



BANCO CENTRAL  
DEL URUGUAY



*e-Peso*

# Central Bank Digital Currency

## A central banker perspective

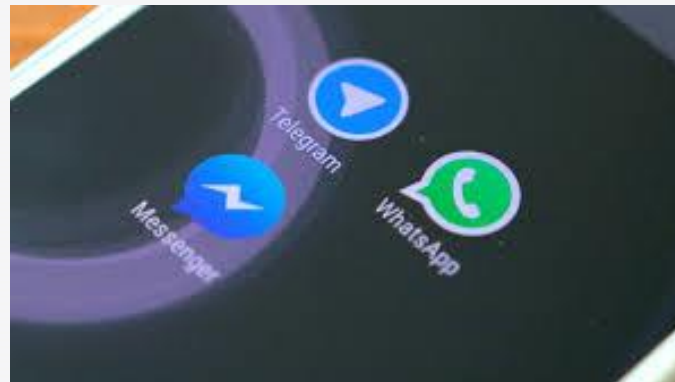
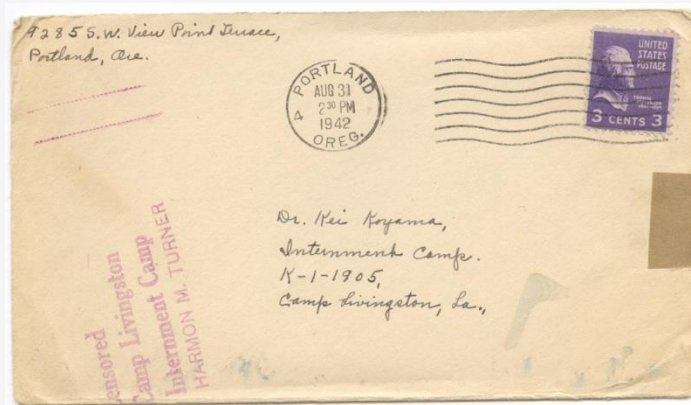
Jorge Ponce

“Global Imbalances and Capital Flows in the  
Era of New Technologies”

Madrid, 10-11 September 2019

(The views in this presentation are those of the author and not of the Banco Central del Uruguay)

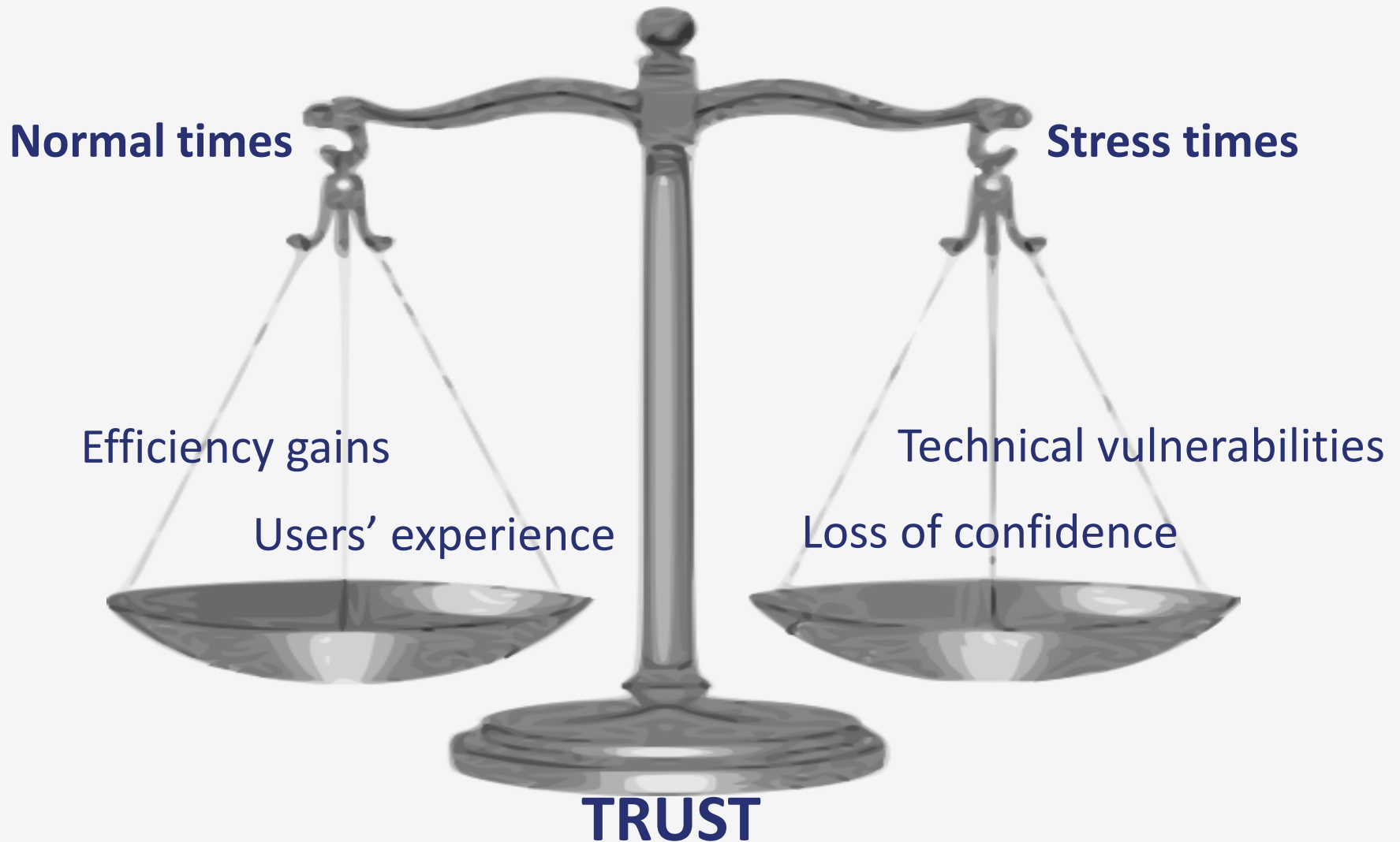
# CBDC: Is this the future?



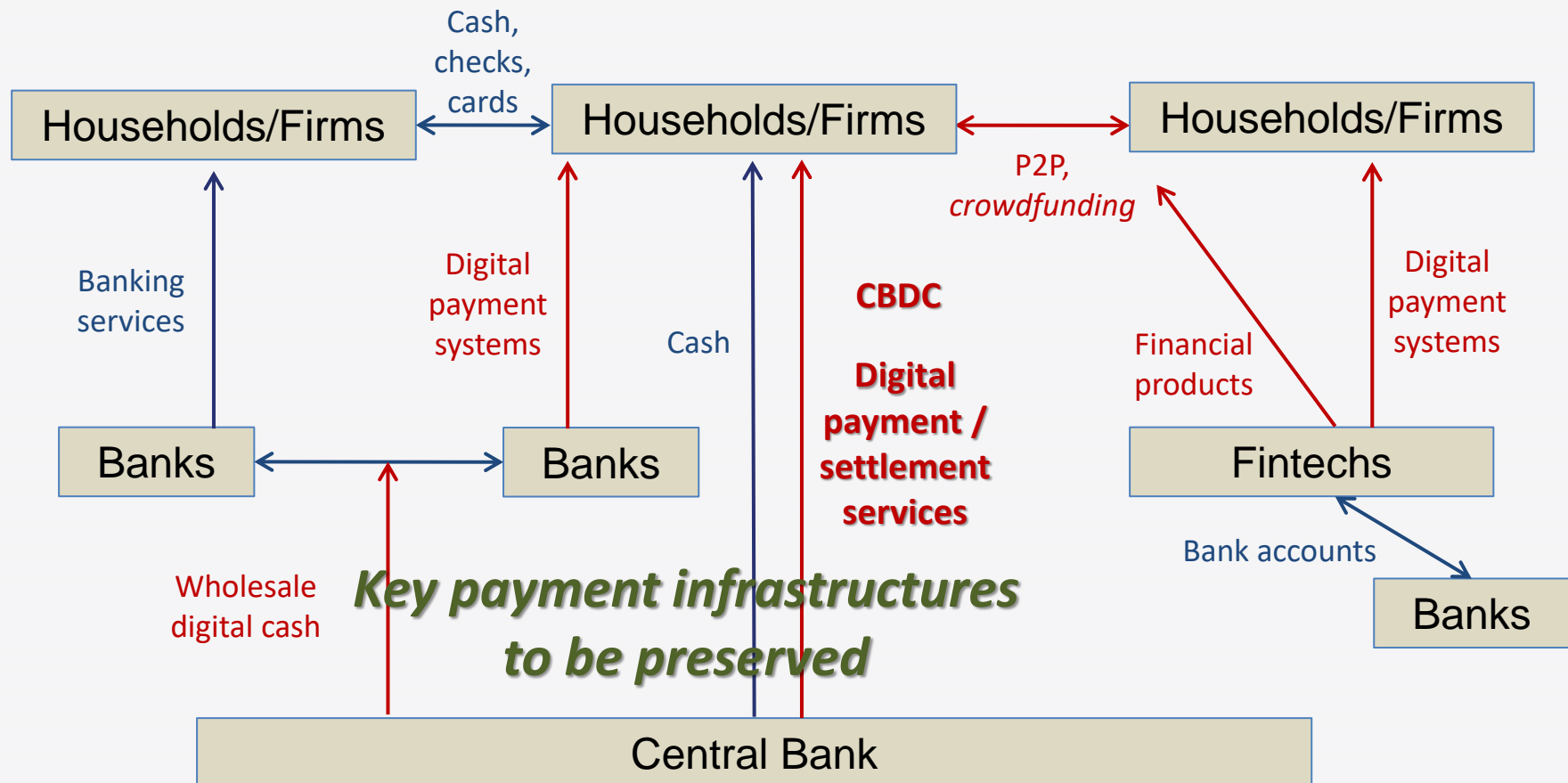
# Challenges and opportunities

- Maybe physical cash will not be the future
  - cashless economies
  - Decentralized, private-owned payment and settlement systems
- How to secure price and financial stability (even a safe payment system)?
- New technologies would imply efficiency gains
  - reduce the cost of cash
  - increase financial inclusion
  - improve security in payments
  - enhanced users' experience

# Need to balance efficiency gains and stability



# Central banking in an era of new technology



Blue: traditional financial channels

Red: new, digital channels

# What has Banco Central del Uruguay done?

- Issue, put in circulation and test in the real world a Central Bank Digital Currency (CBDC) called e-Peso
- e-Peso is the Uruguayan Peso in digital
  - legal tender
  - security





# A pilot plan for CBDC

- Test a digital currency issued by the Central Bank
- Identify relevant issues for further analysis
- Limited to keep risks under strict control:



6 months  
Nov. 17 to Apr. 18  
(e-Peso bills are being  
destroyed now)



Limited bill  
issuance  
(20 million)

**antel**

10.000 mobile phone  
users

**Limited**

\$30000 per wallet  
(aprox. 1000 USD)  
\$200000 for registered  
business



Payment transactions  
in registered stores  
and business



Transfers P2P among  
registered users

# Participants



**Issues digital bills**



**Provides telecom network**

**RGC**

**GSMT (Global Solutions for Money Technologies)**



**Storage, management,  
control of circulation and call  
center**



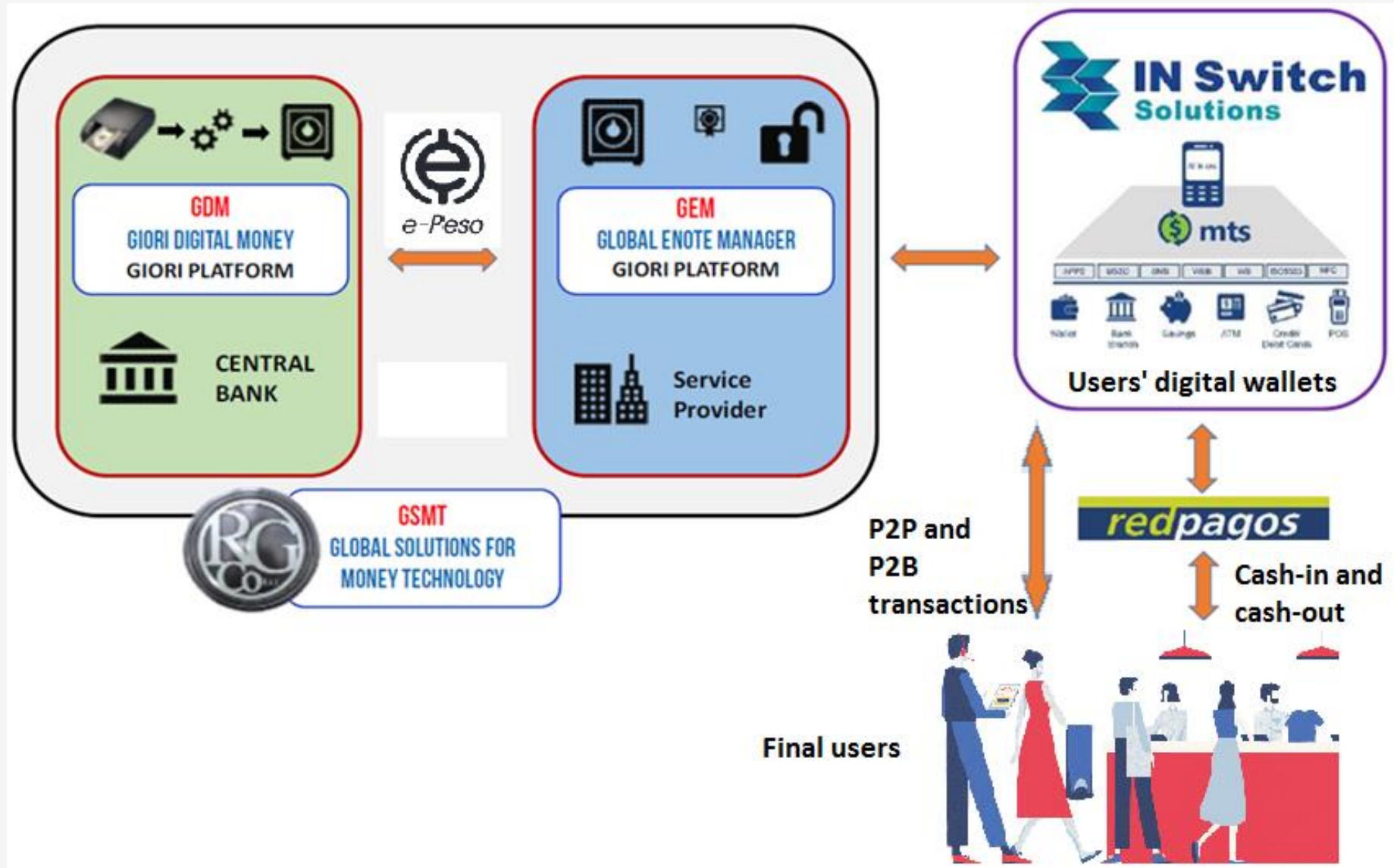
**Management of users,  
transfers and transactions**

***redpagos***

***Cash-In and  
Cash-Out***



# Description of the e-Peso system



# Main features of e-Peso

- Instantaneous settlement
- Does not require internet connection (just a mobile phone)
- Anonymous but traceable
  - users' wallets and encrypted Global E-note Manager (GEM)
- Security improved
  - e-Pesos are secured at GEM even if users lose their phones or password of digital wallet
  - Unique, traceable bills prevent double-spending and falsification
- Unique bills would difficult exchangeability
  - but GEM makes change automatically

# Experience and preliminary evaluation

- Very positive experience
- Develops according to expectations
- No technical incidents
- Mostly P2P transactions
- Increasing number of stores and business
- Banks interested in entering
- Potential prolific field for further innovation by banks and *fintechs*
- Potential to promote
  - financial inclusion
  - security, transparency and efficiency in payment systems

# Future steps

- Further steps are under consideration
- Evaluation of potential impacts
- Analysis to inform decisions regarding design and parameterization
- Assessment of other technologies (e.g. blockchain)
- Evaluation of other digital payment/settlement infrastructures



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# Thank you!