Censorship resistance should be measured in both <u>BFT/honest-threshold</u> and rational models. This post broadly calls for more research in this direction and provides some useful context and references.

For example, <u>some work</u> assumes that a proposer will act purely rationally and asks how much it would cost a party who wishes to censor a transaction in the mempool to do so for a sufficiently long time. As highlighted in the linked post, EIP1559 should make such an attack very expensive over a short number of blocks.

Other work looks at more complicated scenarios, in which the threat of censorship, combined with the targeted on-chain activity, makes censorship more damaging and affordable.

Additionally, Ethereum's EIP1559 mechanism has attracted criticism as the burning of transaction fees reduces incentives to include transactions.

Generally, more research into improving economics of CR properties is much needed. There are many angles which can be taken on the economics of censorship.

Some ideas and references:

- <u>Use multiple proposers</u> to construct a block as initially suggested<u>here</u>. What is the best way to do this? How would such a design interact with MEV and economic efficiency.
- Make censorship statistically challenging due to pre-execution privacy. Censoring specific transactions is hard if they
 can't be identified and censoring many transactions can present high opportunity cost. What kind of guarantees can be
 achieved in this way?
- MEV-burn (1, 2) is the idea that proposed blocks should be chosen in an auction which burns its revenue. Such an auction could potentially be used to combat the reduced incentives to include transactions under EIP1559-like mechanisms.
- Analyse specific use cases like liquidations in the presence of proposers who are likely to produce more than one block in a row (or for an extended period of time in a continuous-time setting). Rollups with single sequencers are great examples of this. The incentive to deny the posting of margin or timely liquidation is clearly there. How can this risk be curtailed? What guarantees do "escape hatches" offer (bearing in mind that this requires liquidators to expose their strategy publicly?