

Digital Money: Emerging Issues and Policy Actions in Asia

Key take-aways from online digital money course

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Agenda

- I. Outline of Digital Money Course
- II. Mechanics of Digital Payments
- III. DFS Business & Performance
- IV. Policy and Regulations for DFSs
- V. Financial Inclusion in the Digital Age
- VI. Implications in Asia

Outline of Digital Money Course

- Online course conceived by the Digital Frontiers Institute (DFI)* and certified by the Fletcher School of Tufts University (<http://digitalfrontiersinstitute.org/certificate-in-digital-money/>)
- Course duration: 22 May – 11 August 2017 (12 weeks)
- Curriculum:

1st four weeks: The functioning of typical payments systems: interbank systems, card-based retail systems, mobile money systems, and international payment systems.

2nd four weeks: Basic enablers on the demand side (customer attitudes and marketing approaches), the technology (identity and security), and regulation.

3rd four weeks: Broader industry trends in terms of industry collaboration (e.g., interoperability), disruptive forces (e.g., bank-telco competition or the rise of crypto-currencies), and inclusion.

* DFI is a not for profit initiative run as a sponsored project of Rockefeller Philanthropy Advisors.

Mechanics of Digital Payments

Store of
value

Bank
account

E-money
account

Payment
instrument

Credit
transfers

Debit
transfers

Card
payments

- Push transaction
- Real time/batch

- Pull transaction
- Direct debit

- Pull transaction
- Credit/debit card

Payment
channel

Bank
branch

ATM

POS
terminal

PC
internet

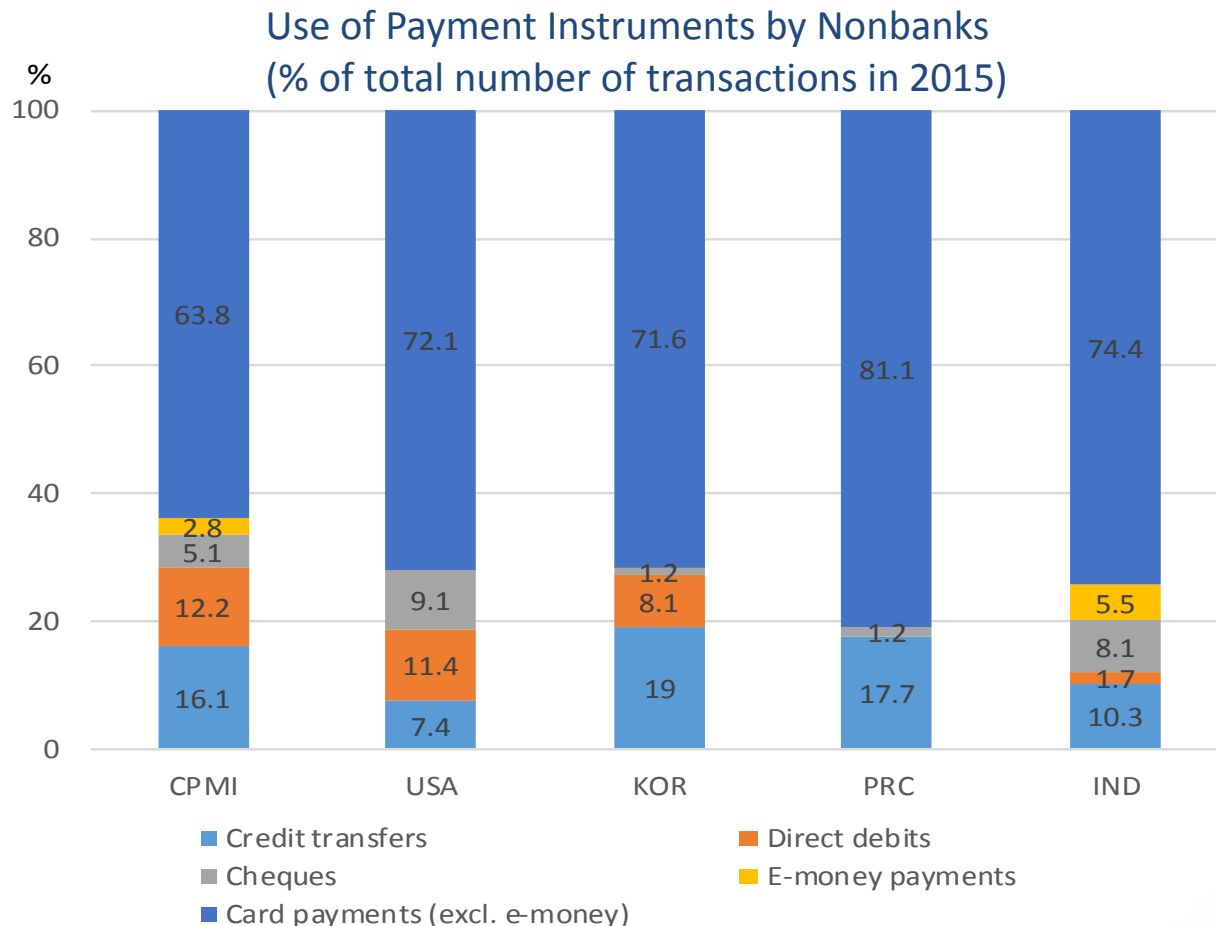
Store as
agent

Call
center

Mobile
phone

DFS Business & Performance

- Payment revenue makes up 41% of the total revenue of banks globally.
- Card payments account for the majority.

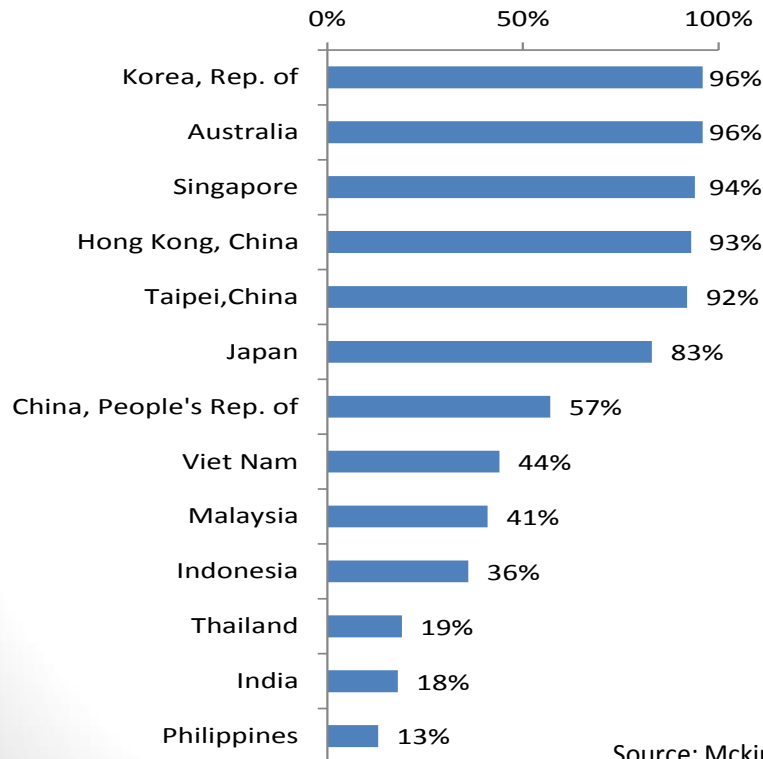


Source: author's compilation from BIS (2016), Statistics on payment, clearing and settlement systems in the CPMI countries: Figures for 2015.
CPMI = Committee on Payments and Market Infrastructures under BIS.

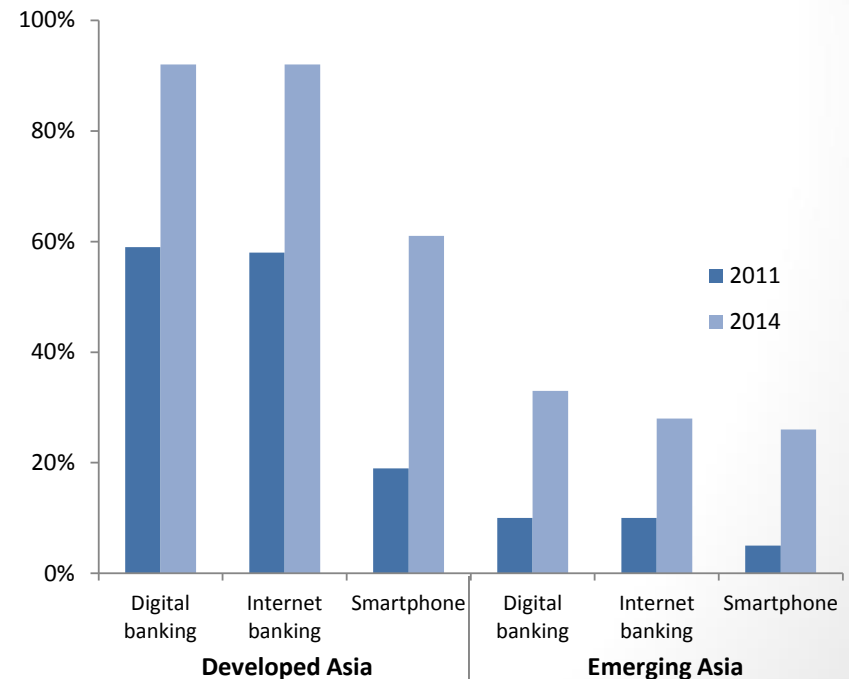
DFS Business & Performance

- Over 700 million consumers use digital banking regularly in Asia.
- Emerging Asia: 28% of respondents used internet banking and 26% used banking services via smartphones in 2014, increasing trend but still low penetration.

Digital Banking Penetration



Digital Banking Channels



Source: McKinsey & Company. 2015. Digital Banking in Asia: What do customers really want?

DFS Business & Performance

- Crowdfunding/P2P

- ✓ The global volume of funds raised through crowdfunding/P2P was \$16.2 billion in 2014, of which:
 - 69% in the form of lending;
 - 41% went to businesses/entrepreneurs
 - 21% was in Asia (\$3.4 billion).
- (2015 Crowdfunding Industry Report)

- Philippines:

- ✓ Online payment gateways: *BancNet Online* and local gateways (e.g., *DragonPay*, *JuanPay*, *PesoPay*, *PayEasy*, *MOLPay*, *WeePay*, *7 Connect*, *Rural Net Inc.*, *Tagcash*, *Paynamics*, *IPay88*, *PayMaya*, and *HelloPay*).
- ✓ Online lenders (e.g., *Cash Mart Philippines*), bitcoin platforms & exchanges (e.g., *Coins.ph*, *BuyBitcoin.ph*, & *Rebit.ph*), and P2P lending sites (e.g., *Bitbond*).
- ✓ E-wallets: *Smart Money* and *GCash*.
- ✓ Infrastructure for DFSs:
 - PhilPaSS (Philippine Payments and Settlements System; RTGS)
 - A single national payment switch to be fully operationalized in 2017.
 - EMV migration to be completed by 30 June 2018.

DFS Business & Performance

- Field Research:

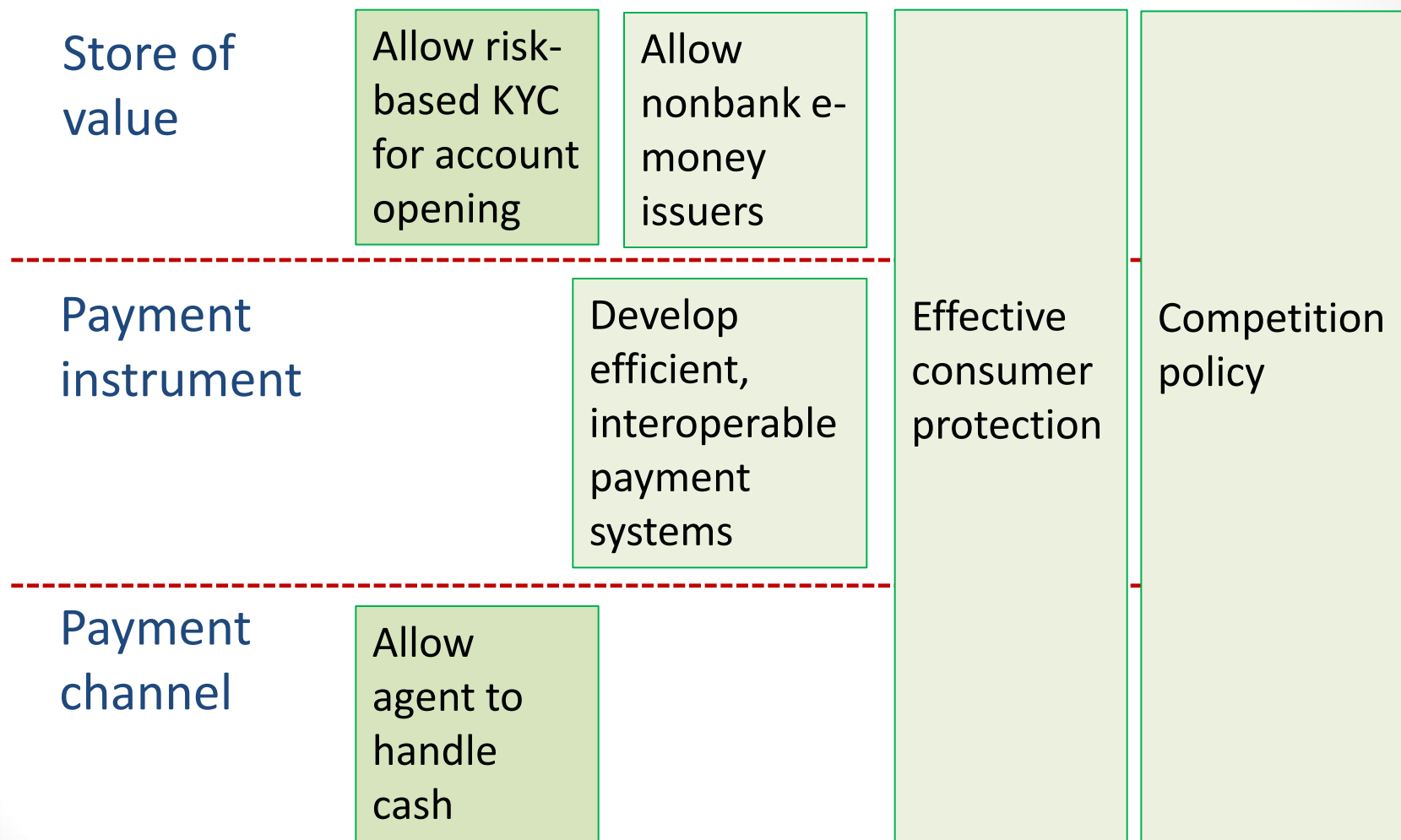
Payment Behavior of Small Businesses in the Philippines*

- ✓ Perception for paper-based payments: **Cash is most trusted** for payments, while physical loss of money before payments is a critical risk.
- ✓ Perception for digital payments: hesitate to use digital options because of:
 - (i) **insufficient knowledge** on what exactly they are & how to use them
 - (ii) **risk aversion** to using new items given their low income status
 - (iii) **failed marketing** (no customer centricity) or small businesses not targeted as digital payment clients.
- ✓ Online payments can be utilized as manager's socioeconomic condition increases.
- ✓ **Value proposition** on digital payments needs to be strengthened to attract small businesses to digital options.

* Interviewed six small businesses in Ortigas (phone accessories, pharmaceutical & daily goods, shoes, jewelries, garment, and bakery), July 2017.

Policy and Regulations for DFSs

What Regulations Enable Digital Financial Services?



Policy and Regulations for DFSs

G20 Principles for Innovative Financial Inclusion (2010)

1. Leadership

2. Diversity

3. Innovation

4. Protection

5. Empowerment

6. Cooperation

7. **Knowledge**

- Evidence-based policy
- Measure progress
- consider an incremental “**test and learn**” approach by both regulators and service providers

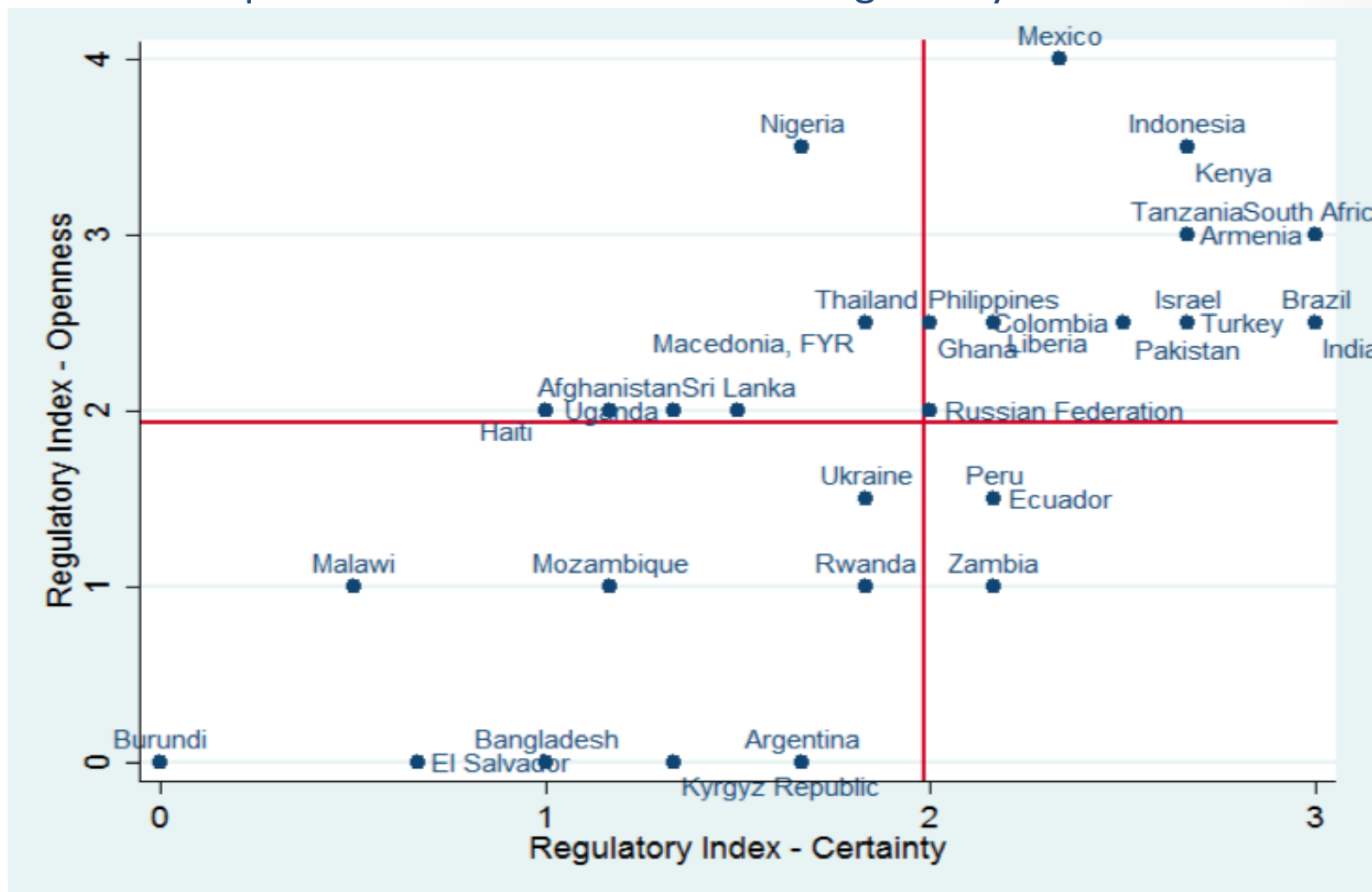
8. **Proportionality**

Consider “**risks & benefits**” involved in innovative products & services based on an understanding of the gaps & barriers in existing regulation

9. Framework

Policy and Regulations for DFSs

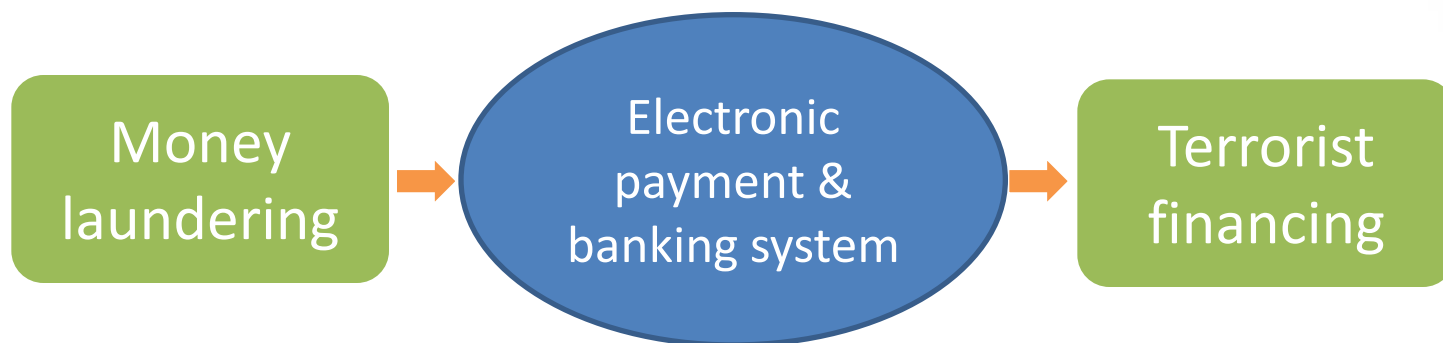
Comparison of Enablement across Regulatory Environments



Source: Financial Access Initiative. 2013. Regulatory regimes matter for mobile money usage.
<http://www.financialaccess.org/blog/2015/7/31/regulatory-regimes-matter-for-mobile-money-usage>

Policy and Regulations for DFSs

Financial Integrity



Risk-based Approaches to New Payment Methods

	CDD	Record keeping	Value limits	Funding method	Geographic limits	Usage limits	Service segmentation
Higher risk if	Anonymous	E-records not retained or accessible	No limits	Anonymous sources	Transfer/with drawal allowed across border	High # of acceptance with unlimited withdrawals	Several independent providers
Lower risk if	Identified/verified	Retained & accessible	Amount limits	Through accounts at regulated FIs	Only domestic use	Few/limited withdrawal options	Whole process by one service provider

Source: Financial Action Task Force (FATF). 2013. CDD = customer due diligence.

Policy and Regulations for DFSs

- Fostering competition

- ✓ Regulators' concerns: (i) anti-competitive practices of a dominant player, (ii) collusive practices of existing players, and (iii) regulatory arbitrage across different payment service providers.
- ✓ Require **inter-regulatory coordination** among banking, teleco, and competition regulators.

- Consumer protection

- ✓ Financial regulators' approaches to consumer protection evolved but still inadequate as digital services proliferate.
- ✓ AFI regulator guidelines for protecting DFS customers (2014)
 - Consumers receive **sufficient info** to make informed decisions.
 - Rules prevent **unfair practices** by financial service providers.
 - Consumers have access to **recourse mechanisms** to resolve disputes.
- ✓ GSMA Mobile Money Operators Code (2014)

Policy and Regulations for DFSs

- Regtech
 - ✓ “A subset of fintech that focuses on technologies that may facilitate the delivery of regulatory requirements more efficiently or effectively than existing capabilities” (UK-Financial Conduct Authority, 2015)
 - ✓ Oversight regime is changing from reporting to access to data.
 - ✓ A number of software vendors selling “regtech” solutions.
 - Regulator-facing: work flow & process automation, e.g., VIZOR (online application to manage licensing & reporting)
 - Industry-facing: reduce compliance cost & enable compliance, e.g., Trulioo (instant electronic identity verification service helping business comply with AML & KYC)
 - ✓ New privacy & data protection issues.
 - ✓ Require new skills & mindset for the staff of regulators.

Financial Inclusion in the Digital Age

- Definition

“Households and businesses have access and can effectively use appropriate financial services. These services must be provided responsively and sustainably in well regulated markets” (CGAP)

- National strategy

- ✓ Common policy goal: economic growth, transaction efficiency, and poverty reduction.
- ✓ NSFI: IND (2014), INO (2012), MON (2016), MYA (2013), PAK (2015), PNG (2013), PHI (2015), and VAN (2013).

- Condition

- ✓ 2 billion excluded adults: half in developing Asian countries, women, no wage employed, income gap wider for bottom 40% of households.
- ✓ 2/3 of the world is banked (62% in 2014), of which **1%** with mobile money account only and **1%** with both bank & mobile accounts.
- ✓ Among banked, half of digital accounts inactive & half of active accounts empty.

Financial Inclusion in the Digital Age

Why are so many digital accounts empty?

- Digitizing payments is different from digitizing money.
 - ✓ Payments as flow but storage of value as friction.
 - ✓ People see accounts as a pass-through for payments (single purpose).
- Lack of intuition & interpretation
 - ✓ Various informal savings mechanisms while digital account as one pot.
- Wrong terminology
 - ✓ Savings as money not used and as virtue \Rightarrow savings for future payments (e.g., school fees)
- Lack of universality (impractical)
 - ✓ Cash as universal acceptance toughly acts to beat digital money.

Preconditions for cashlessness

- One digital money (interoperability)
- Broad acceptance (ecosystem)
- Perform as advertised (trust)
- Intuitive money tools (application)

Financial Inclusion in the Digital Age

- How digital financial services can be made to connect more directly into the daily lives of poor people with precarious, uncertain incomes who do not have the benefit of financial predictability?
- ✓ **Only 1%** of poor households using digital payment services while 96% using cash; digital financial service providers have so far failed to justify value additions to target customer groups.
- ✓ Kenya Financial Diaries project: “getting financial products much closer to real life needs” to attract more customers to emerging financial services like digital finance.
- Is digital financial services far beyond the dream for the ultra poor in access to finance?
- ✓ Data connectivity is key.

Financial Inclusion in the Digital Age



Emily's home, Kashiglahan (field visit on 19 Aug 2017)

- Husband works as construction worker; P500-600/day, 10-15 days working/month; three children.
- No bank account; no informal borrowing; small savings in a money box at home.
- Hold smartphone & tablet.
- **Internet** available: P7/week paying to neighbor; for school homework & games.

Implications in Asia

1. Better understand the conditions on digital financial services (DFSs)

- E-money has failed to generate “trust” to use among people.
- Cryptocurrency not well utilized for payments due to its price volatility.
- Consider the way to use more E-money as store of value for digital payments.

2. Diversify demand-oriented DFSs

- Develop products linked to important life events of people, e.g., schooling, marriage, and funeral.
- P2P lending platforms as business partners with banks.
- Elaborate savings products for the poor to make future payments.

3. Develop infrastructure for DFSs

- The RTGS system allowing both banks and NBFIs to participate directly (e.g., PhilPaSS in PHI)
- A single national payment switch (e.g., NRPS in PHI)
- A digital identity system (e.g., Aadhaar in IND)
- Open API (e.g., IndiaStack in IND)

Implications in Asia

4. Regulation as an enabler

- The test and learn approach used to justify regulatory inactivity needed to be amended.
- Coordination required among concerned regulators, given the overlapping jurisdictions in DFSs.
- Strengthen the enforcement of regulations.
- Develop new skills and change mindset in DFSs for the staff of regulators.
- Regulatory process efficient further through *regtech*.

5. Policy actions to facilitate the shift from cash to digital

- Promote evidence-based policymaking to fill the gap between the reality and the concept.
- Strengthen financial integrity to keep a financial system transparent in AML-CFT.
- Address consumer protection and facilitating competition further.
- EMV migration, given the increased security concerns.
- Enhance digital finance literacy among people, including the poor.
- Debate: cash demonetization as a trigger to promote digital money?
- New issues: (i) inflow of refugees and migrants into Asia and (ii) access to DFSs for the ultra-poor.

Thank you for your attention.

For further questions:

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