



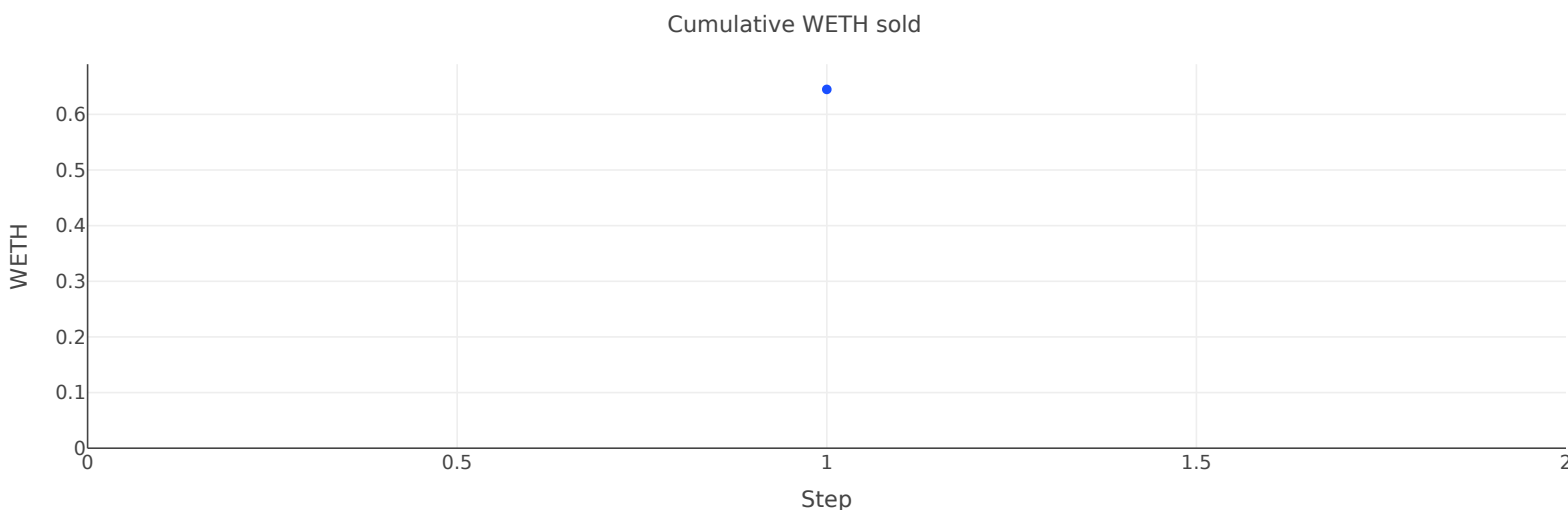
# post-volume-fix-canary

Forked Ethereum mainnet at block **19,000,000**, 2 simulation steps (0.4 minutes of mainnet block time). Seed 0.

RECIPIENTS <b>10</b>	TOTAL SWAPS <b>10</b>	WETH SOLD <b>0.6449</b>	USDC REALIZED <b>1,652.94</b>	AVG EFFECTIVE PRICE <b>2,563.16</b> <small>USDC/WETH</small>	PEAK STEP <b>0.6449</b> <small>WETH sold (step 1)</small>
WALL-CLOCK <b>3.8s</b>					

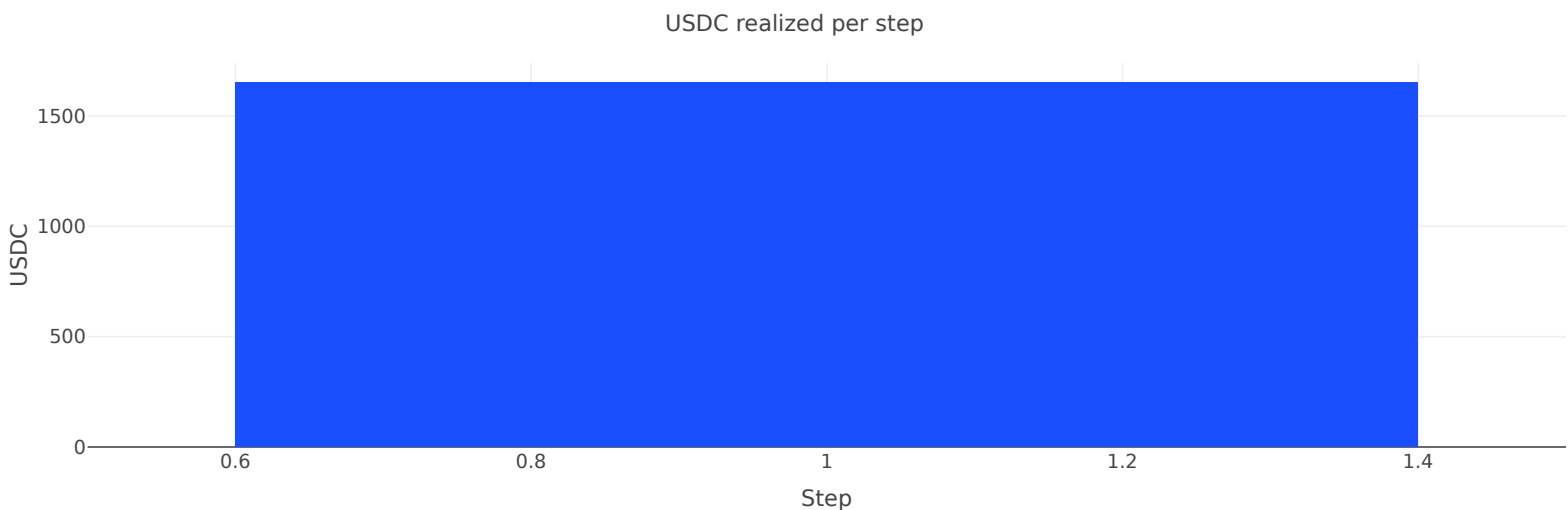
## Sell pressure over time

Cumulative inventory liquidated, in WETH, by simulation step. The slope reflects the aggregate selling intensity across all recipients.



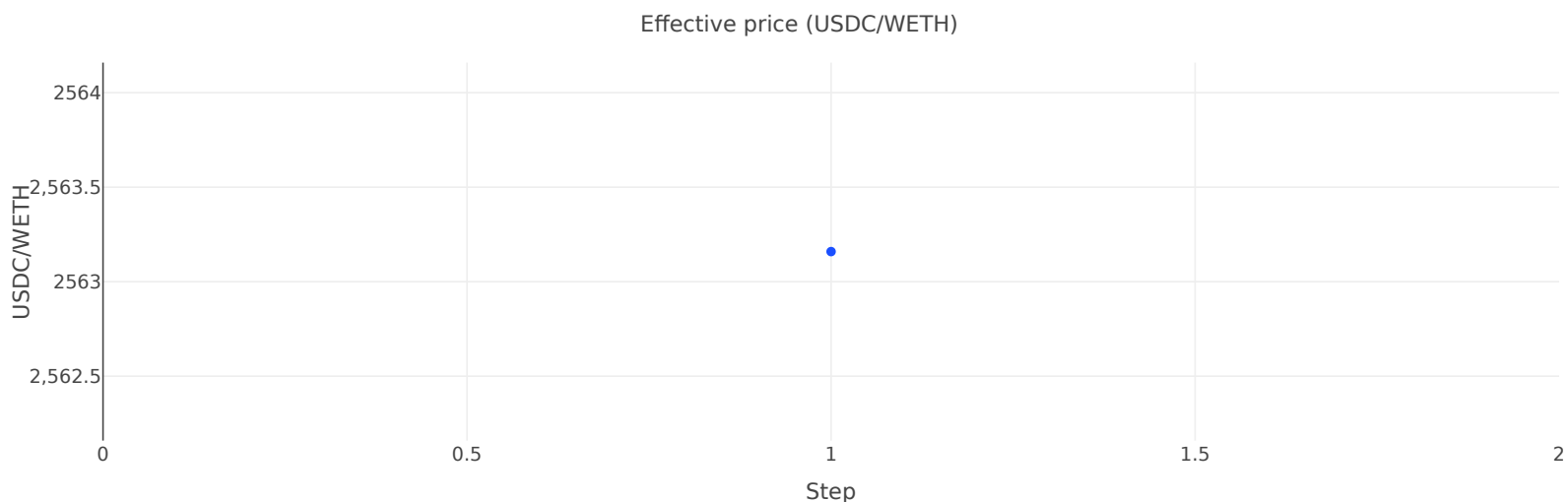
## Realized USDC per step

Per-step revenue summed across all recipients. Gaps indicate steps where no recipient sold (small rounding amounts below the dust threshold).



## Effective realized price

USDC received per WETH sold, per step. A declining line indicates accumulating slippage from sustained selling.



## Per-recipient breakdown

AGENT	WETH SOLD	USDC REALIZED	EFFECTIVE PRICE	SWAPS
recipient-0	0.0866	222.05	2,563.17	1
recipient-1	0.0805	206.43	2,563.16	1
recipient-2	0.0564	144.45	2,563.16	1
recipient-3	0.0445	114.18	2,563.16	1
recipient-4	0.0629	161.27	2,563.16	1
recipient-5	0.0552	141.54	2,563.16	1
recipient-6	0.0824	211.11	2,563.16	1
recipient-7	0.0478	122.53	2,563.16	1
recipient-8	0.0604	154.85	2,563.15	1
recipient-9	0.0681	174.56	2,563.15	1

## Methodology

- **Execution:** All token operations execute against actual Solidity bytecode deployed at the pinned mainnet block via revm (Rust EVM). No Python re-implementation of pool math — slippage and routing match what would have happened on-chain at that block.
- **Fork pinning:** Mainnet state is fetched once at block 19,000,000. The fork captures token balances, pool reserves, oracle states, and contract code as they were at that block.
- **Agent population:** 10 heterogeneous recipients with urgency parameters sampled via seeded RNG (seed=0). Same seed + same fork block produce byte-identical results.
- **Pool:** WETH/USDC 5.00% pool (Uniswap V3, fee tier 500bps).
- **What is NOT modeled:** external arbitrageurs restoring price between recipient sells; cross-pool routing through aggregators (1inch / CoW); sandwich attacks from other MEV searchers; off-chain venues (CEX hedging); recipient behavior changing in response to observed price impact.
- **Engine validation:** Mayavi's execution kernel has been validated **bit-exact** against the on-chain Uniswap V3 Quoter at the pinned block. Every swap our engine produces matches what the official Uniswap simulation contract produces — zero delta. Reproduce locally with `mayavi validate`.

This report is a simulation of a counterfactual scenario under the assumptions stated above. It is **not** a price prediction, a trading recommendation, or a guarantee of future performance. Actual on-chain outcomes will differ due to factors not captured by the simulation: real-time arbitrage, mempool competition, oracle updates, and reflexive participant behavior. Use this report as one input among many in your due-diligence process.

Generated by Mayavi 0.1.0. Source: [github.com/sambhal-labs/mayavi](https://github.com/sambhal-labs/mayavi) (private). Run reproduction key: fe24190761c1@b1ock:19000000@seed:0 .