

## Autonomous SmartCoin Liquidity Funded by Dilution

### How It Works:

1. Bitshares autonomously prints BTS specifically for the purpose of funding liquidity operations.
2. Bitshares shorts every committee-issued SmartCoin, and puts them up for sale at an arbitrary percentage over the price feed.
3. The percentage the SmartCoins are sold over the price feed, the amount of liquidity provided for each SmartCoin market and the amount of collateral should be determined by the committee (and thus can be adjusted whenever the community deems it is necessary.)
4. Proceeds from the sales can be burned, or they can be used to resupply the liquidity pools for each SmartCoin... it does not matter.
5. If the liquidity pool for any certain SmartCoin is running low, Bitshares can autonomously print more BTS and short the SmartCoin, so that the amount of liquidity provided (which is again set by the committee) is maintained.
  - a. Note: This step would only be necessary if the committee adds more SmartCoins (such as bitAPPLE, bitGOOGLE, etc.) to the DEX. (see How It Works #7)
6. Instant liquidity is observed across all SmartCoin markets, effectively bootstrapping DEX liquidity and fixing one of Bitshares' most glaring problems.
7. Considering the autonomous liquidity is provided at an arbitrary amount above the peg, Bitshares will make a profit each time these liquidity operations are utilized. Thus, the amount of funds available for these liquidity operations will grow in time without the need for any dilution. This profit can be used to provide more liquidity, or it can be burned.
8. As "natural liquidity" (liquidity provided by actual users) grows, the committee can lower the amount of liquidity provided autonomously. Effectively, this proposal works as training wheels on a bicycle. As soon as the DEX has sufficient "natural liquidity", all autonomous liquidity operations can cease and the BTS/SmartCoins that were printed can be burned.
  - a. Autonomous liquidity operations can be ceased on a market-by-market basis, as inherently some markets will be dynamically more liquid than others.

### Pros:

1. Liquidity for SmartCoins traded on the DEX, which is arguably the biggest issue that Bitshares faces, would instantly be available as soon as this proposal is programed and implemented.
  - a. Liquidity is one of the things that Bitshares' competitors (FIAT-pegged cryptocurrencies) do better. Nubits, Tether, etc. have a ludicrously larger amount of liquidity than our bitFIAT SmartCoins. This proposal levels the playing field in regards to liquidity.
    - i. Furthermore, the autonomous liquidity operations as I propose them would work on all SmartCoin markets so we would have a competitive advantage of many different liquid assets (bitOIL, bitAPPLE, bitNASDAQ, etc.)
  - b. There are other projects that are (or have) implemented a decentralized exchange (B&C Exchange, Elephant, InstantDEX, Lykke, etc.) As evidenced by centralized exchanges' volumes, users largely tend to trade on the exchanges that have the greatest volume and liquidity. This proposal would cement Bitshares' stranglehold on the DEX market as users would flock to the DEX with the most liquidity.
  - c. Many Bitshares' users would like to user other more obscure SmartCoins like bitOIL, bitNASDAQ, etc. However, the DEX having low liquidity makes these SmartCoins a non-starter.

- i. I personally want to use our exchange for many different assets but am not willing to pay the huge premium for things like gold, silver, etc... I really want to purchase other commodities such as oil, stocks, and stock indexes but I can't. I know I am not alone because there have been many threads stating the same thing.
- 2. Autonomous liquidity operations are a means to an end. As soon as enough "natural liquidity" is present on the DEX, autonomous liquidity operations can cease and the BTS/SmartCoins burned. This proposal is simply intended to jump start volume and liquidity on the DEX. Eventually, the DEX will be able to stand on its own two feet with "natural liquidity" and autonomous liquidity operations can cease.
  - a. See How It Works #8
- 3. Bitshares' position as far as market capitalization web sites (like coinmarketcap.com) is bolstered, so as to make sure it stays in the spotlight for at least the immediate to near future.
- 4. Nubits' liquidity operations take a lot of cooperation in between a lot of different parties. It takes a small army of people to hold the Nubits market peg. Bitshares has a superior advantage in these regards considering the DEX is located on-chain. Thus, Bitshares' liquidity operations can be made to be almost purely autonomous which will require a much smaller amount of "man power" when it comes to providing liquidity, monitoring liquidity, etc.

**Cons:**

- 1. The community will need to be educated that all dilution is not created equally, and that dilution for autonomous liquidity operations is not equal to dilution to pay individuals for certain services (developing, advertising, etc.)
  - a. The former has no effect on the "effective supply" of BTS because it never makes its way to a sell order on the BTS off ramp markets (BTS/USD, BTS/BTC, Etc.) Thus, the former has no effect on the value of BTS.
  - b. The latter always (at least eventually) has negative effect on the value of BTS, because it always makes its way to a sell order on the BTS off ramps. Whether the individual needs to cover expenses, diversify their pay, or anything else... this kind of dilution can and will make its way to a sell order on the BTS off ramp markets.
  - c. See Myths #1

**Myths:**

- 1. Dilution will lower the value of BTS.
  - a. I understand the word dilution has a very negative connotation. People hear the word dilution and automatically think "that's bad", but I don't think that is always necessarily the case. All dilution is not created equally. The dilution for this feature would not lower the value of the BTS token, as it does not affect the demand. The supply on "paper" increases, but that supply never makes its way into the market. So, no downward pressure is ever applied onto the market from the BTS printed.
    - i. Dilution for the purpose of autonomous liquidity operations will not affect Bitshares' value, because it never makes its way into the "BTS off ramp markets" (BTS/BTC, BTS/USD, etc... any asset that isn't a smart contract on Bitshares). The dilution is always autonomously shorted to create SmartCoins purely for the use of providing liquidity. Thus, there is never any downward pressure on the market. In supply and demand, the supply only affects demand if it makes its way to the "BTS off ramp markets".

- ii. Alternatively, Dilution for developer (or any other type of worker) pay can and will exert negative value force on the “BTS off ramp markets”. Developers need to pay expenses, diversify their holdings, and sell for many other reasons. They should be able to do this freely, because if they can’t then there is no reason for anyone to work for Bitshares’ (if there are extreme limitations attached.) I agree this kind of dilution can (and/or will) negatively affects Bitshares’ value since it almost certainly eventually enters “BTS off ramp markets”.
- 2. Smartcoins will no longer work on free market dynamics.
  - a. A limit should be hardcoded into the Bitshares protocol as to how close to the peg the autonomous liquidity operations can sell at. As long as a sufficient percentage is hardcoded into the protocol, then it will leave enough room for shorts or market makers to come along and “naturally” tighten the peg more so.
  - b. This is why I suggest starting with a wide 5% to 10% peg. This leaves a lot of wiggle room for shorts and market makers to profit. The amount can be adjusted as needed. So, it can start at a 5% peg until the “natural liquidity” reaches a certain point, then it can be relaxed to 6%, then 7%, etc. As the market matures the percentage can increase and the "training wheels" taken off. Eventually, the autonomous liquidity operations will cease altogether once there is a sufficient amount of “natural liquidity”.
    - i. See How It Works #3 and #8 as to how the peg can be adjusted and the definition of “natural liquidity”.
- 3. This seems very risky.
  - a. Everything is done autonomously on a publicly auditable blockchain, so all operations could be monitored by shareholders.
  - b. I don't see it as risky considering we are printing BTS, and we can put as much collateral down as we like. Hell, we could do 100x collateral. The price would have to fall to 1% of what it is now for a margin call. At that time the market cap would be approximately \$90,391.89, or with 1000x collateral the price would have to be 0.1% of what it is now for a margin call. At that time the market cap would be approximately \$9039.19 ... Wouldn't you consider Bitshares to already be in dire straits and on its death bed by that point? If it is in the latter position, then I think it is quite likely that the SmartCoins are no longer backed by a sufficient amount of BTS, and Bitshares could get into this position without ever passing this proposal. This is an inherent risk with SmartCoins (with or without my proposal.)
- 4. What if the funds get margin called?
  - a. Considering we are shorting with printed BTS, we can short with a very high percentage of collateral. Thus, it is unlikely a margin call ever occurs. If one does occur after setting an astronomical amount of collateral, then the BTS value is in the “gutter of the gutter” already and Bitshares is already in dire straits (or likely dead.)