**Status**

* **Dynamic**: In which supply is changing
* **Equilibrium**: In which supply remains static

And unlike current-generation synthetics, the Ampleforth [supply policy](https://www.ampleforth.org/redbook/ampleforth_protocol/) has three states:

* Expansion
* Contraction
* Equilibrium

**Supply Smoothing**

To avoid unnecessary overcorrection, the protocol grades supply changes as though they will distribute evenly over the course of 10 days. For example:

* *if* the exchange rate is 1.5 Amples : 1, the price difference can be offset by increasing each wallet’s balance by 50%.

Grading linearly over 10 days means in this case that the protocol will increase wallet quantities by **+50% / 10** on the first day.

* *if* the exchange rate is 0.5 Amples : 1, this price difference can be offset by decreasing each wallet’s balance by −50%.

Grading linearly over 10 days in this case means that the protocol will update wallet quantities by **−50% / 10** on day zero.

The supply change is recomputed and executed no more than once every 24 hours. **This operation is stateless**, meaning each day the protocol recomputes a supply target based on the latest price difference, and executes *as though* the change will occur evenly over the next 10 days without any memory of the previous day’s supply change.

### Strategy

1. Supply Expansion – If price is **above** target, right before supply is expanded, purchase Ample. Right after supply expansion immediately sell Ample.
2. Supply Contraction – If price is **below** target, right after supply is contracted, purchase Ample. Wait until price increases then sell.

### Risks

### Supply Expansion

### Once Ample is bought, price drops below price threshold, therefor supply does not expand and risk of price reverting to the price target before supply expansion will ruin the chance for arbitrage

### Supply Contraction a.