falling in exchange against dollars</u></p>	<p><u>D. <b>Wishing to speculate with DOLLARS</b> on bitcoin rising in exchange against dollars</u></p>
<p>Speculating on bitcoin falling in exchange against dollars: this will certainly happen within some timeframe, eg over two months but one from the present, if it were to happen at all and to profit from that speculation means not only ‘exchanging bitcoins now for dollars and reversing that later’ but also having <i>constant</i> exposure to such speculation in order to profit from it.</p>	<p>Speculating on bitcoin rising in exchange against dollars: this will certainly happen within some timeframe, eg over two months but one from the present, if it were to happen at all and to profit from that speculation means not only ‘exchanging dollars now for bitcoin and reversing that later’ but also having <i>constant</i> exposure to such speculation in order to profit from it.</p>	<p>Speculating on bitcoin falling in exchange against dollars: this will certainly happen within some timeframe, eg over two months but one from the present, if it were to happen at all and to profit from that speculation means not only ‘exchanging bitcoins now for dollars and reversing that later’ but also having <i>constant</i> exposure to such speculation in order to profit from it.</p>	<p>Speculating on bitcoin rising in exchange against dollars: this will certainly happen within some timeframe, eg over two months but one from the present, if it were to happen at all and to profit from that speculation means not only ‘exchanging dollars now for bitcoin and reversing that later’ but also having <i>constant</i> exposure to such speculation in order to profit from it.</p>
<p>Observation: exchange bitcoin for dollars <i>NOW</i> is <b>POSSIBLE</b> and exchange dollars for bitcoin <i>LATER</i> and always have exposure to this spread. Exposure to bitcoin CO-BASIS required.</p>	<p>Observation: exchange dollars for bitcoin <i>NOW</i> is <b>NOT POSSIBLE</b> and exchange bitcoin for dollars <i>LATER</i> and always have exposure to this spread. Exposure to bitcoin BASIS required.</p>	<p>Observation: exchange bitcoin for dollars <i>NOW</i> is <b>NOT POSSIBLE</b> and exchange dollars for bitcoin <i>LATER</i> and always have exposure to this spread. Exposure to bitcoin CO-BASIS required.</p>	<p>Observation: exchange dollars for bitcoin <i>NOW</i> is <b>POSSIBLE</b> and exchange bitcoin for dollars <i>LATER</i> and always have exposure to this spread. Exposure to bitcoin BASIS required.</p>
<p>nb: having such exposure might not seem worthwhile but having constant exposure to the CO-BASIS is crystallised when <i>closed</i> by exchanging dollars for bitcoin <i>NOW</i> and exchanging bitcoin for dollars <i>LATER</i> or gaining exposure to bitcoin BASIS.</p>	<p>nb: having such exposure might not seem worthwhile but having constant exposure to the BASIS is crystallised when <i>closed</i> by exchanging bitcoin for dollars <i>NOW</i> and exchanging dollars for bitcoin <i>LATER</i> or gaining exposure to bitcoin CO-BASIS.</p>	<p>nb: having such exposure might not seem worthwhile but having constant exposure to the CO-BASIS is crystallised when <i>closed</i> by exchanging dollars for bitcoin <i>NOW</i> and exchanging bitcoin for dollars <i>LATER</i> or gaining exposure to bitcoin BASIS.</p>	<p>nb: having such exposure might not seem worthwhile but having constant exposure to the BASIS is crystallised when <i>closed</i> by exchanging bitcoin for dollars <i>NOW</i> and exchanging dollars for bitcoin <i>LATER</i> or gaining exposure to bitcoin CO-BASIS.</p>

- A & B rely on an exchange like deribit.com, but B itself cannot be executed through deribit.com.
- C & D rely on an exchange like CME, but C itself cannot be executed through CME.
- To be able to execute A, B, C & D in their entirety, should one wish to do that, would require access to *both* deribit.com *and* CME or their equivalents.

What if someone wishes to stop accounting against dollars|bitcoin for bitcoin|dollars – ie no longer wishes to take greater or lesser balances of dollars|bitcoin? Such a wish would certainly be preceded by ‘getting out of dollars|bitcoin for bitcoin|dollars.’

They wouldn’t consider C & D|A & B *in their entirety* where before they did. Such considerations are observed as follows:

- I. 'Getting out of bitcoin for dollars' (viz accounting purposes) with A & B leads to rising | falling CO-BASIS/BASIS (deribit.)
- II. 'Getting out of dollars for bitcoin' (viz accounting purposes) with A & B leads to rising | falling BASIS/CO-BASIS (deribit.)
- III. 'Getting out of dollars for bitcoin' (viz accounting purposes) with C & D leads to rising | falling CO-BASIS/BASIS (CME.)
- IV. 'Getting out of bitcoin for dollars' (viz accounting purposes) with C & D leads to rising | falling BASIS/CO-BASIS (CME.)

'Permanent' flight from dollars to bitcoin

In particular, a 'flight' from dollars to bitcoin (II and III) would be evidenced by rising | falling BASIS/CO-BASIS (deribit) *and* rising CO-BASIS/BASIS (CME.)

'Permanent' flight from bitcoin to dollars

In particular, a 'flight' from bitcoin to dollars (I and IV) would be evidenced by rising | falling CO-BASIS/BASIS (deribit) *and* rising | falling BASIS/CO-BASIS (CME.)

Insights into the first question are observed from changes in the basis/co-basis as calculated through deribit.com and CME. Specifically, a 'flight' from dollars to bitcoin would not be evidenced by bitcoin's dollar quotation (spot or future) soaring but by rising/falling basis/co-basis (deribit.com) and rising/falling co-basis/basis (CME.)

Insights into the second question are observed by monitoring changes in insight into the first question.

Such figures and data will be displayed on a new website [www.cryptocobasis.com](http://www.cryptocobasis.com) that is expected to launch in the first weeks of 2018. Insights will be provided in a (free) monthly newsletter.



\* Those 'counting against dollars | bitcoins' can be viewed as not having an issue with acquiring 'greater or lesser quantities of dollars | bitcoins.'