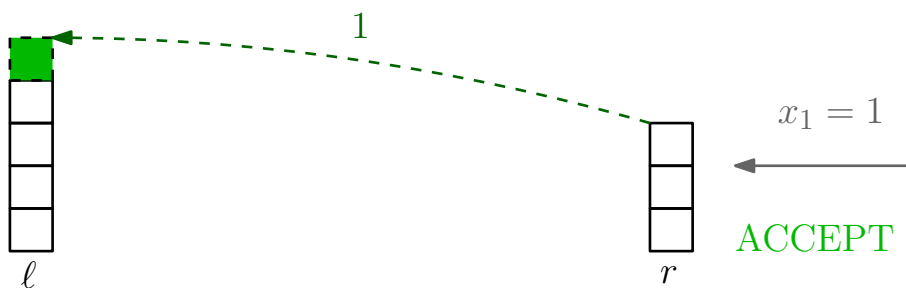


## Accepting a transaction

$$X_4 = \overleftarrow{1}, \overleftarrow{9}, \overrightarrow{6}, \overrightarrow{2}$$



## Rejecting a transaction

$$\text{COST} = Rx_2 + f_2$$

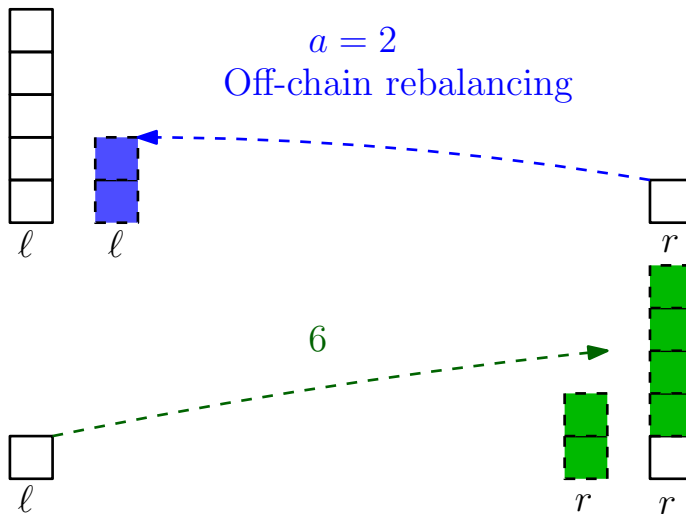


## Off-chain rebalancing

$$x_3 = 6$$

ACCEPT

$$\text{COST} = C(Ra + f_2)$$



## On-chain Recharging

## Blockchain

$$x_4 = 2$$

ACCEPT

$$\text{COST} = \beta(F_\ell + F_r) + f_1$$

