



BERNARDITA PIEDRABUENA K.
MINISTRY OF ECONOMY

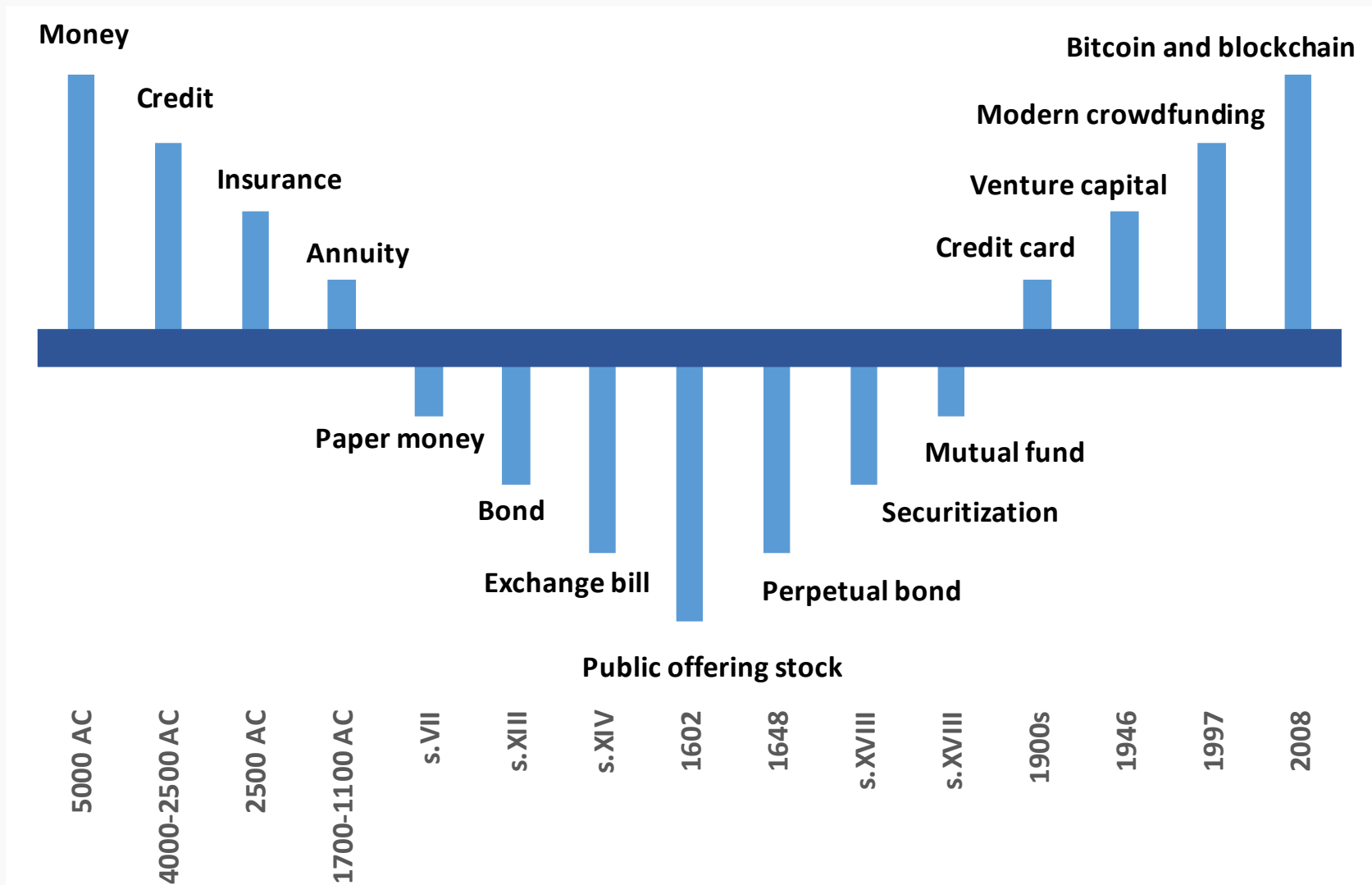
Financial Innovation, Big Data and Operational Risks

3rd Conference on Banking Development, Stability, and Sustainability”

November 3rd, 2017

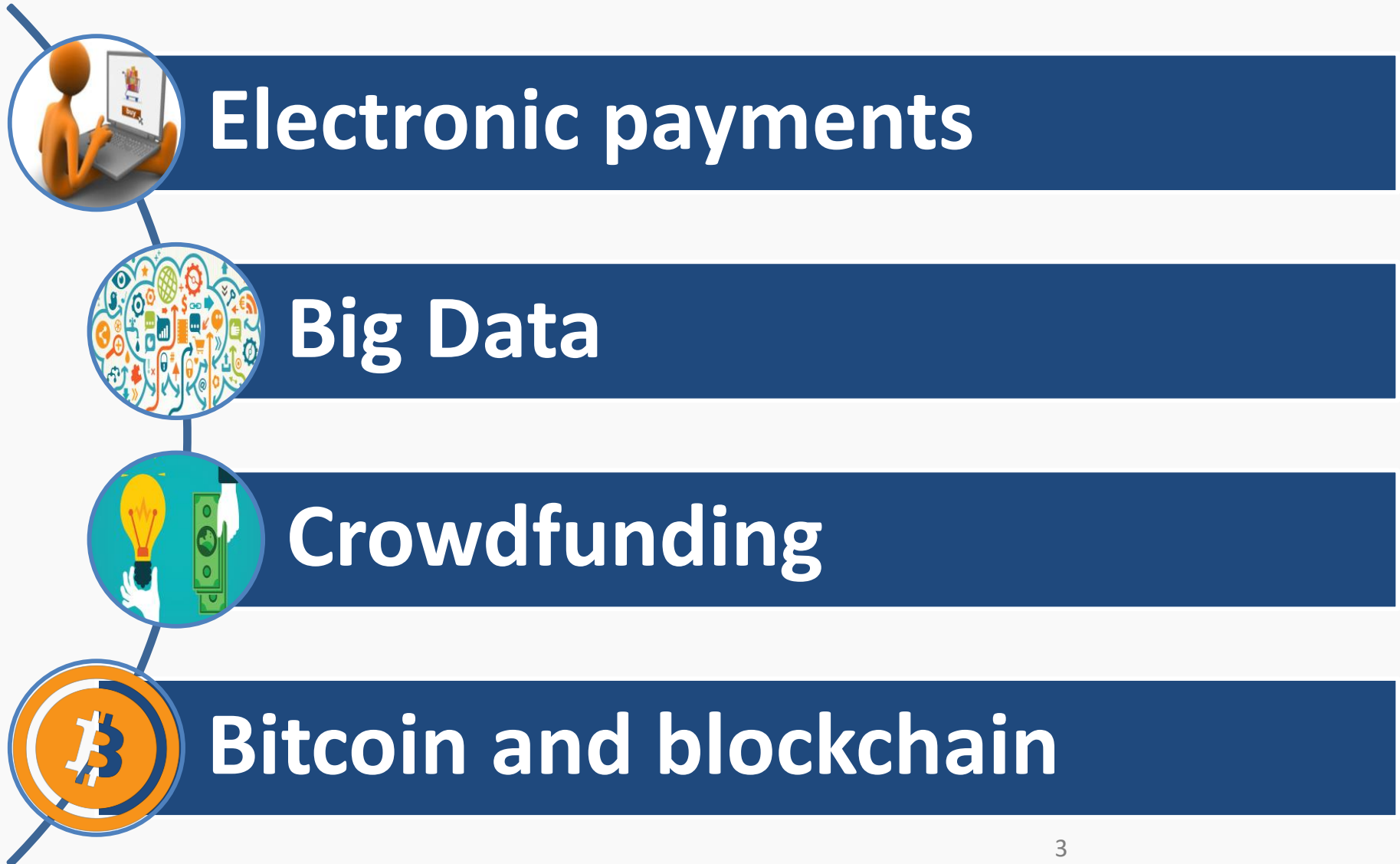


Timeline of financial innovations

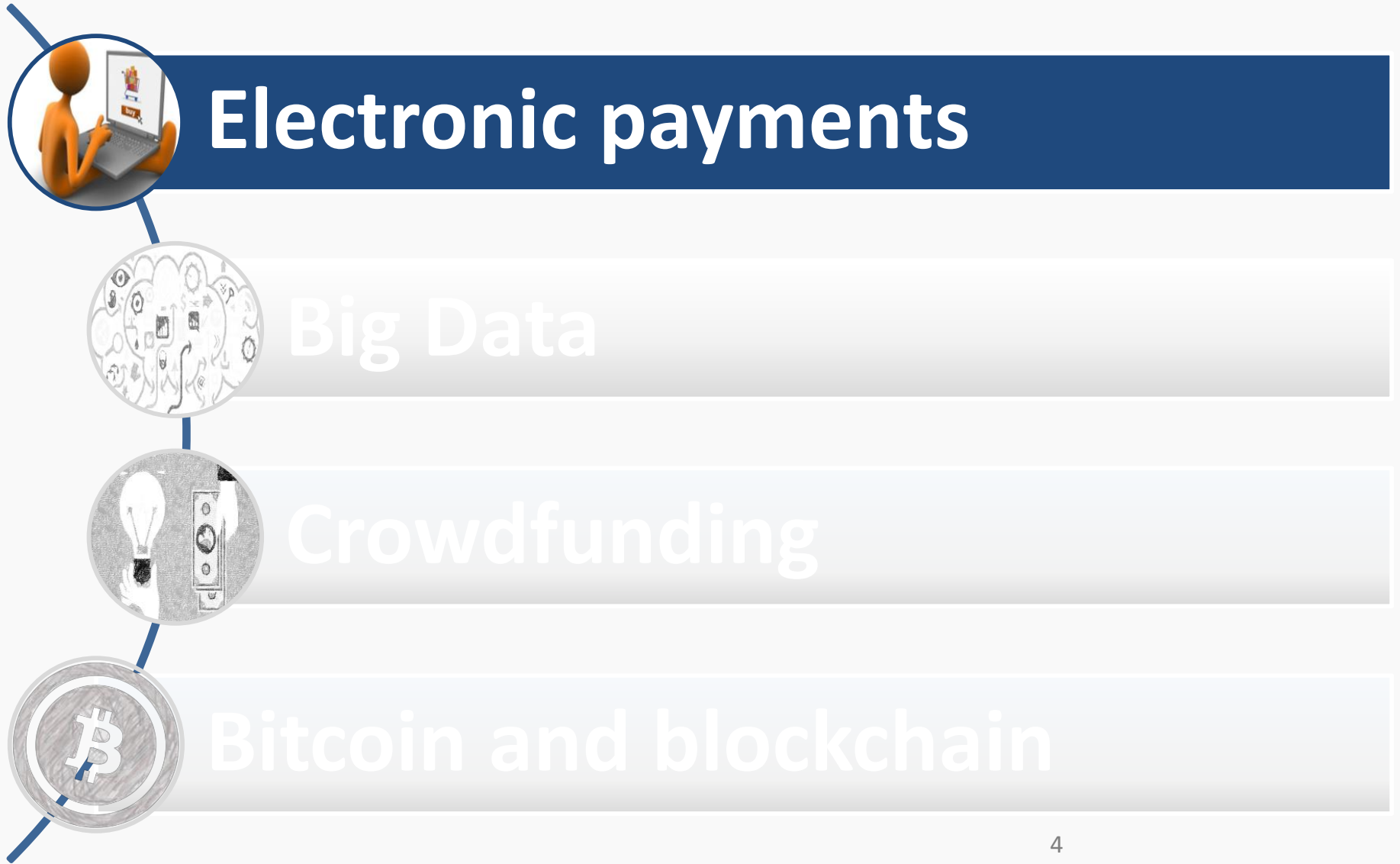


Fuente: Goetzmann W. y K. Geert Rouwenhorst (2007), "The History of Financial Innovation", presentación de la serie Carbon Finance Speaker de la Universidad de Yale; y World Economic Forum, 2012.

Outline

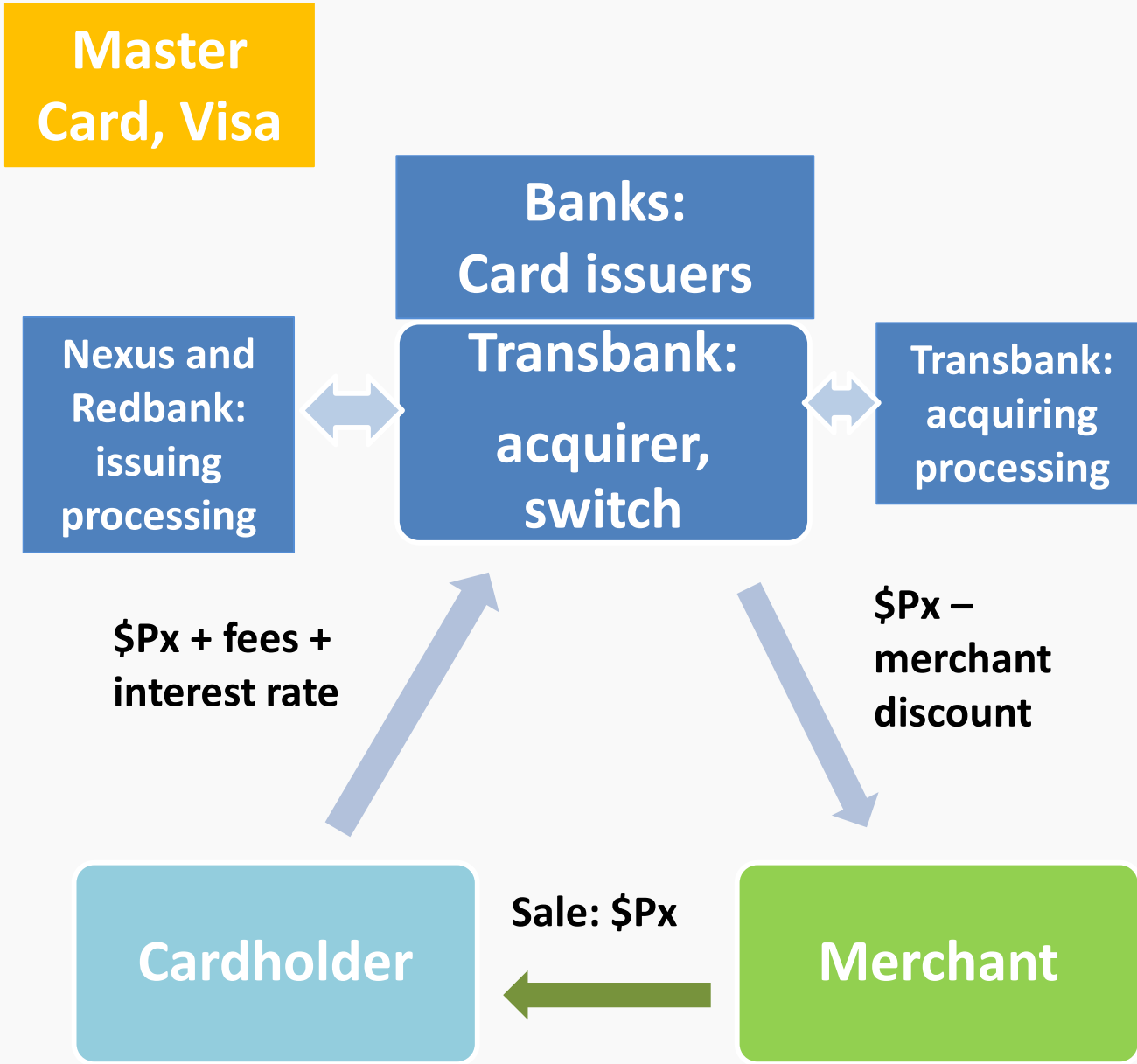


Outline





Current payment card system



- **Banks:** issuers of credit, debit and prepaid cards; acquirer.
- **Non-Banks issuers:** issuers of credit cards.
- **Regulation:** NAWI; three-party system.

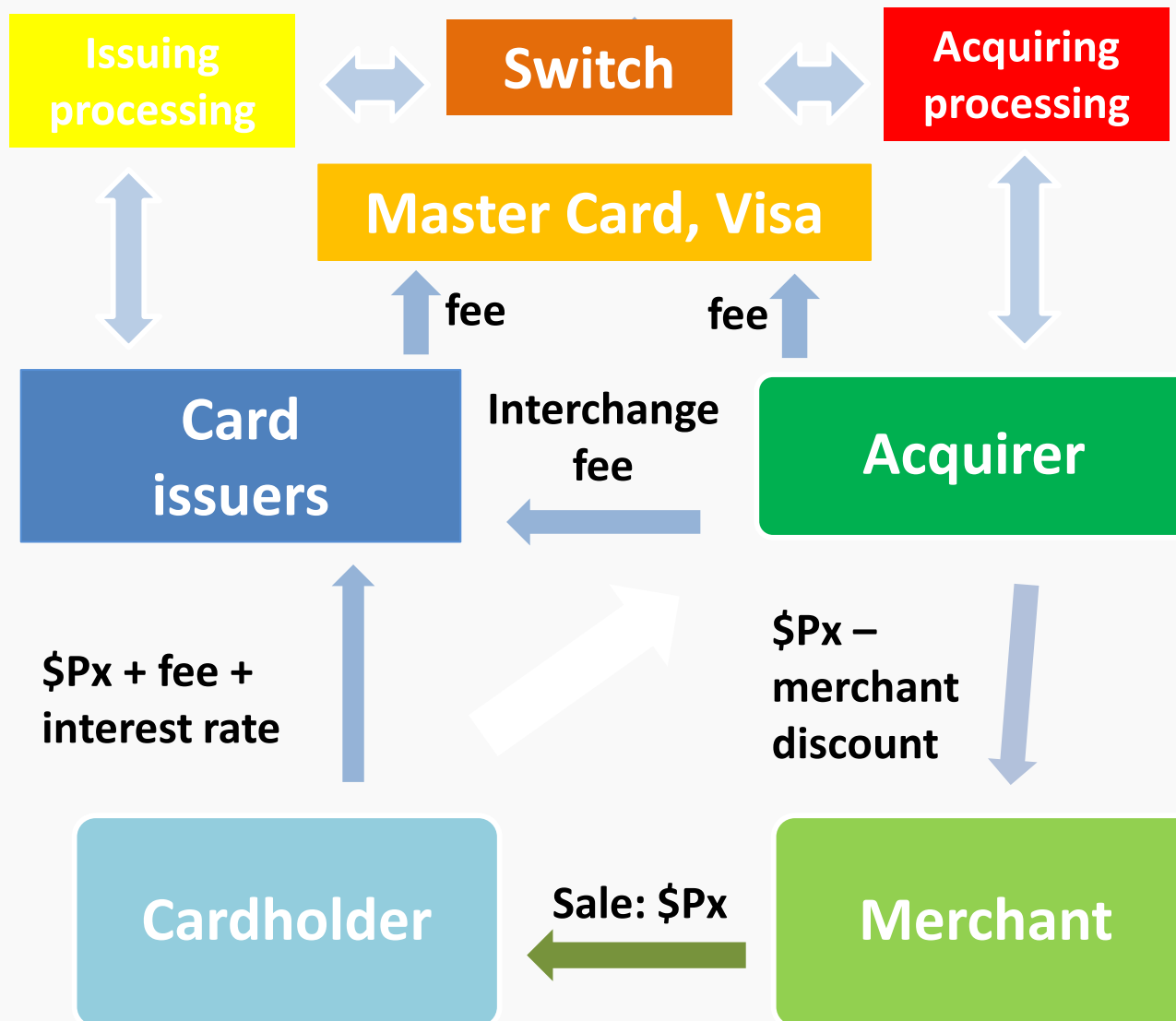


Prepaid payment system

- **Law 20.950 (October 2016) authorizes issuance and operation of prepaid payment system by non-banking institutions:**
 - Main goal is financial inclusion: make more easy the access to financial services of those who are excluded from formal financial system.
 - Central Bank of Chile regulation: chapters III.J.1 and III.J.2 of CNF.
 - SBIF supervision.



Future payment card system



- Banks: issuers of credit, debit and prepaid cards.
- Non-bank: issuers of credit and prepaid cards.
- Acquirers and PSP.
- New regulation: not NAWI; SAGs interconnection.



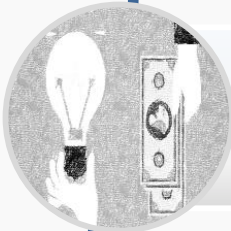
Outline



Electronic payments



Big Data

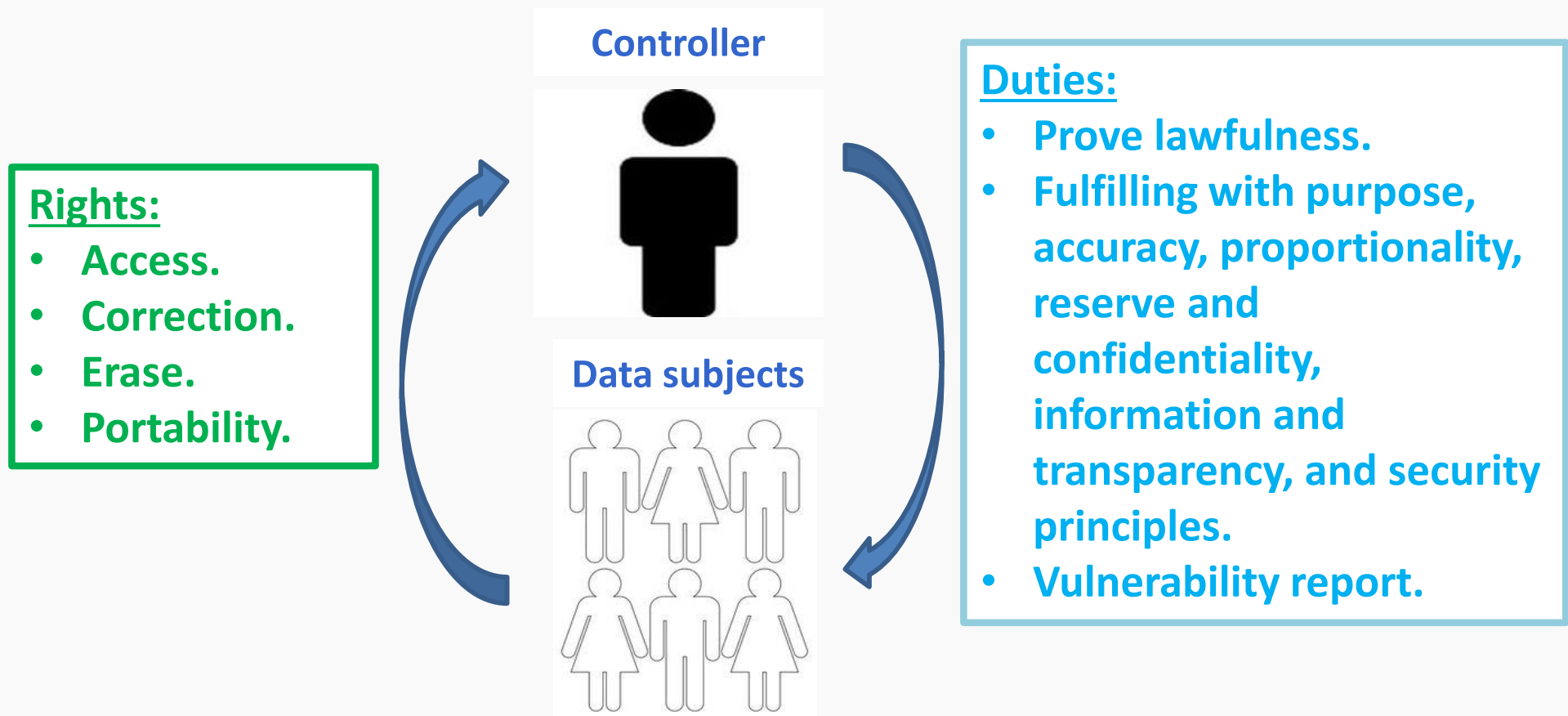


Crowdfunding



Bitcoin and blockchain

Big Data and privacy act



- **Right to object:** The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.

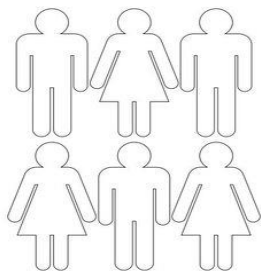
Transborder flows of personal data



Controller



Data subject



- Country that ensures adequate level of protection
- Controller provides appropriated safeguards and conditions that enforce data subject rights
- Explicit consent and specific transborder flows
- Financial transactions
- Among holding's companies
- International treaties
- Cooperation or supervision agreement between public entities
- Authorized by law
- Judicial assistance
- Contract between controller and data subject
- Medical or health emergencies, or medical treatments

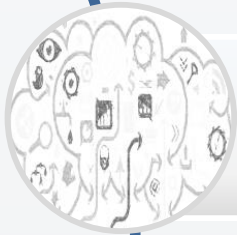
Agency authorizes case by case



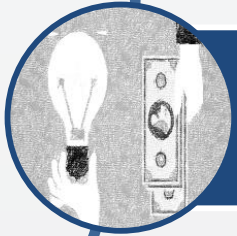
Outline



Electronic payments



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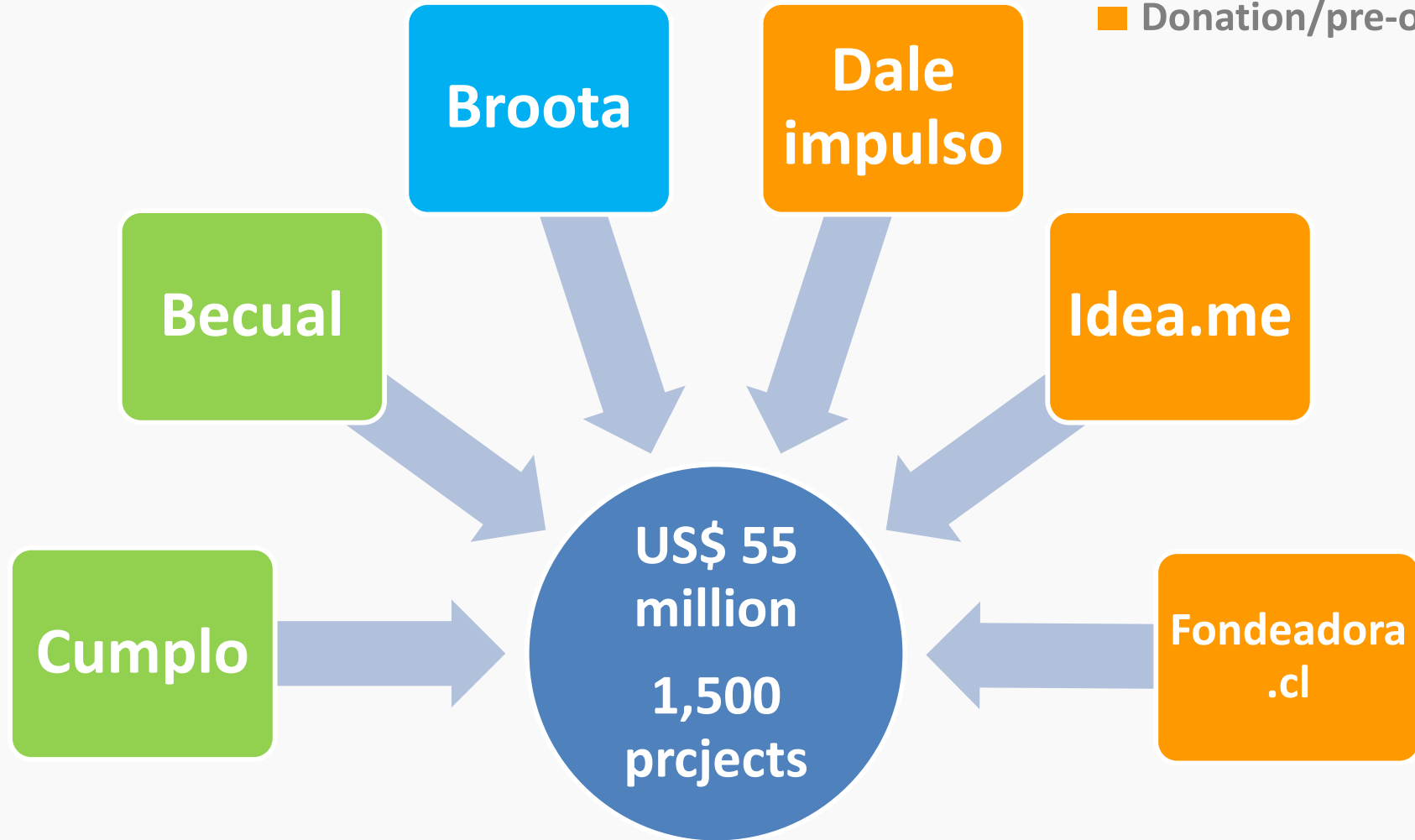


Bitcoin and blockchain



Crowdfunding in Chile

- Debt-based
- Equity-based
- Donation/pre-order





Regulatory issues

➤ General Banking Law:

- Banks are allowed to receive deposits or do money brokerage.
- Institutions authorized by law.

➤ Securitie Law:

- Securitie definition.
- Public offer securitie.

Special regulation

CMF-SII-UAF



INVESTORS:

Amount
Education

PLATFORM:

Registration and authorization
Capital requirements
Operational and technological risks
Resolution framework
Sanctions

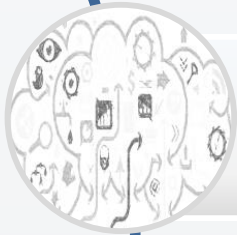
ENTREPRENEURS:

Amount
Activities
Information to public and regulator
Transparency
Conflict of interests

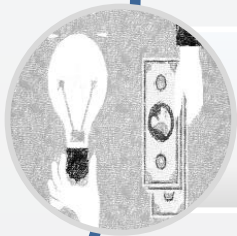
Outline



Electronic payments



Big Data



Crowdfunding



Bitcoin and blockchain



Bitcoin, challenges

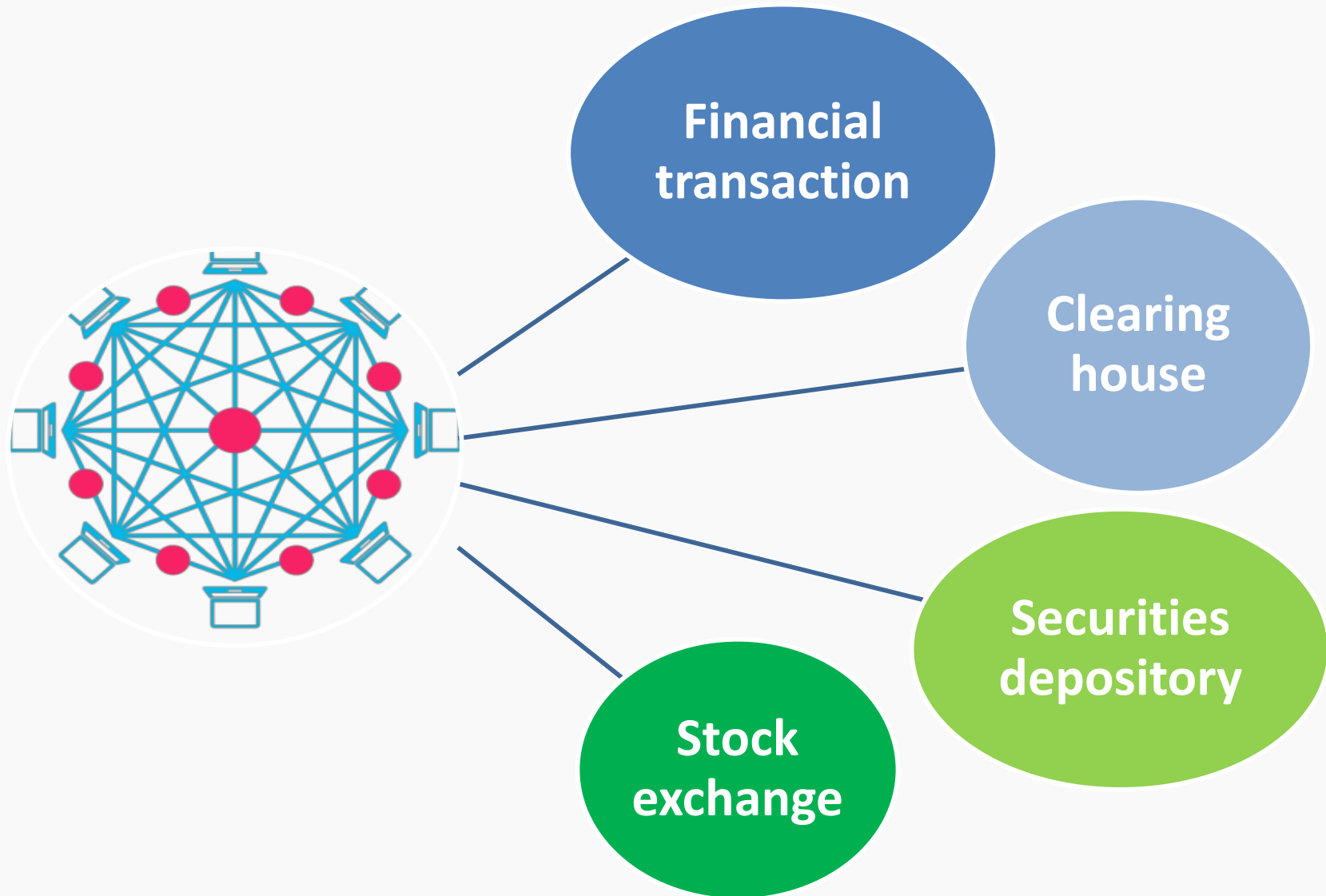
Asset

- Exchange market supervision?
- Intermediary supervision?
- Taxation?
- AML?

Money

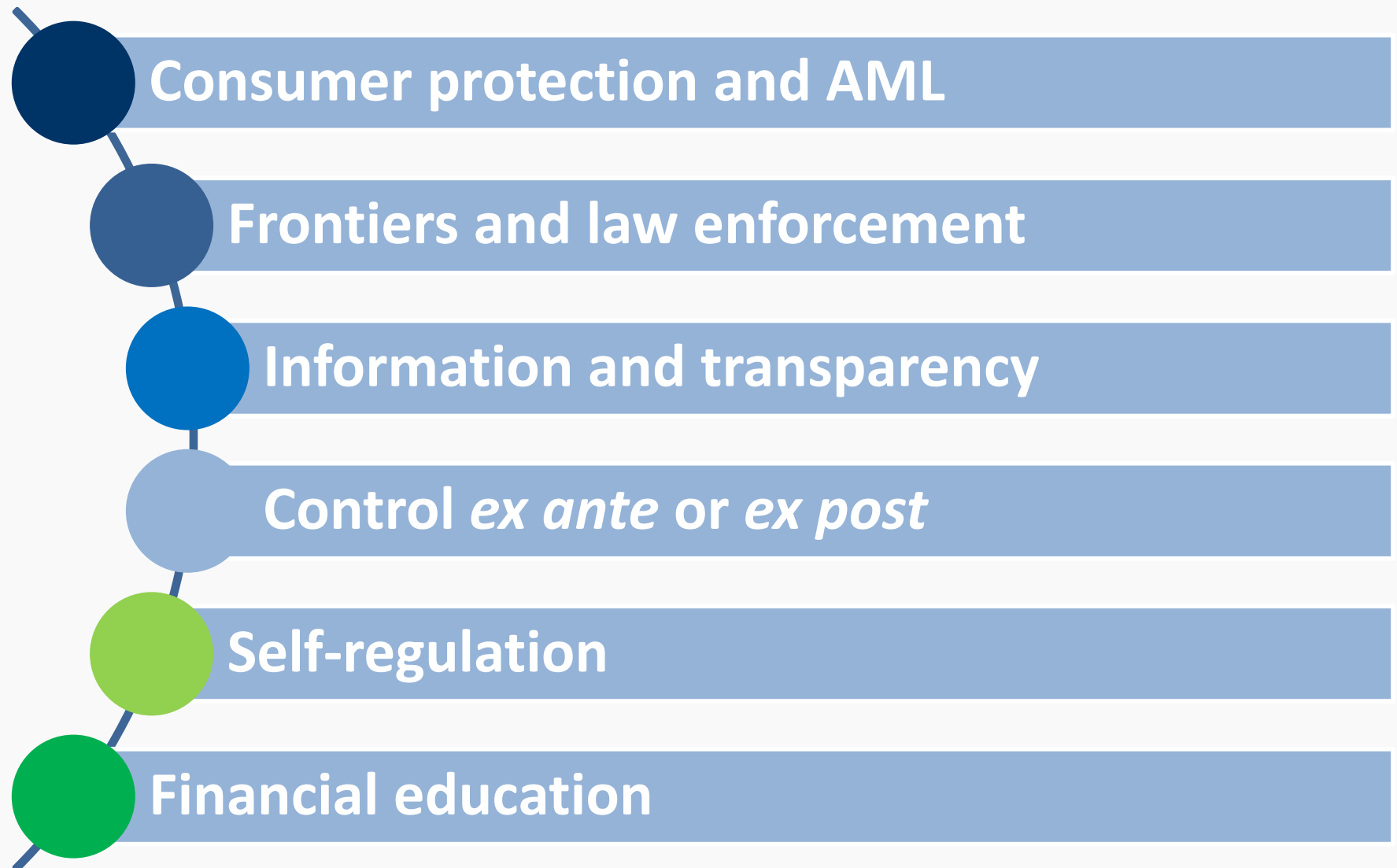
- Seigniorage of CBoCh?
- Crowding-out of traditional currency?
- Transmission channel of monetary policy?

Blockchain





Challenges for regulators





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