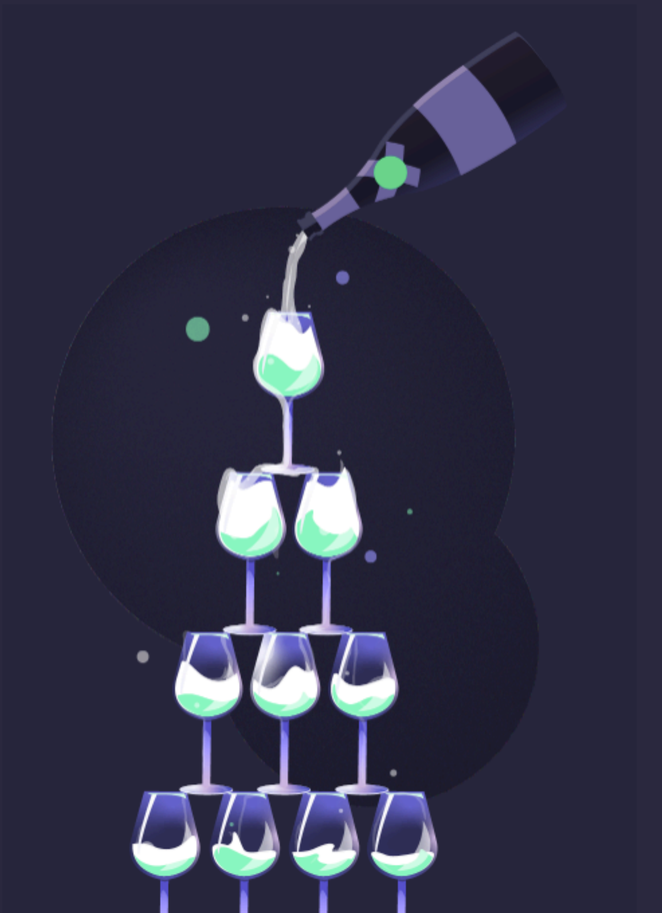
kyber network

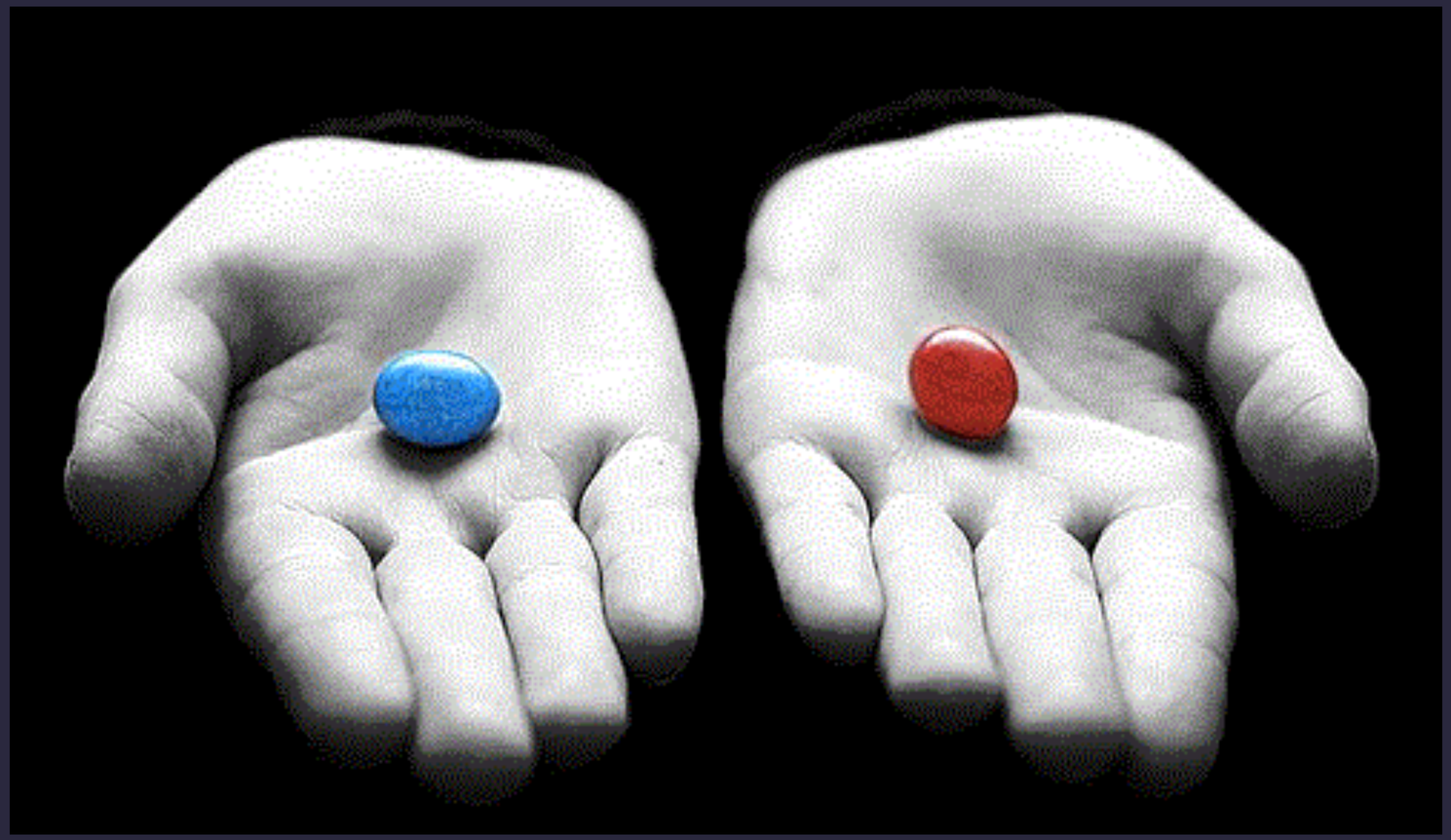
Crypto Structured Fund

Kyber DeFi Virtual Hackathon



#KyberDeFi / pelith.com

A choice for you



ETH price
will rise above
20%*

ETH price
will rise within
1% - 20%*

* Arbitrary value which is determined during contract deployment

ETH price
will rise above
20%

Excess Return

ETH price
will rise within
1% - 20%

Preferred Share

Preferred Share

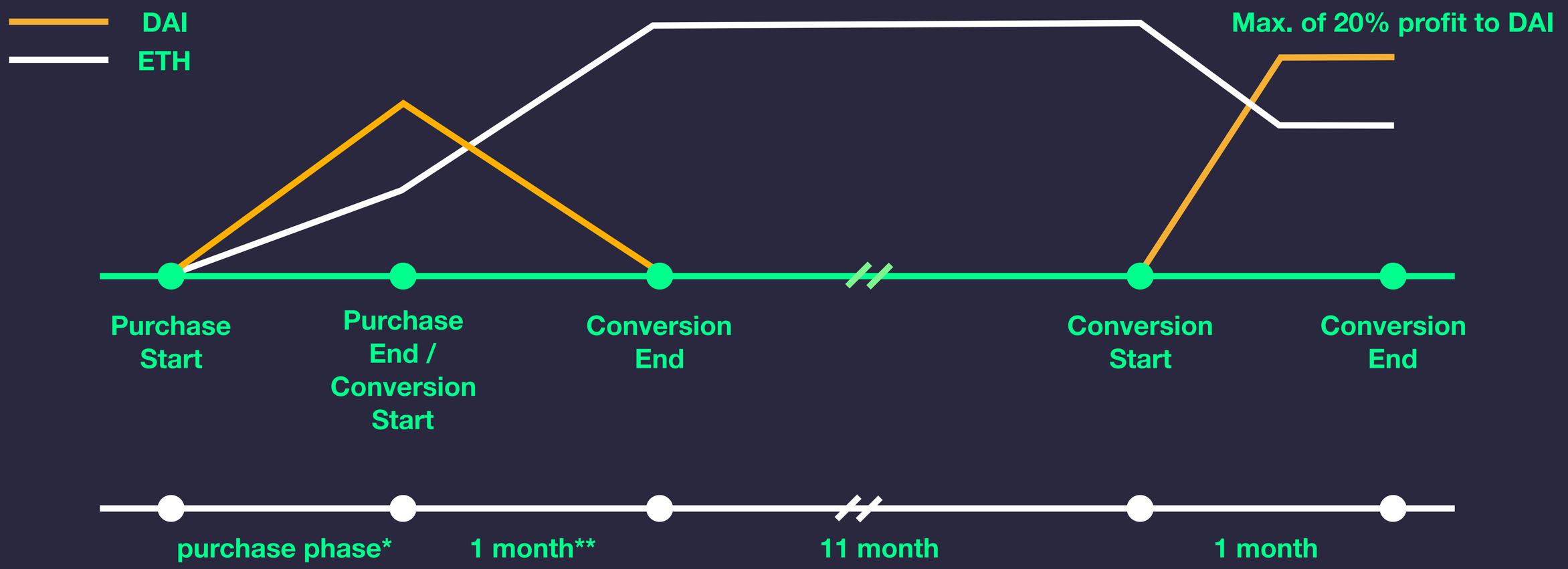
Deposit DAI, except ETH price rise or drop little

Excess Return

Deposit ETH, except ETH price will rise above 20%

How Structured Fund Works?

How Structured Fund Works?



#KyberDeFi / pelith.com

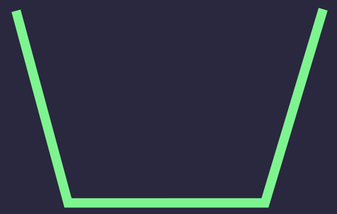
* Purchase phase ends while conversion starts

** Conversion will occur throughout a timeframe, not a certain time

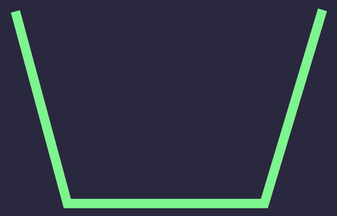
Detail procedures

- Customer choose to deposit DAI or ETH during purchase phase
- Conversion phase initiated. DAI is converted to ETH using KyberNetwork swapTokenToEther function. (Conversion will slowly conduct within a time range to mitigate sudden price change)
- Contract locked. Store ETH and wait for price change
- Redeem phase start, ETH is converted to DAI using KyberNetwork swapEtherToToken, but this conversion will stop when DAI balance >= 120% of the initial DAI investment amount.
- Customer can redeem profit at any time after the whole process

Profit of ETH price rising

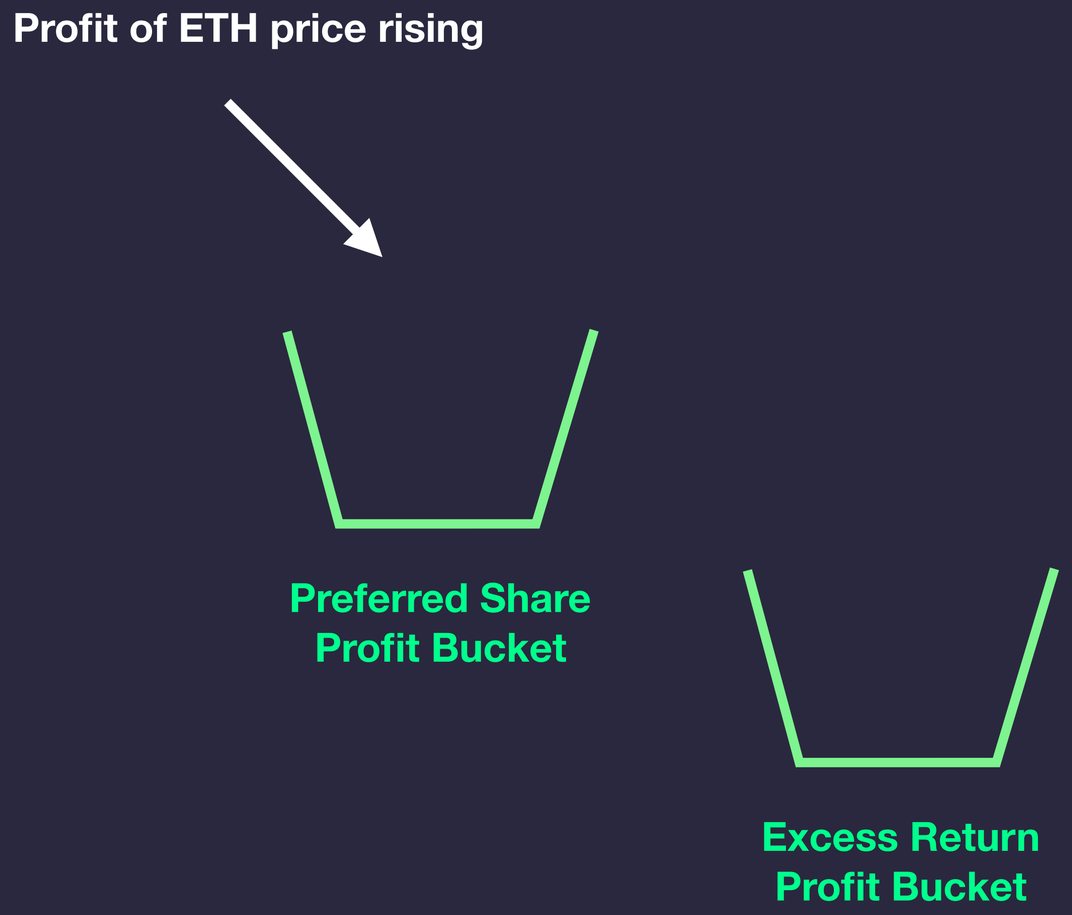


Preferred Share
Profit Bucket



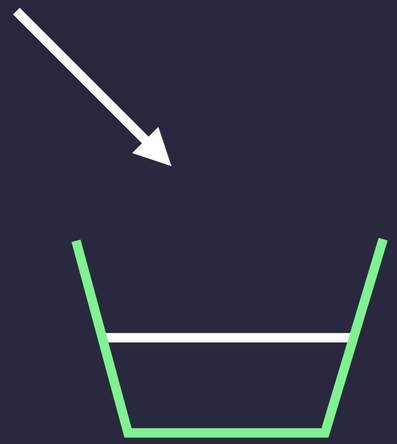
Excess Return
Profit Bucket

Customer who purchase **Preferred Share** will enjoy **priority** to share up to 20% of the profit

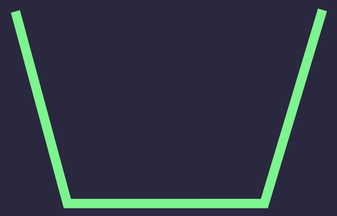


Customer who purchase Preferred Share will enjoy **priority** to share up to 20% of the profit

Profit of ETH price rising

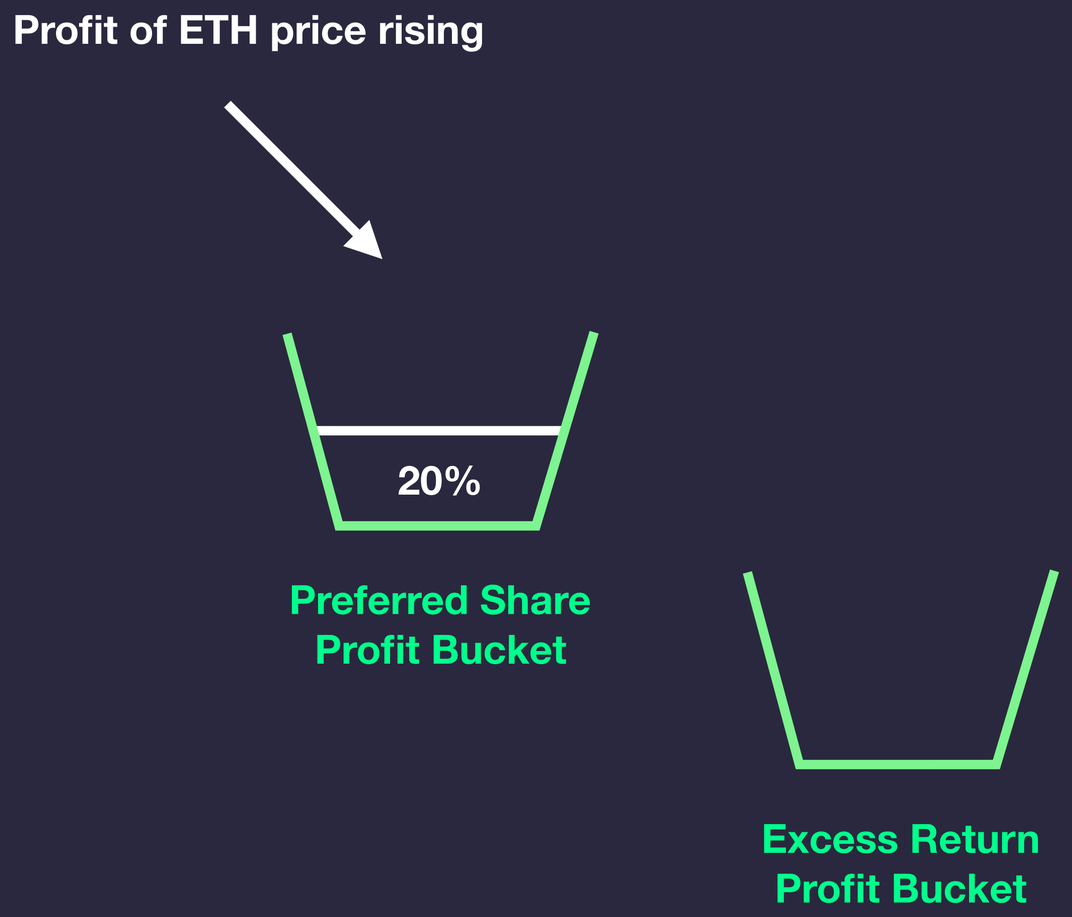


Preferred Share
Profit Bucket

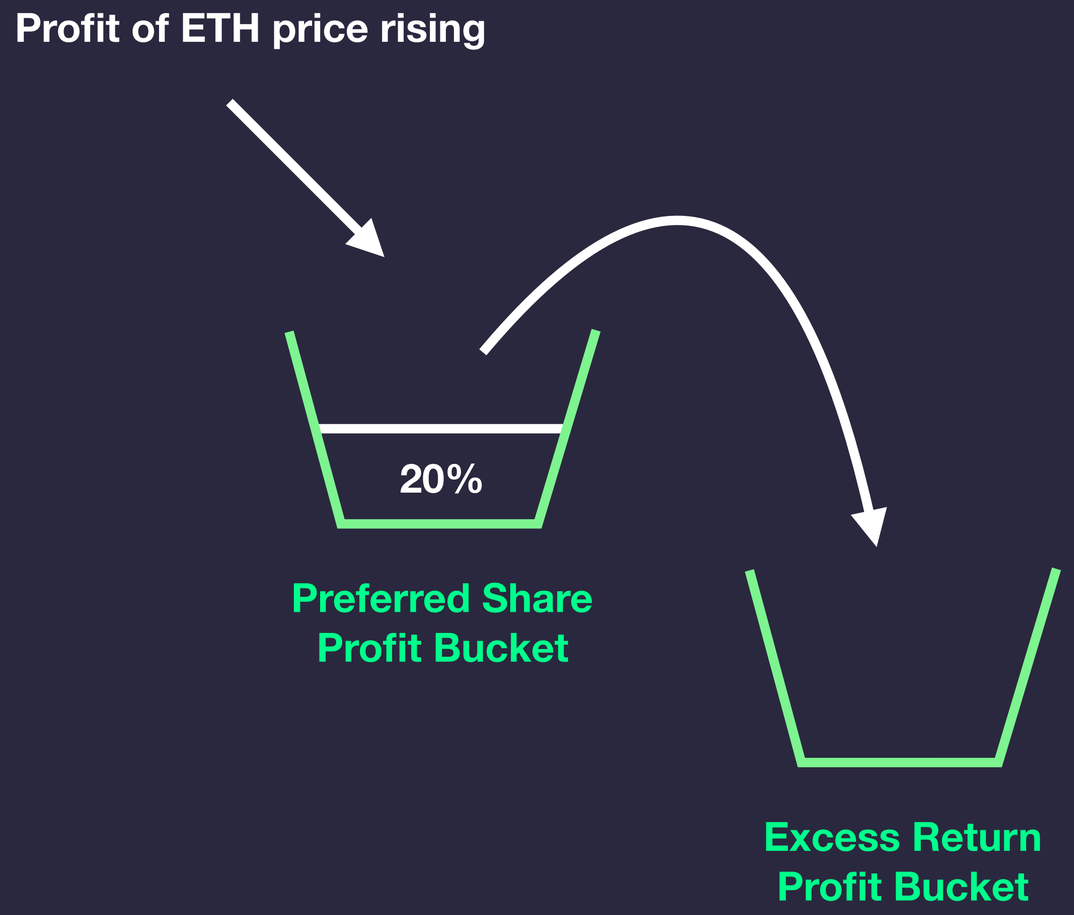


Excess Return
Profit Bucket

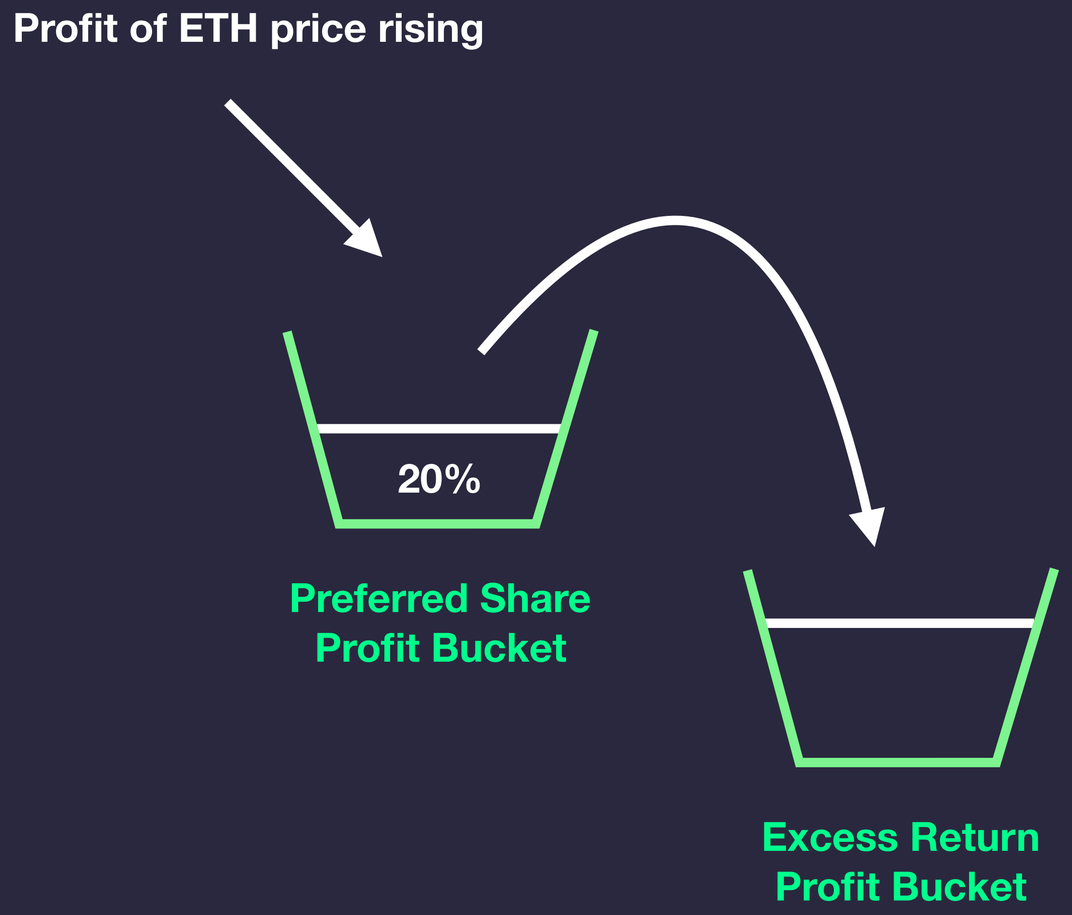
Customer who purchase **Preferred Share** will enjoy **priority** to share up to 20% of the profit



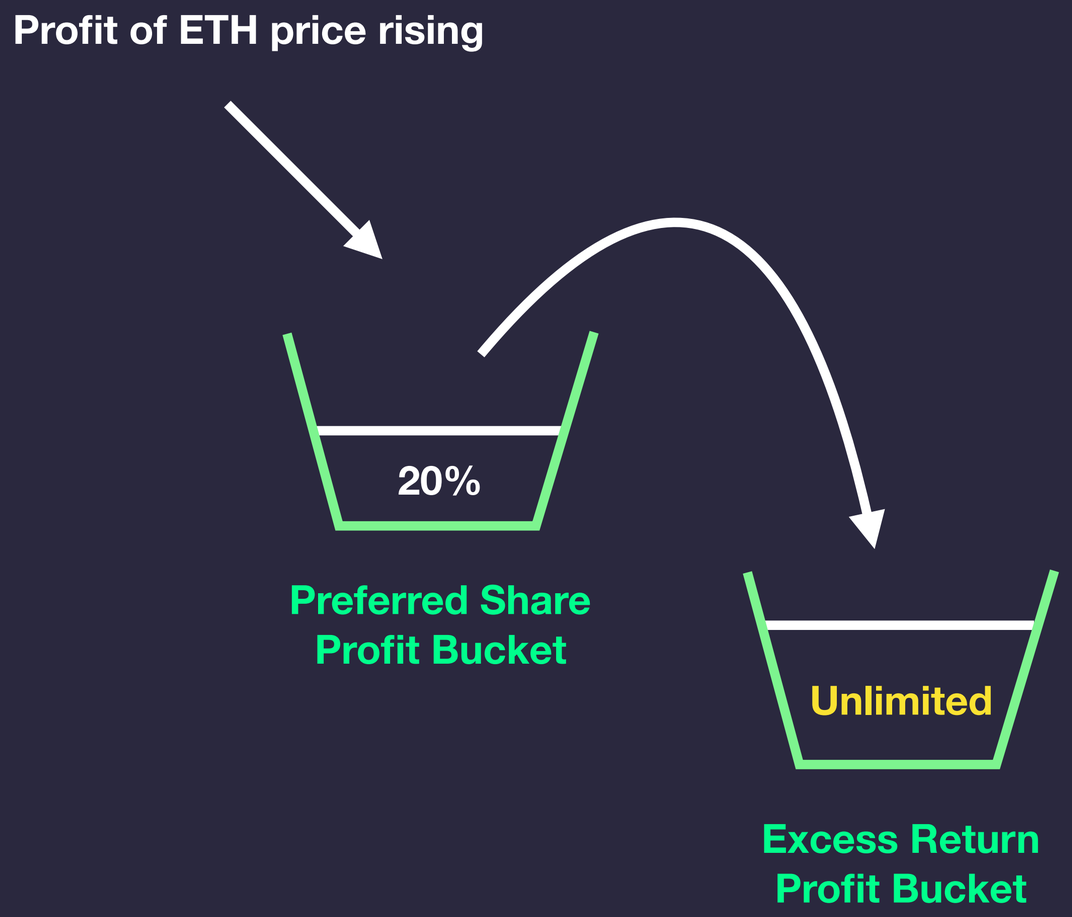
Customer who purchase **Preferred Share** will enjoy **priority** to share up to 20% of the profit



Customer who purchase **Preferred Share** will enjoy **priority** to share up to 20% of the profit



Customer who purchase **Preferred Share** will enjoy **priority** to share up to 20% of the profit



After
Preferred Share
Customer’s profit
is satisfied
Excess Return
customer will
share the rest

Result summary

When contract time ended and conversion is done

	ETH price rise over 20%	**ETH price rise or fall little**	**ETH price collapse**
Preferred Share	Share 20% profit	Share profit up to 20%	Get lower profit or lose principal
Excess Return	Get excess return	Get lower profit or lose principal	Get nothing

No Oracle Needed

Thanks to the deep liquidity pool of Kyber Network,
Crypto Structured Fund requires no on/off-chain price feed.

Comparison

- Prediction Market:
  Create synthetic asset at a given price, essentially a zero-sum game, oracle dependent.

- Lending (Money Market):
  Given a collateral/leverage ratio, determine APR by market force, oracle dependent.

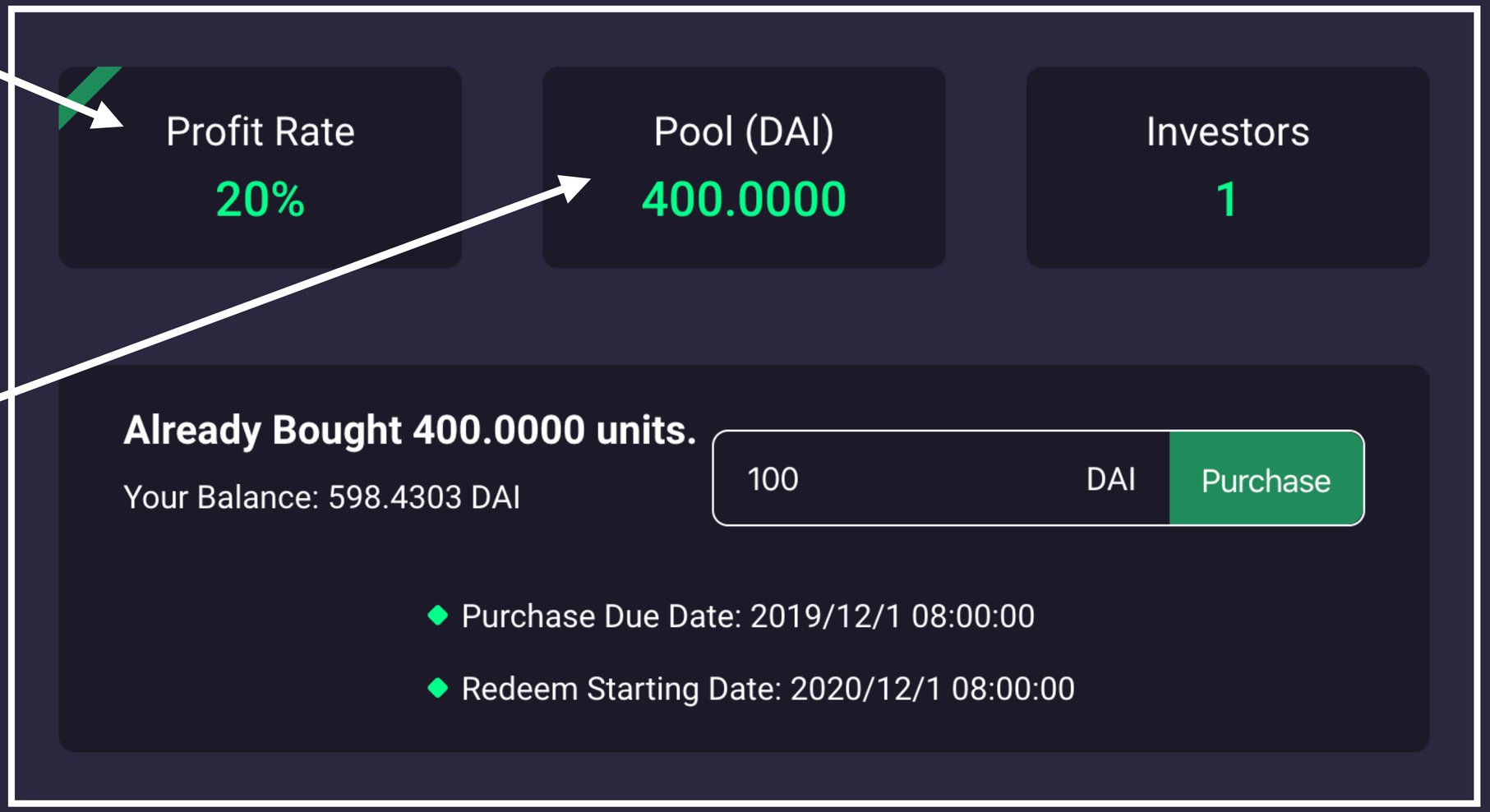
- Structured Fund:
  Given a specific APR, determine leverage ratio by market force, independent of price oracle.

User Interface Walkthrough

Preferred Share

Profit Rate Limit

DAI Amount in the Preferred Share



Preferred Share

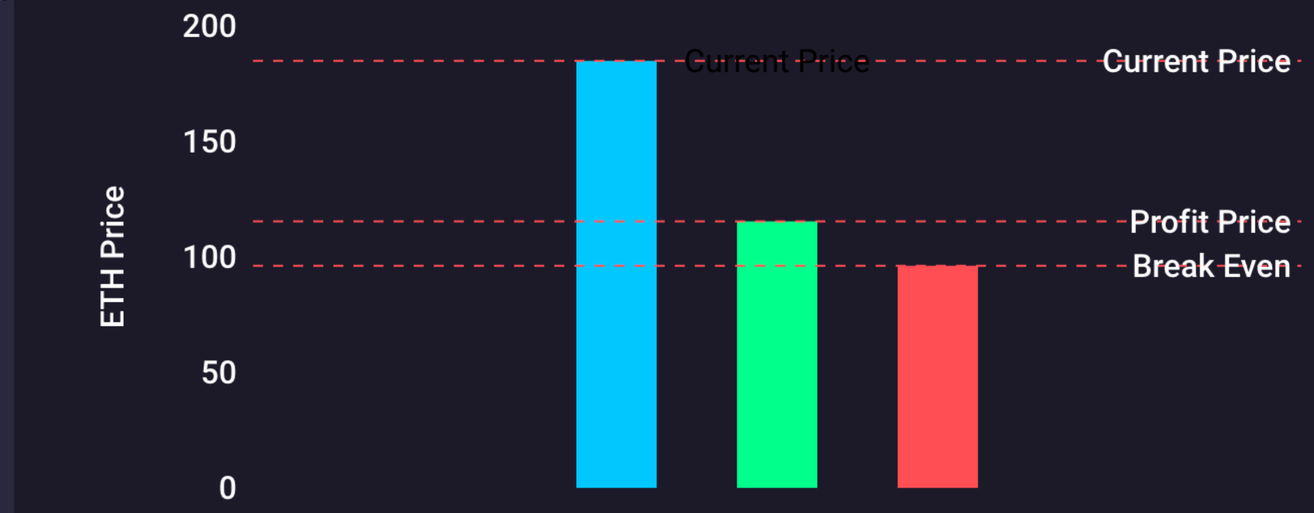
DAI pool * 1.2 / Total pool

DAI pool / Total pool

Estimated Ether Price that you will get...

Unit: USD/ETH

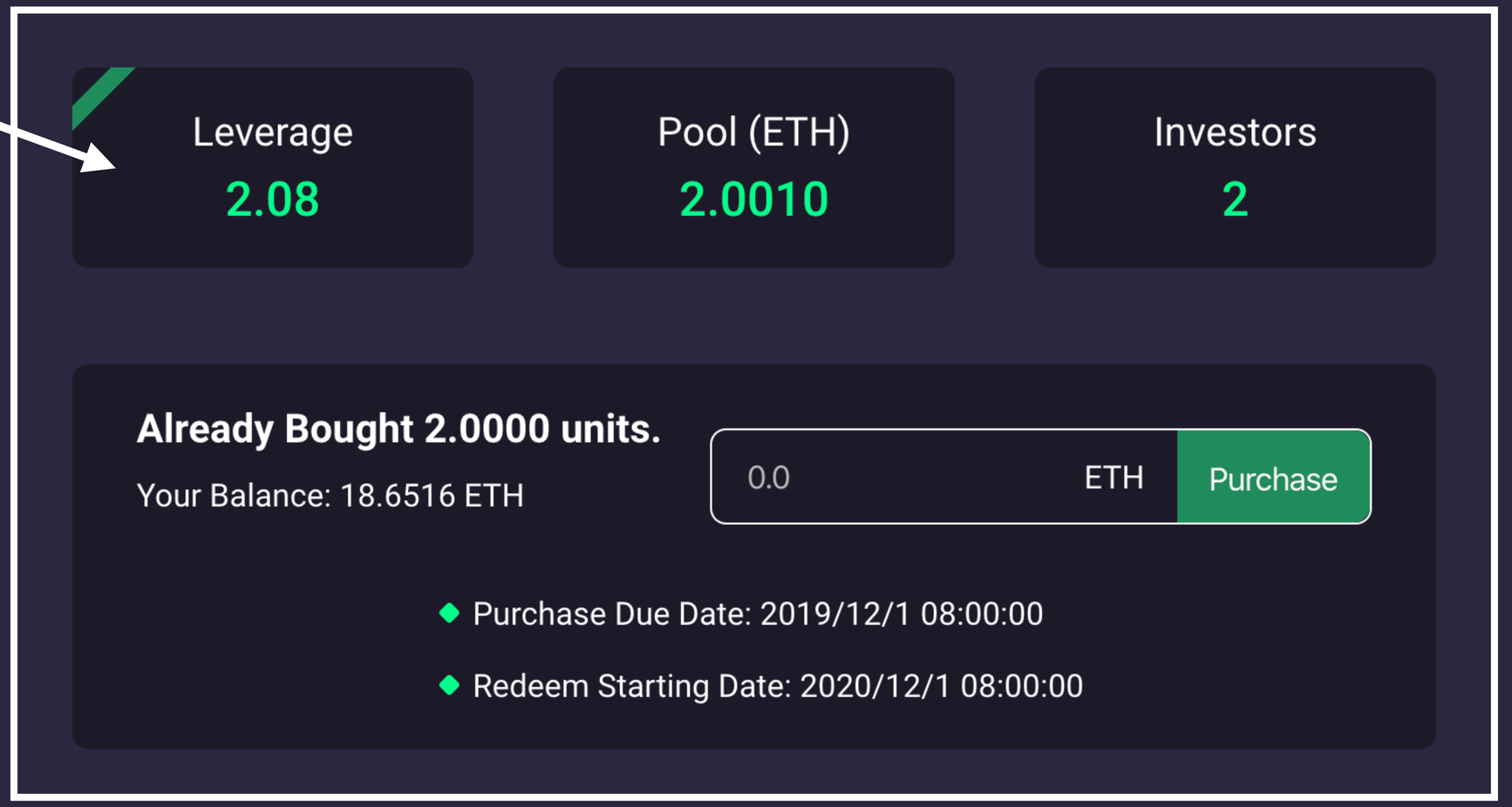
Current Price	Full Profits	Loss
184.87	115.38	96.15



#KyberDeFi / pelith.com

Excess Return

Total pool /
ETH pool



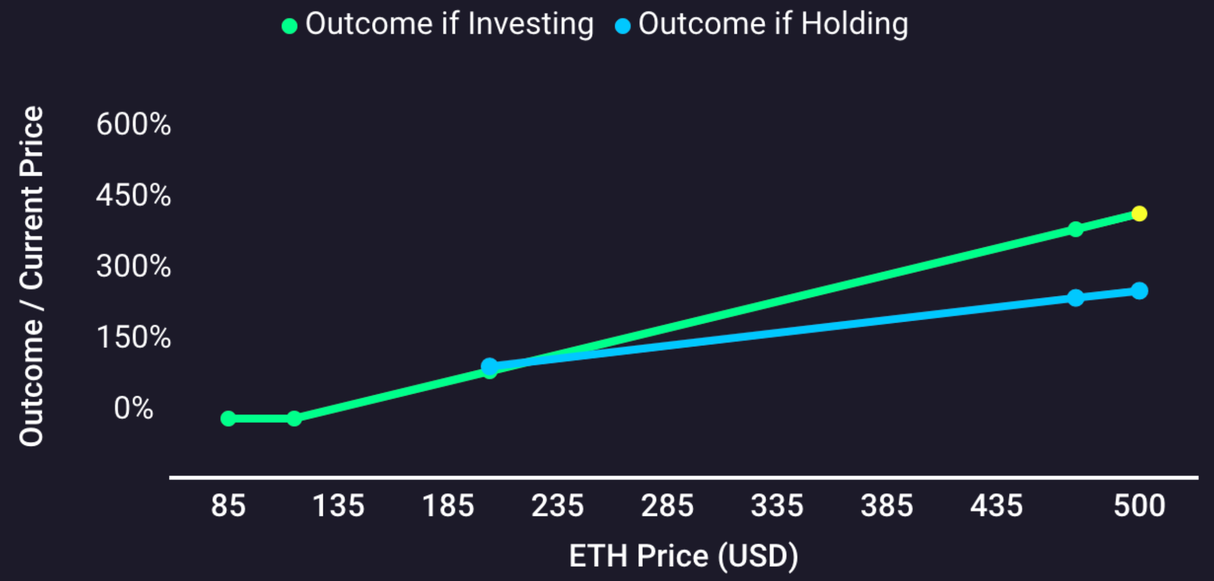
Excess Return

(Total pool * ETH USD price - DAI Pool * 1.2) / ETH pool

Estimated Profits/unit if Ether hits USD 500

Unit: USD/ETH

Outcomes	Profit Rate	Current Price
799.5887	333%	184.87



csf.pelith.com

Source Code:
https://github.com/artistic709/crypto-structured-fund