# Discussion of Maarten van Oordt's "On Bubbles in Cryptocurrency Prices"

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[1]These are my views and not necessarily those of the ECB.

# Research question

- Consider cryptocurrencies such as Bitcoin
- Is it a bubble or "digital gold"?
  - What is the fair price of a cryptocurrency (CC)?
- Key insight: its dual use
  - use as a means of payment
  - invest in it (as a speculative asset)
- Standard answer (sum of discounted future expected dividends) fails (zero value)
  - dividends = transactional demand of CC?

# Approach

- Parsimonious applied theory
- Rational bubble literature
  - Blanchard 1979; Blanchard / Watson 1982
  - Just impose rationality and market clearing
- (1) What beliefs are required to justify a bubble?
- (2) Characterize the link between (a) net investment inflows and (b) the nominal return on the exchange rate

# Two equilibria

- (1) Baseline equilibrium
  - Lowest possible exchange rate (= price of the CC)
  - Sell the CC to future users
- (2) Bubble equilibrium
  - Hold the CC because of expected appreciation of the price (TVC not imposed)
  - expect future investment inflows

# Comment 1: Literature

- Can one relate this to an international finance literature on exchange rates?
  - Emerging markets
  - Exchange rate determination

# Comment 2: Model assumptions

- Risk neutrality: fine
- constant interest rate: yield curve?
- $M_t$: Fixed number of units of cryptocurrency
  - strong assumption
  - Incentives to issue more units of CC?
  - Risk-taking incentives of money market mutual funds
  - Issuance of stablecoins and keeping the peg

# Comment 3: user demand

- $X_t^{\$}$: user demand in USD
  - What about illicit transactions? (Demand for anonymity)
  - Independent of the means of payment
- Currently, CC used to settle claims in the crypto world. This is shifting towards stablecoins (and perhaps tokenized Central Bank money in the future).
  - implications for future transaction demand