# Discussion of "Towards a cashless economy: the case of Argentina" by Pedro Elosegui and Santiago Pinto

Peter Zimmerman\*

XXV Meeting of Central Bank Researchers' Network October 29, 2020



<sup>\*</sup>Research Economist, Federal Reserve Bank of Cleveland. This presentation does not necessarily reflect the views of the Cleveland Fed or Federal Reserve System.

### Summary of paper

- What determines the choice of payment method (cash vs electronic) in an economy with an informal sector?
- Theory model: multiple equilibria; more cash usage if cheaper for both buyers and sellers.
- Empirics: more cash usage if lower income, less education, smaller local network.
- This version seems to be a draft.

### Comment 1: Equilibrium

- Buyers choose payment method (same for sellers).
- ② Buyers choose  $m^b$ , which is the proportion of payments that use credit cards, to maximise utility. That's not right, unless you have central planning!
- 3 There will be (up to) three possible equilibria:
  - PSNE where all buyers use cash  $(m^b = 0)$ ,
  - **2** PSNE where all buyers use CC if they can  $(m^b = \alpha)$ ,
  - **3** MSNE (0 <  $m^b$  <  $\alpha$ ) only if buyers are indifferent between cash and CC .

## Comment 2: Link between theory and empirics needs to be clearer

- The purpose of the theory model should be to develop empirical predictions. But the two parts of the paper seem totally separate!
- ullet Example: a proportion lpha of buyers can only use cash. This can be used to make predictions about the effect of the informal sector, but it's not mentioned.
- How are education, income, demographic, and socioeconomic factors captured in the theory model?

#### Concluding remarks

- Revise theory model so that mixed strategies means agents are indifferent.
- Paper should be clearer about the purpose of the theory model, and what it predicts.
- Paper can be further improved with fleshing out, especially on empirical side.