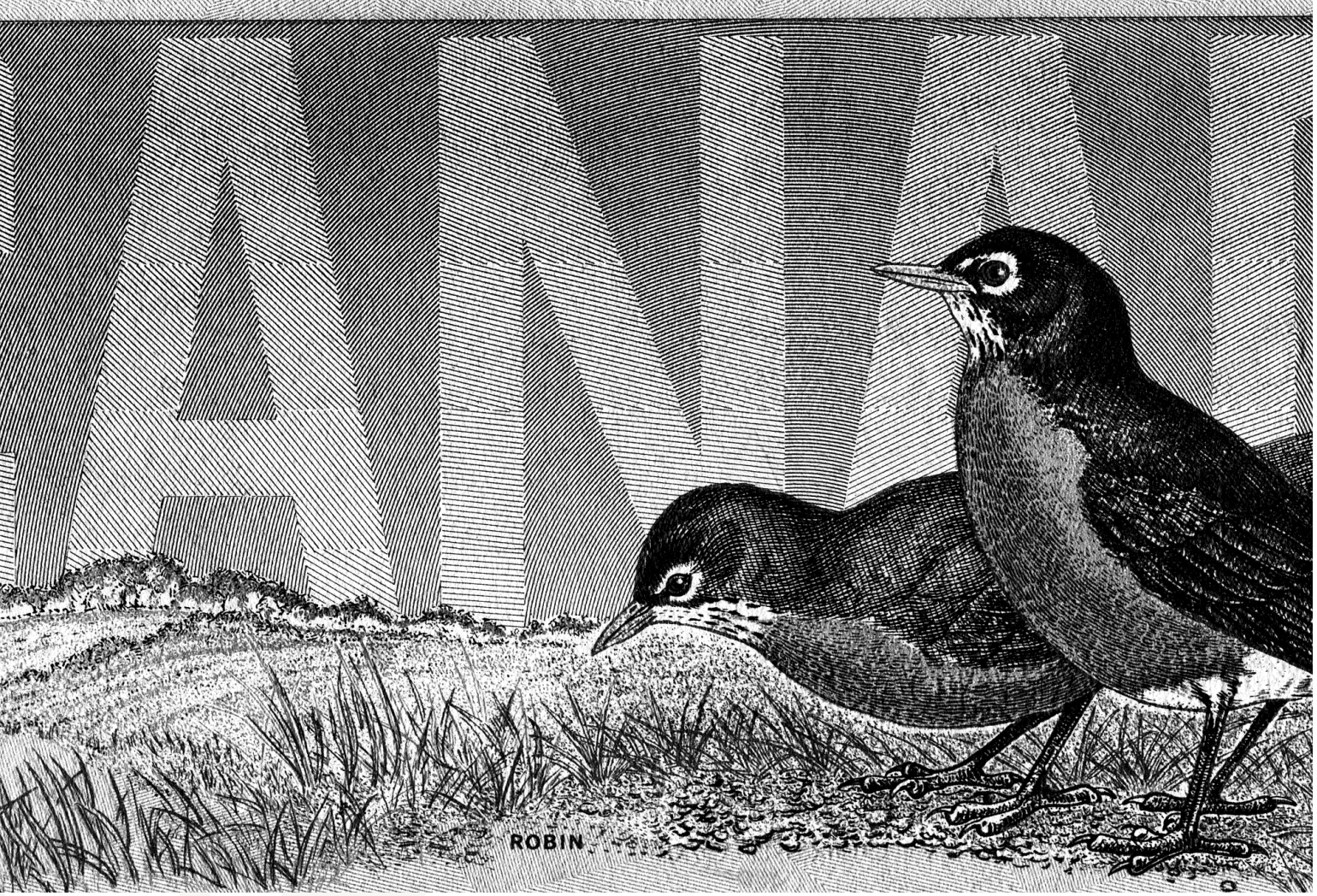



GOETHE UNIVERSITÄT FRANKFURT AM MAIN

# Can CBDCs Compete with the Unique Features of Cash?

# The digitalization of money and its consequences for society

(1) Results in the privatization of public infrastructure

(2) creates a stable link between payments and consumer credit

(3) Re-contextualizes the act of payment

# Social Inequalities in the Use of Financial Services
# The Paradox of Exclusion and Inclusion

**The problems of Exclusion:**

"Unbanked" – lack no access to bank accounts, loans, cards, etc.
"Underbanked" – use of alternative (often unregulated) financial services such as pawnshops or money transfer services

**The problemes of inclusion:**

Distribution of costs and benefits (e.g., fees and risks arising from the use of financial services) across different groups and social classes in society.

# Private companies that provide digital payment services have to generate revenue and therefore transform the payment process:

**(1) The Coupling of Payment and Consumer Credit**

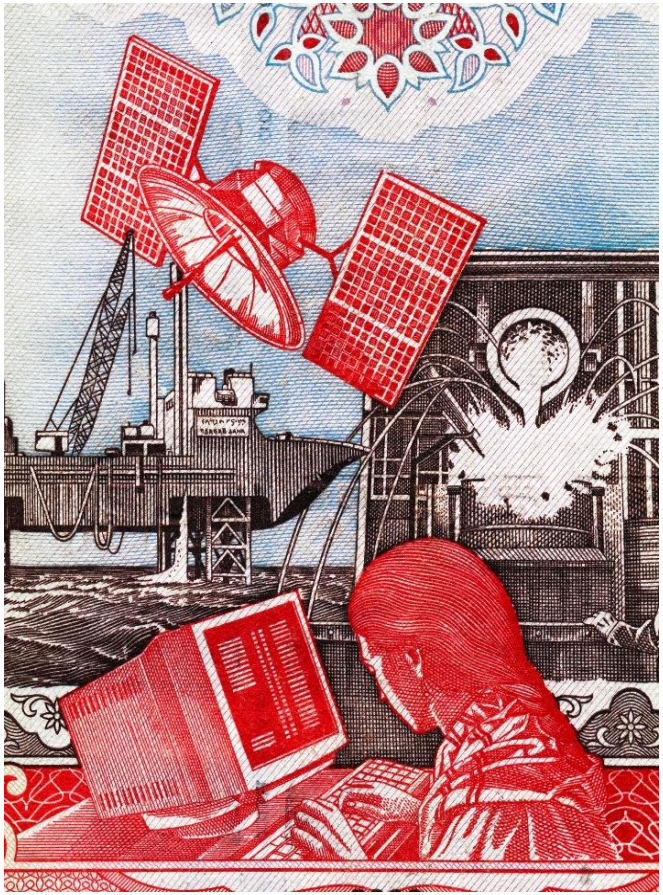
- Consumer credit is characterized by high interest rates and rigid repayment structures and therefore worsens a precarious financial situation through cycles of indebtedness and repayment.

**(2) The Extraction of Data in the Payment Process**

- First wave of digitalization: financial history
  Second wave of digitalization: alternative data

**(3) Redistribution of Money through Loyalty Programs and Other Incentives for Using the "Right" Card**

- Researchers from the Federal Reserve have estimated that approximately $15 billion are redistributed from poorer to wealthier households.

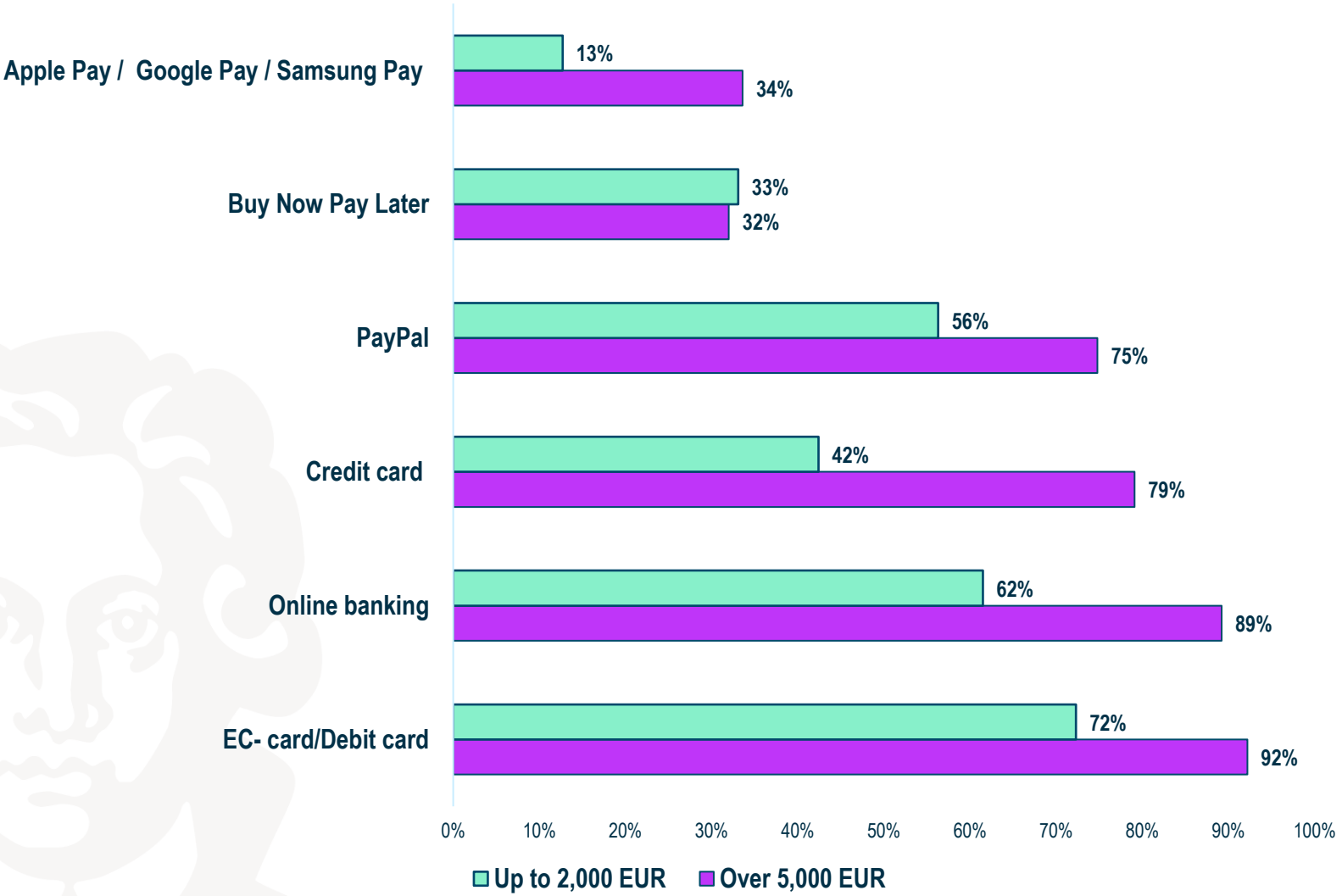


# The social problems of digital payments:

- higher income groups/ higher formal education benefit form the digitalization of money (easy access to credit, rewards, more attuned to their live experience)
- People from lower social groups a disproportionately are bearing the costs (high fees for tiny overdrafts, sharing data reveals vulnerabilities, difficulties dealing with small budgets)
- The traditional financial sector benefits from the rise of digital payments (Mobile Money Sub-saran Africa, PIX Brazil)
- A public infrastructure does not solve the problem of linking payment with the creation of credit (PIX Brazil)

# Example 1:
# Visa and Master Card are the most valuable Companies in the financial sector (market cap)

# Example 2:
# Use of Payment Options by Income Group in Germany




Data source: Brandl, B; Ignaz, Z; Keiner, A & Preunkert, J (2025): on der Kreditkarte zu Buy-Now-Pay-Later: Soziale Ungleichheiten in der Nutzung von digitalen Bezahldiensten und Konsumkrediten (Weizenbaum Discussion Paper, 49). Weizenbaum Institute.

# The amount redistributed annually from poorer to wealthier households through credit-card-linked loyalty programs in the United States:

## 15 Billion US-Dollar

**Source:** Sumit Agarwal u. a., (2023) Who Pays For Your Rewards? Redistribution in the Credit Card Market. IWF Working Paper.

**Average interest on credit card debt in Brazil:**

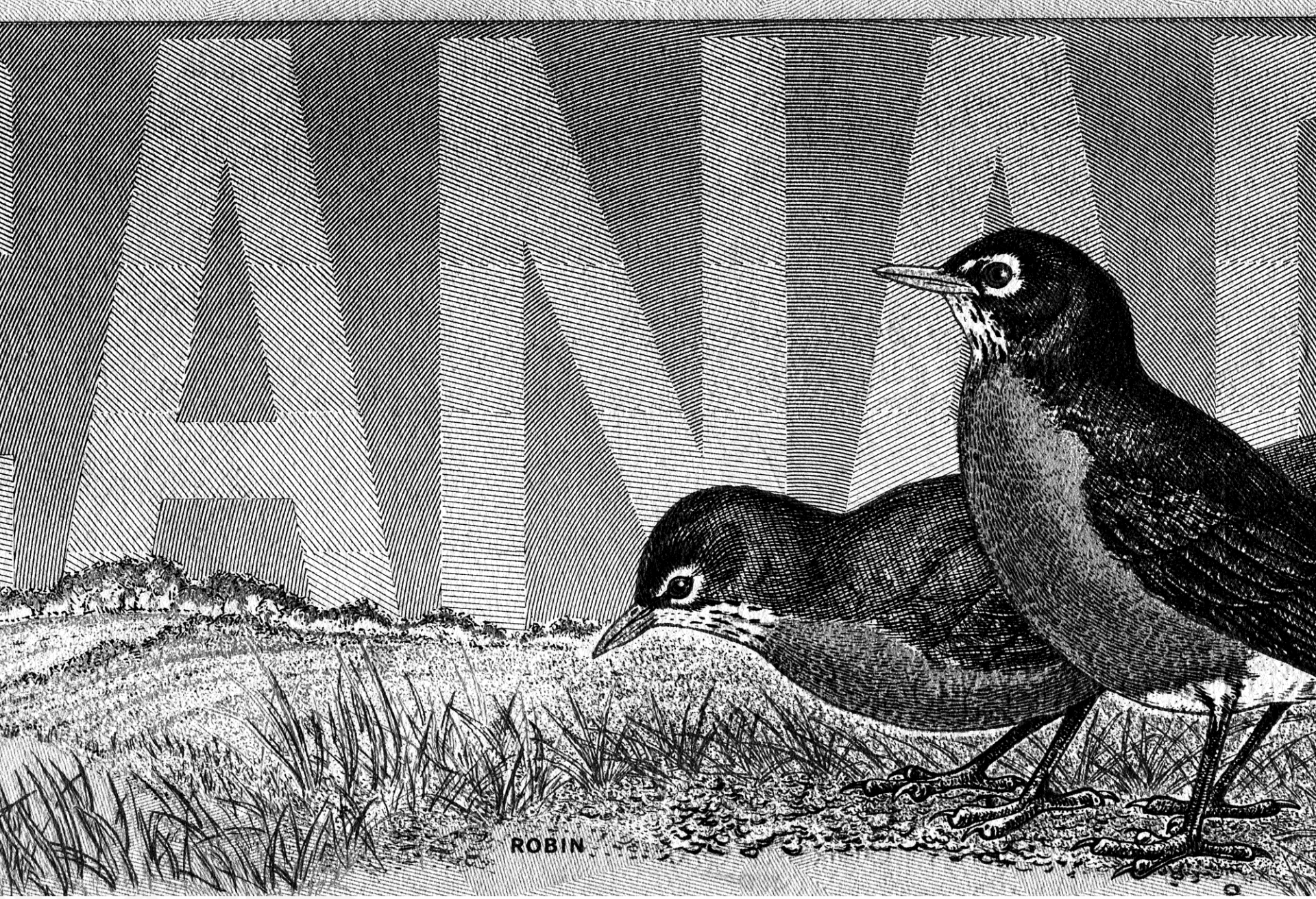
annualized interest rate of 450 percent

**Average fees for a loan of 1,500 KES held for 30 days via Fuliza (the overdraft facility of M-Pesa):**

555 KES — equivalent to an annualized interest rate of approximately 540%.

# Can CBDCs Compete Aganist the Unique Features of Cash?

| Unique features of cash | Digital Euro |
|---|---|
| No data extraction during the payment process | Data protection better than in most other forms of digital payment |
| Provision of infrastructure by a public actor | The digital euro is provided by the ECB |
| Available to everyone | Difficult, but there are strong efforts by the ECB to make the digital euro available to everyone |
| Payment and the creation of consumer credit are separate processes | The most critical issue, the ECB invites private banks to couple their services with the digital euro |


ROBIN