

## **BitUSD Trading Guide**

Many people have been speculating how the BitUSD price will move relative to USD and are looking for guidance on how to value, price, trade, and speculate relative to BTSX. The purpose of this guide is to explain how the market peg should behave assuming rational market players looking to earn a profit.

All markets are subject to manipulation in the event that someone has a large amount of capital and isn't looking to make a profit with their trades. The larger a market becomes the harder it is to manipulate. Because BitUSD is backed by BTSX, an attack on BitUSD is also an attack on BTSX (and vice versa) so regardless of which side of the market the attacker targets they will end up losing money. Attacks are outside the scope of this guide.

For simplicity, this guide focuses on the BitUSD although the following also applies to other BitAssets. At the core BitUSD always trades at a price near market consensus on what the will be in the future. This is based on the fundamental fact that the only way to exit a BitUSD position is via a voluntary trade at future market prices.

The BitUSD has been seeded with the consensus that the value of one BitUSD should be equal to the value of one US Dollar. Therefore, unless something happens to change this consensus the most profitable trade to make is to buy BitUSD when it is under 1 USD and sell BitUSD when it is over 1 USD. If you trade against this then you are predicting others will do the same and as far as we know there is no rationale for any other price.

However, this basic advice only applies for one type of trader: those that provide BitUSD liquidity for a small fee. There are other types of traders in the market and I would like to address how each of them will affect the BitUSD price.

### **BTSX Bulls**

Those that are bullish on BTSX will want to short BitUSD on the assumption that they will be able to buy it back cheaper in the future. For these individuals it may make sense to short BitUSD even if it is slightly below the value of one dollar because they expect the dollar to fall against BTSX and thus make a profit. In this case, Bulls shorting below USD parity are creating a buying opportunity for those who want to get dollars cheaper. This is the moral equivalent of shorts (bulls) paying longs (bears) a premium (or interest) so they can take out a short position.

### **BTSX Bears**

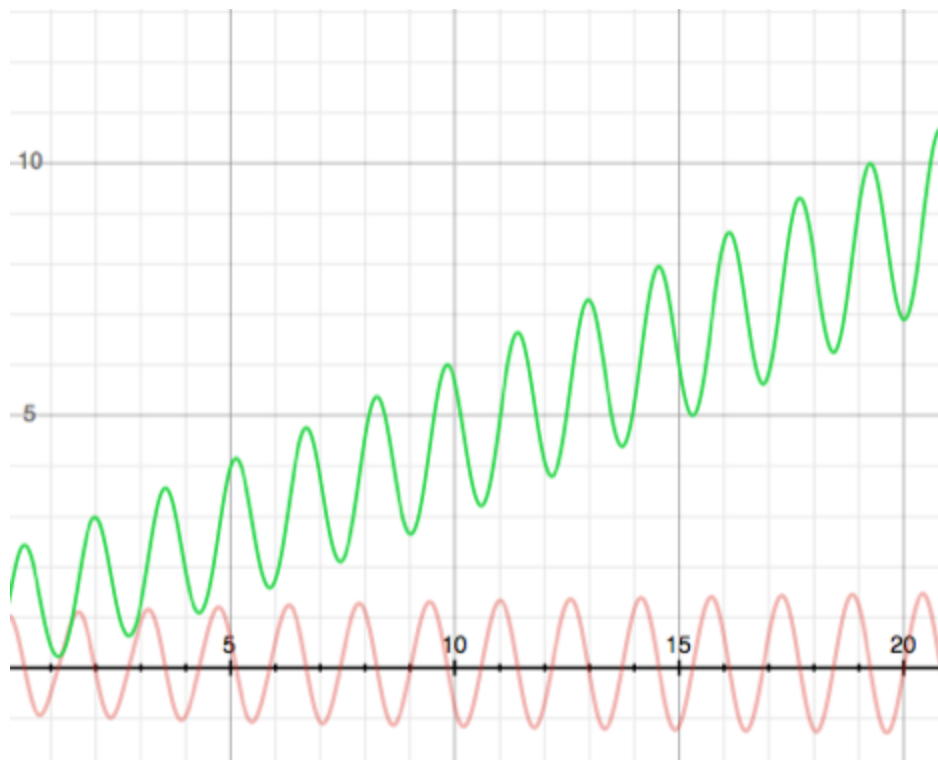
These are the people that believe the BTSX is overvalued relative to the Dollar and expect the value of the dollar to rise. Perhaps they think BTSX is in a bubble. Bears will buy BitUSD above the market peg and pay interest to those shorting in order to gain price stability insurance.

## Market Makers

These players don't pretend to know which way the market is going to move long-term, instead they only see an imbalance in the short term difference between BitUSD and USD. Market makers know that the BitUSD/USD price will fluctuate based upon changes in the net flow of capital moving from BitUSD to BTSX or from BTSX to BitUSD that temporarily move the peg until more capital is attracted by the price imbalance (aka implied interest).

The existence of ebb and flow of sentiment between the bulls and bears causes the peg to lean one way or the other in during the transition only to stabilize again.

Those who are mathematically inclined can view the expected deviation in BitUSD to USD price to be correlated to the first derivative of the USD/BTSX price graph. Assume the Green Line represents the long-term growth of BTSX vs USD, the RED LINE is the first derivative and fluctuates based upon the direction of the market.



Market makers trade the Red Line while bulls and bears trade the Green Line. Trading the Red Line is only making the assumption that eventually the green line will change directions and thus the profits are much more predictable. It is the competition for these predictable profits that causes the peg to hold very tightly in all market conditions. The larger the market grows and

the more automated bots and liquidity providers enter the market the smaller the deviations in price will become because the “time horizon” on the market direction will shrink substantially.

### **Market Matching Algorithm**

BitShares X uses a non-traditional order matching algorithm. The algorithm chosen always gives the buyer exactly what they ask for instead of traditional order matching which gives the buyer at least what they ask for and sometimes more. Any time the highest bid is greater than the lowest ask - the difference is captured as fees by the network. In the case of BitShares X there is no distinction between buyer and seller because someone buying BTSX with USD is no different than someone buying USD with BTSX. Both sides of the trade get the price they specified rather than using the same price for both parties. The difference is kept as fees for the network.

The reason for this algorithm is to penalize those that would attempt to manipulate the market by walking the book via fees charged proportional to the amount of the book they walk in a single go. This is designed to enforce value-based investing rather than technical trading. This is expected to reduce volatility and liquidity as trading noise is removed from the network. No market participant should be able to complain about getting exactly what they ask for and thus they should only place orders they think are fair.

### **Maximum Price Movement**

The ability to short and the price at which margin calls are executed is limited by a moving average of the price. There is a maximum rate of change on this price equal to 0.09% every 10 seconds. This averages out to about 33% per hour. These price restrictions do not apply to those selling BitUSD for BTSX, only for those looking to short or for margin calls. The purpose of these restrictions is to give the market time to react to potential manipulation attacks.

### **Covering Short Positions**

If you are bullish on BTSX and want to leverage up by going short against BitUSD then you will need to maintain collateral in case you are wrong. You need to lock up some collateral at the time you place your order, but you will also need to maintain enough extra BTSX to buy the USD necessary to cover your order.

**You cannot use your collateral to cover buy the USD to cover your position.**

Therefore the BTSX required to short is 1x to create the position and 1x+ held as reserve to allow you to cover without being called.

You do not get any collateral back until the position is fully covered. If you partially cover your short position then the remaining BitUSD will be very well collateralized.

### **Margin Calls**

Your short position will automatically be covered any time the highest bid is below the call price (and above 2/3 the moving average). The call price is the price at which 75% of your collateral is required to buy back the USD owed. When your position is called your collateral will be used to buy BitUSD and if there is any collateral remaining after the short position is fully covered then 95% will be returned to the short, the remaining 5% will be kept by the network as fees.

### **Increasing your Margin**

Long-term traders may want to avoid a margin call because of a short-term price fluctuation. These individuals can most easily increase their margin by partially covering their position.