



OESTERREICHISCHE NATIONALBANK

EUROSYSTEM

# „Designing CBDCs“ by Agur/Ari/Dell’Ariccia: Comments

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**Beat Weber**  
Oesterreichische Nationalbank



## „Designing CBDCs“ by Agur/Ari/Dell’Ariccia: Overview

Scenario: CBDC introduced in addition to cash and deposits

Drivers of possible substitution effects CBDC vs. cash and/or deposits:

- Heterogeneity among households in terms of preferences for anonymity vs. security of payments
- Network effects (minimum number of users for cost effective supply of a payment instrument)
- interest rates offered on stored payment instrument

CBDC brings:

- potential welfare gains: variety in payment instruments
- and potential welfare costs (crowding out cash, deposits):
  - pushing cash/ deposits below minimum efficient network threshold;
  - decline in bank intermediation – lower investment and output

Results/implications:

=> Design of CBDC (anonymity, interest) influences outcome

- There is a trade-off between preserving variety and mitigating negative effects on financial intermediation
- heterogeneous preferences among households result in societal preference for variety
- interest on CBDC as instrument to influence relative attractiveness

## Assessment

Considerable achievement in terms of marrying complexity (and number of variables) with policy relevance

Before drawing policy lessons:

- Balance sheet perspective must be extended to all issuers of payment instruments
- A larger set of potential design instruments

Features of Agur et al. paper:	Additional implementation issues/options/problems
<p><b>Drivers of substitution CBDC - cash - deposits:</b></p> <ul style="list-style-type: none"> <li>- Heterogeneity in preferences for anonymity vs. security</li> </ul>	<p>Will payment innovations change preferences? E.g. payment experience, platform integration...</p>
<ul style="list-style-type: none"> <li>- Network effects</li> </ul>	
<ul style="list-style-type: none"> <li>- interest rates paid on payment instrument</li> </ul>	
<p><b>CBDC welfare gains:</b> variety in payment instruments</p>	<p>Public perceptions matter: How to credibly signal to users that this is the motive? (Not: Abolishing cash, user surveillance, enforcement of negative rates)</p>
<p><b>CBDC welfare cost:</b> pushing cash and deposits below minimum efficient network threshold;</p>	<p>Networks below minimum threshold size may be upheld by subsidizing of or imposing costs on providers by regulation</p>
<p><b>CBDC welfare cost:</b> decline in bank intermediation – lower investment and output</p>	<p>Central banks have balance sheets too =&gt; CBDC might not reduce, but shift intermediation from commercial to central banks. Quantity of credit might remain constant, but composition might change. =&gt;Legitimacy and allocation issues</p>
<p><b>Result:</b> Design of CBDC (anonymity, interest) influences substitution</p>	<p>Other potential CBDC design variables: maximum limits for funds held in individual accounts; tiering; services offered etc.</p>

**Danke für Ihre Aufmerksamkeit**

**Thank you for your attention**

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