

# Comments on: Advancing Asia's Payment Systems Through Financial Technology by Yueling Huang

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### **Outline**

- An important topic: Fintech has great promise to help promote the goals of financial inclusion, but also presents numerous challenges, including:
  - Need for adequate financial literacy and consumer protection
  - Data security risks
  - Potential for widening of income/wealth gaps
  - Maintenance of financial stability
  - Regulation must balance innovation with regulatory obligations
- "...the aim of this paper is thus to provide a comprehensive empirical assessment of the growing penetration of digital/FinTech payment systems, their impacts and challenges, and reflect on ways for improvement."
- Overall comment: The paper presents a nice overview of many issues on this topic, but regressions are problematic and some of the arguments need to be strengthened



#### 1. Introduction

- Need to distinguish between card-related digital payments and more recent developments, e.g., Alipay, WeChat
- Definition of fintech
  - Some would exclude internet banking
  - But should include e-commerce in Fig. 1
- Need to add definitions of various fintech categories
- Literature review (none yet)



## 2. 10 stylized facts

- 3. Average value for checks in EMEs seems very high (\$18K)
- 4. Something strange—how can average value per transaction be higher overall than for all categories for EMEs?
- 10. Figures for 2014 and 2017 should be scaled the same to make the more easily comparable



## 3. PRC Case Study: E-commerce

- Definition of PKU-DFIIC index? (units?)
- Dependent variable: E-commerce sales & purchase value
- Explanatory variables need more data description
  - Payment index—very significant
  - GDP per capita
  - Share of rural population—very significant
  - Share of population aged 65
  - Number broadband subscribers

#### Questions:

- How much does PKU-DFIIC index include e-commerce, aren't they mostly the same thing?
- Variables likely to show strong time trends: Lagged effects? Lagged dependent variable? Stationarity issues?
- Helpful to normalize the dependent variable?



## 3. PRC Case Study: E-commerce (2)

- IS approach
  - IV: PKU-DIICF Insurance index (why chosen?) Still likely to be correlated with e-commerce
- Explanatory variables
  - Payment index—very significant
  - GDP per capita
  - Share of rural population—very significant
  - Share of population aged 65
  - Number broadband subscribers
- Questions:
  - How much is e-commerce included PKU-DFIIC index?
  - Lagged effects? Lagged dependent variable? Stationarity issues?
  - Causality vs. correlation



## 3. PRC Case Study: Fintech products

- Dependent variable: Fintech product indices for insurance, money funds, credit, investment, credit investigation
- Explanatory variables
  - Payment index—very significant
  - GDP per capita
  - Share of rural population—insurance only
  - Share of population aged 65
  - Number broadband subscribers—significant but inconsistent sign

#### Questions:

- The payment index is the only significant variable, too good to be true?
  This probably simply reflects the fact that all are growing rapidly
- Lagged effects? Lagged dependent variable? Stationarity issues?
- Causality vs. correlation



## 4. Cross-country Study: E-commerce

- Dependent variable: E-commerce sales value
- Explanatory variables
  - % making digital payments—very significant
  - GDP per capita
  - Share of rural population
  - Share of population aged 65
  - Broadband subscribers per 100 people—marginally significant
- Questions:
  - Again, aren't a lot of digital payments for e-commerce?
  - Lagged effects?
  - Lagged dependent variable?
  - Causality vs. correlation



## 5. Digital payments and informal economy

- Negative relationship between the size of the informal economy and digital payments is documented by the BIS (2020)
- But what is definition of informal economy?
- Informal economy participants can use fintech as well, e.g., street vendors, but not necessarily an incentive to become formal
- Use of digital payments is correlated with lots of other indicators of financial inclusion, so hard to make a strong argument that this is a key factor promoting reduction of the informal economy



## 6. Challenges and policy recommendations

- Challenges of digital payments
  - Efficiency/convenience—issues of "payment divide"; exclusion of cash
  - Transparency—risks to data privacy
  - Security—cyber attacks; cyber fraud
  - Network effects—excessive market power
- Other concerns that could be mentioned
  - Over-borrowing
  - Use of AI could lead to discriminatory lending and other practices



## 6. Policy recommendations

- Recommendations for policy makers
  - Bridging existing regulatory gaps to reflect emerging legal issues arising from FinTech payments
  - Encouraging interoperability between platforms
  - Providing relevant devices, connectivity, digital ID/KYC and technological/financial literacy, especially to the more socially disadvantaged groups—digital financial literacy is important
  - Maintaining the provision of alternative payment options, especially the availability of cash—a problem in the PRC?
  - Promoting regional cooperation in the standardization of industry practices, cross-border crimes and payment systems integration
  - Introducing digital G2P/G2B/P2G/B2G payments and CBDC to incorporate FinTech and the use of digital tools—how necessary is CBDC?; risks need to be considered as well



## 6. Policy recommendations (2)

- Recommendations for fintech
  - Constantly leveraging the latest technologies and upgrading cybersecurity measures
  - Complying with regulatory efforts—this not needed
  - Engaging in knowledge sharing (when possible) and standardization of industry practices—a good proposal



#### 7. General comments

- An ambitious and interesting study, but need to be cautious about claims
  - Regressions are problematic, and are far from establishing causality in a convincing way; in fact, it's not clear what they are adding
  - In some cases the arguments are based on simple bivariate correlations,
    which are not convincing given all the different factors involved
  - Text states: "In Sections II IV, we discussed how FinTech payment makes retail payments more efficient (cheaper, faster, safer), transparent and inclusive in areas such as e-commerce, FinTech development, domestic remittances transfers, G2P/G2B and the informal economy."
     The studies in sections III-IV show correlations but not benefits
  - Discussion of G2P and G2B payments and Covid-19 is quite limited, needs to be expanded



## Thank you!

