



FED Seminar on ePayments and Financial Inclusion

Trade and Regulatory Frameworks for Digital Financial Services

13 March 2017, Geneva, Switzerland



Mina Mashayekhi
Head

Trade Negotiations & Commercial Diplomacy Branch

DFS and development

Access to financial services and ICT is recognised in SDGs

- Goal 1 - ending poverty: 1.4 (...) ensure that all men and women (...) have access (...) to basic services, (...) new technology and financial services (...);
- Goal 2 - ending hunger: 2.3 (...) double the agricultural productivity and incomes (...) through secure and equal access to (...) financial services (...);
- Goal 5 - achieve gender equality: 5.a Undertake reforms to give women (...) access to (...) financial services (...).
- Goal 8 - economic growth and employment: 8.3 (...) support productive activities, decent job creation (...) including through access to financial services; 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all;
- Goal 9 - infrastructure, industrialization and innovation: 9.2 Increase the access (...), in particular in developing countries, to financial services (...); 9.c (...) increase access to ICT and (...) universal and affordable access to the Internet (...);
- Goal 10 - reduce inequality: 10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations; 10.c (...) reduce to less than 3 per cent the transition costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent.
- Goal 17 - means of implementation: 17.14 Enhance policy coherence (...); 17.18 (...) enhance the use of (...) ICT.

DFS and development

Financial inclusion is key for income and welfare opportunities:

- Financial services play an important multidimensional role:
 - Encompass activities with high value added and qualified jobs;
 - Provide inputs for all economic sectors & individuals: facilitate transactions; mobilize savings; insure & reduce risks; allow credit for productive investments in the real economy; facilitate trade (e.g. letters of credit, insurances);
- Financial inclusion, the “effective access and use by individuals and firms of financial services from formal providers” contributes to poverty reduction, and economic and social development:
 - Basic payment, savings and insurance services benefit the poor;
 - Addresses development inequalities for firms: in developing countries only 34% of firms have a bank loan (51% in developed countries) and informal firms (80% of MSMEs) face major challenges in financial access;
 - Maximizes the developmental impact of remittances by formalizing their flows, reducing transfer costs and facilitating their investment into productive activities;
- Financial inclusion needs to consider trade in financial services:
 - Cross-border exports in financial services reached around \$540 billion in 2015 with an annual growth rate of 7% for 2005-2015. Developed economies account for 84% of global exports but exports in developing countries grew faster (12%) than in developed economies (6%).



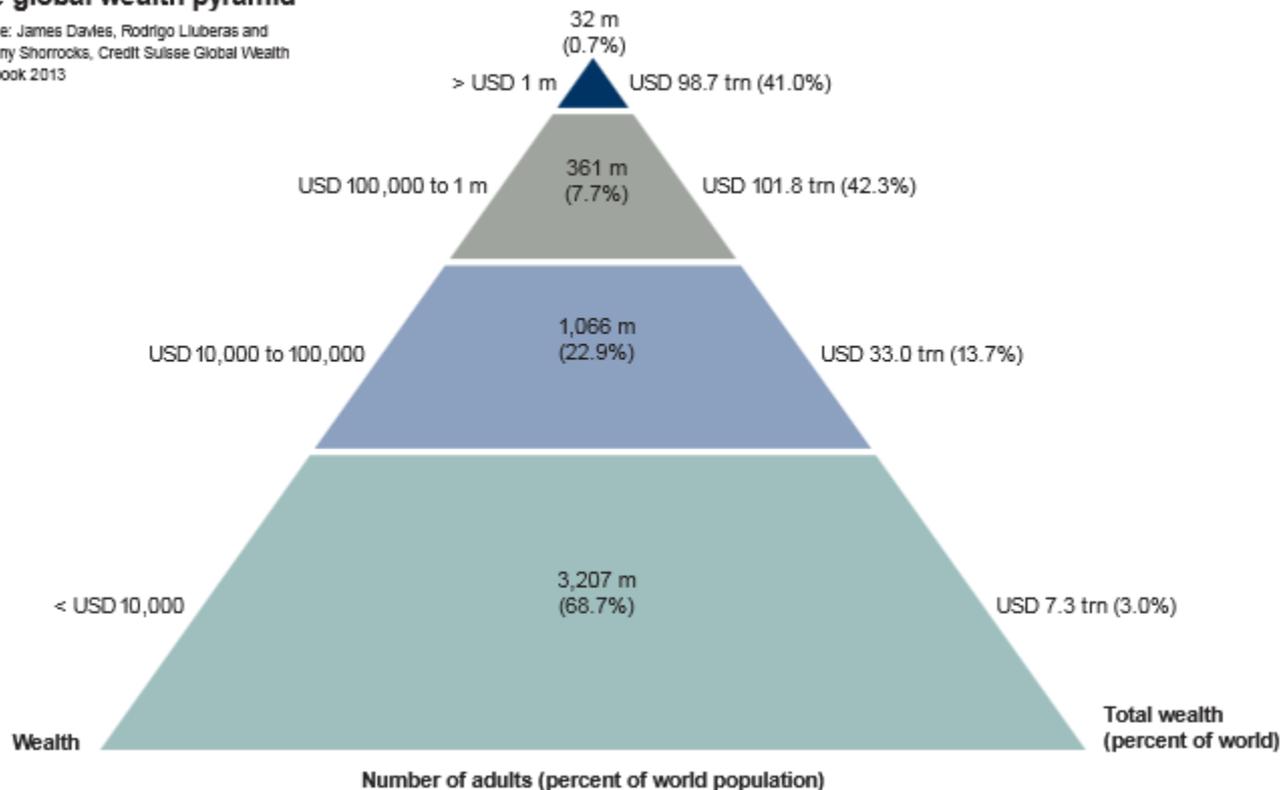
DFS and development

Income disparity is a global risk affected by financial exclusion:

- 83.3% of total wealth is concentrated on 8.4% of the world population.

The global wealth pyramid

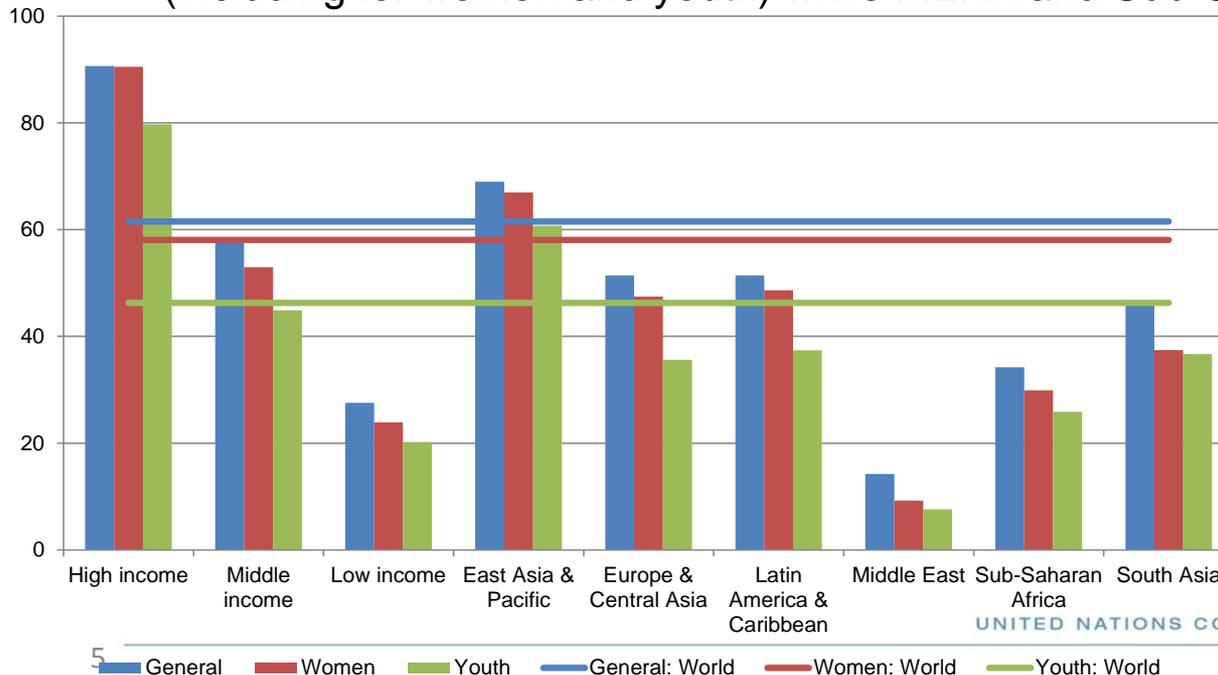
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2013



DFS and development

Financial inclusion has progressed but gaps remain

- **By gender and age:** in 2014, 62% of adults had a bank account, above 50% in 2011; women are behind (more in South Asia) with 58%, above 47% in 2011; youth was also worse off (more in Europe & Central Asia) with 46%, above 37% in 2011;
- **By income level:** the share of adults in developed countries that have a bank account is much higher than that of developing countries; middle income countries have an account penetration rate that doubles the one of low income countries;
- **By region:** Asia and the Pacific exceed the global average of account penetration (including for women and youth) while MENA and Sub-Saharan Africa lagged behind.



People with a bank account by region and income level, 2014 (%)

Source: UNCTAD based on the World Bank's Global Financial Inclusion Database
 Note: adults are people over 15 years old and youth are people between 15 and 24 years old



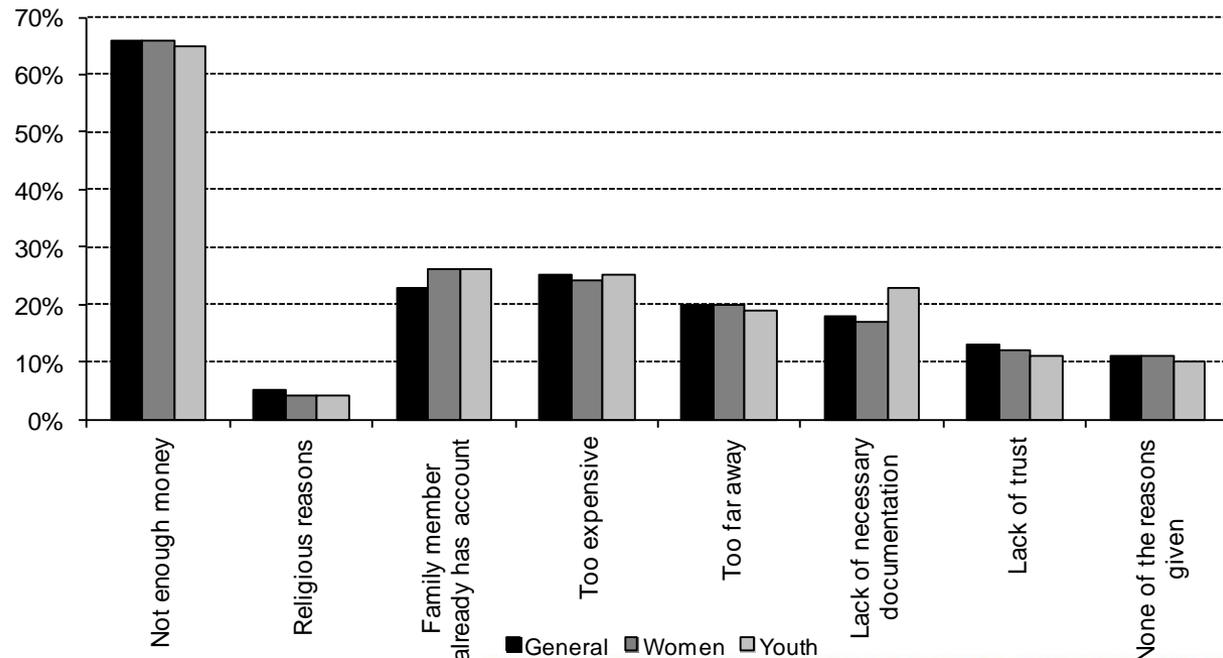
DFS and development

There is a variety of reported obstacles for financial inclusion:

- No demand for bank accounts from people across gender, age groups and geography, and firms:
 - Lack of disposable money is a main reason for having no account;
 - Exclusion for physical, economic, administrative and psychological barriers such as cost, travel distance, paperwork and lack of trust in banking system;
 - These barriers mainly affect the poor, women, youth, rural population, informal workers and migrants.

Self-reported barriers to use of formal accounts, 2011 (%)

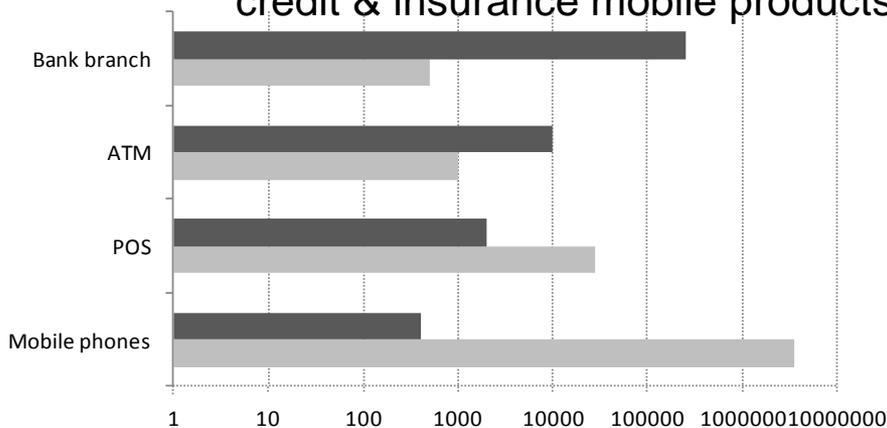
Source: Demirguc-Kunt et al (2012)



DFS and development

Digital financial services play a key role in financial inclusion

- Builds on ICT to reduce infrastructure costs and increase coverage:
 - 2 billions lack a bank account but, of these, 1.6 billion access to a mobile phone;
 - Telecom and ICT services allow for more productivity, efficient and automated processes, access to information, reduced production and transaction costs;
 - Effects are enhanced when it comes to international trade where information and connectivity barriers are traditionally higher. ICT-enabled solutions allow for better connections; knowledge on the traded product and alternatives; payment solutions; and, in some cases, facilitate distribution services;
- DFS have positive externalities: incentivises use of banking services by establishing linkages; information on mobile money usage may help credit scoring;
 - Is more gender neutral and youth friendly. Allows for sectoral development (e.g. credit & insurance mobile products promote agricultural development).



Cost of infrastructure (\$US) and number of points of presence (thousands) by channel of delivery

Source: UNCTAD based on the CGAP. Note: logarithmic scale.



DFS and development

DFS are not a panacea for financial inclusion

- Lessons from UNCTAD expert meeting on financial inclusion:
- The infrastructure gap (e.g. ICT, energy) financing must be bridged:
 - The estimated annual global infrastructure investment need is about \$3.7 trillion, and only a \$2.7 trillion is currently met annually, resulting on a \$1 trillion gap;
- Mobile money DFS still account for a smaller value of transactions;
- High access rates does not imply high usage: in Malawi, users are mostly interested in buying mobile airtime and cash-out is limited due to low agent liquidity;
- Engagement between regulators/operators for increased usage:
 - Poor people without any access to technology are not financially included;
 - Solutions may not be suitable for all (women, youth, elderly, with disabilities, ...);
- Success stories may be hard to replicate:
 - Results in Kenya depend on critical mass of users/specific regulatory framework;
 - Choice of model (bank or MNO centric) relates to the country specific regulatory situation. The focus should be in enabling innovation without prescribing models;
- Consider risks related to fragmentation of standards:
 - Fragmentation limits proliferation of technologies that require scale. Decisions on technology convergence /coexistence should attend market needs but, above all, ensure that standards do not become barriers for developing country operators.



Payment services in DFS

Bulk payments through digital financial services

- Bulk payments (e.g. G2P subsidies and B2P payroll) increase digital financial inclusion;
- Development importance of digital bulk payment services:
 - Decrease leakage (money lost in cash transfer delivery could be 70-85%);
 - Improve identification, traceability, and availability of data for evaluation;
 - Reduces the logistical cost and security issues of transferring cash;
 - Increases transparency and reduces corruption risks;
- Remaining challenges specific to bulk payments:
 - Issues of moving from a cash programme: cleaning enrolment data, gathering KYC information, system integration and reconciling payment records, ...;
 - Interoperability to facilitate routing and adoption by users.



Payment services in DFS

B2B payments increase digital financial inclusion

- Systemic importance for DFS and digital financial inclusion:
 - Digital liquidity, lower cost of doing business, MSMEs development/formalization;
- Allows for the participation of MSMEs, small buyers and suppliers;
 - Buyers gain more control over the timing of disbursement; eliminate the need to be physically present at delivery; build a digital history of timely payment (improving credit worthiness); increase transparency and security of payments; data on payments can be used to manage relationships, track payments, facilitate repeated payments, and allow analysis and better business decisions; facilitate accurate accounting and tax and regulatory compliance;
 - Suppliers gain faster payments; improved security; data to manage relationships, track payments; increase client base (distant and digitally-focused customers); build a digital history (improving availability of e.g. receivables financing);
- Remaining challenges specific to B2B payments:
 - Difficult adoption among companies wanting to avoid taxes and regulation, cash-starved businesses and users of post-dated checks (with ePayments, money leaves accounts faster which may lead to reduced working capital);
 - Facilitated business/credit could lead to overextension and usurious practices (with facilitated ePayments and credit processes and potentially improved credit worthiness, risk of over indebtedness may increase).



Payment services in DFS

Cross-cutting remaining challenges

- Availability and reliability of energy and ITC infrastructure services;
 - Data privacy issues related to collecting and processing data;
 - Fraud and security risks to payment systems;
 - Lack of technological knowledge is a limitation and requires training;
 - Liquidity to agents and to users that still cash-out is relevant;
 - Resistance to change and bureaucracy linked to Know Your Customer (KYC) requirements;
 - Sound agent networks, and interoperability remain critical;
 - Proportional regulation is required to involve disadvantaged users (poor, rural areas, migrants, MSMEs, ...).
-
- Payment services and DFS in general depend on trade and investment and on competitive and interoperable markets and thus require a sound trade and regulatory frameworks.



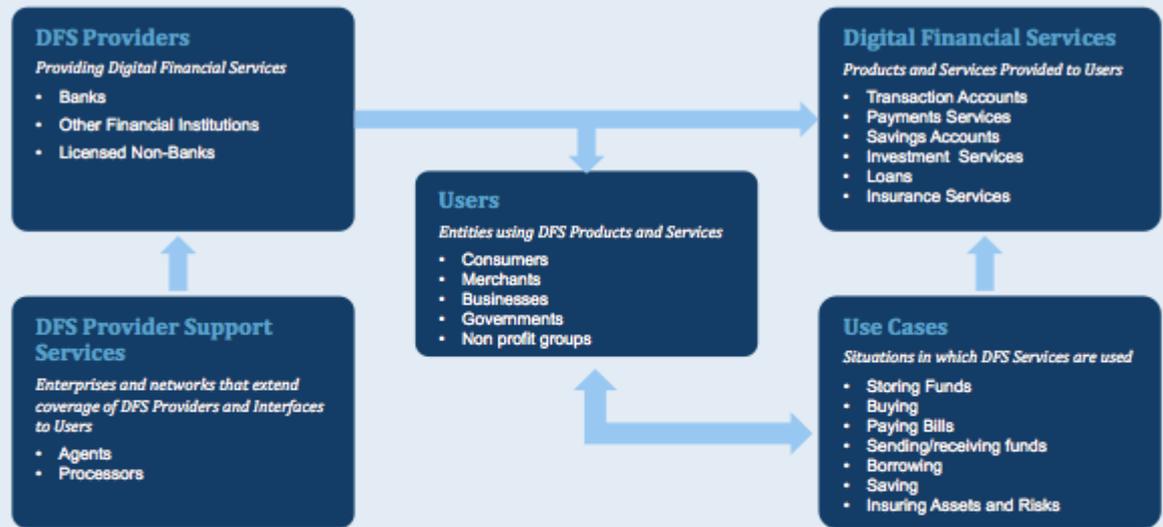
Trade & regulatory frameworks for DFS

The enabling ecosystem for trade and to attract investment in DFS

- Developing DFS, including through investment and trade, requires:
 - An enabling environment that consists of laws and regulations; national policy and institutional frameworks; standards; regulatory and supervision institutions;
 - Infrastructure readiness that consists inter alia of energy and ICT availability; identity systems; payment systems; voice and data communication networks.

The Digital Financial Services Ecosystem

Enabling Financial Inclusion and Building the Digital Economy through Availability, Affordability, Convenience and Quality



The Digital Financial Services Ecosystem

Source: Focus Group on Digital Financial Services (2016), The Digital Financial Services Ecosystem.

Infrastructure Readiness

Technical Systems to Enable Digital Financial Services

Payments Systems

Energy Availability

Voice and Data Communication Networks

Identity Systems

Enabling Environment

Regulatory, Supervision and Standard Setting Enabling Environment (national, regional and international)

Regulators

Standards Bodies

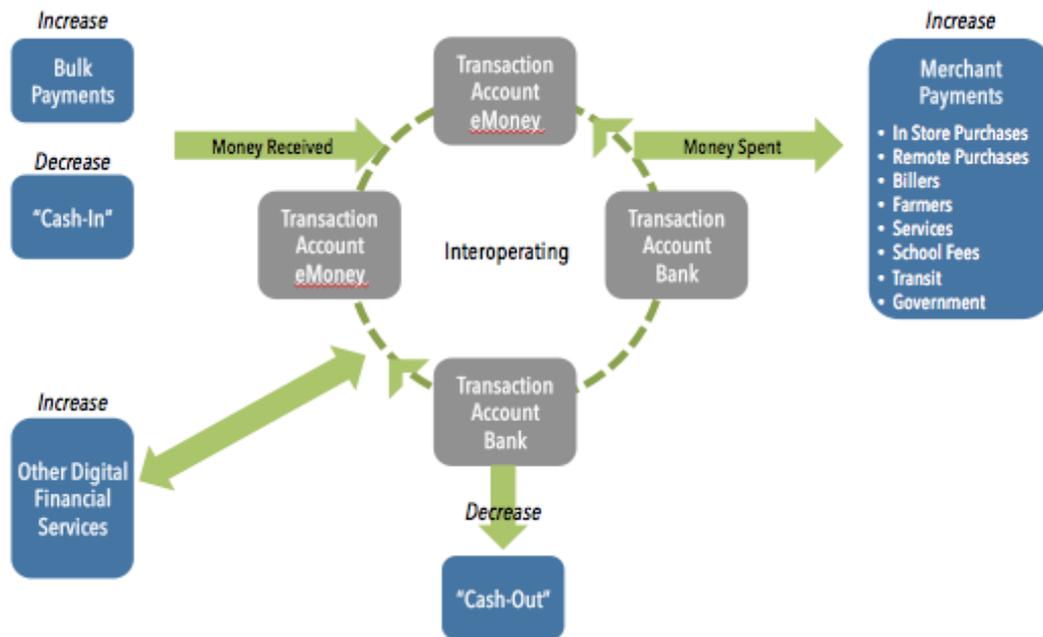
Financial Inclusion Policies

Industry Groups

Trade & regulatory frameworks for DFS

Digital liquidity is required for trade and investment in e-payment

- Digital liquidity (keeping money in eMoney form rather than cash), is enabled by:
 - Delivery of bulk payments (e.g. G2P, B2P) to enable adoption of digital accounts;
 - Merchant services (payment acceptors) to receive payments of digital wallets;
 - Interoperability to enable "ubiquity" to make payment to any receiver regardless of who is providing the transaction account for that receiver;
 - Additional financial services, such as savings, lending and investing;
 - Sound and competitive trade and regulatory frameworks.



Reaching Digital Liquidity

Source: Focus Group on Digital Financial Services (2016), The Digital Financial Services Ecosystem.

Trade & regulatory frameworks for DFS

Coherent regulatory frameworks to harvest the potential of DFS

- Lessons from UNCTAD's MYEM Trade, Services and Development:
- Multiple regulatory objectives:
 - Address information asymmetry; moral hazard (indebtedness); imperfect competition (market concentration / undersupply in rural areas and to the poor);
 - Balance between efficient markets and universal, equitable & affordable access to financial services, pursuing simultaneously inclusion, stability, and integrity;
 - Allow competing providers / consumers to benefit from technological innovations;
 - Competition, consumer protection, level playing field, access to resources;
 - Diversification to reduce vulnerability to external shocks / disruption of supply;
- Multiple levels of regulatory coherence are required:
 - Envisage synergies in otherwise competing objectives of financial stability (macroprudential objectives), financial security and financial inclusion;
 - Seek proportionality as excessive regulation may hamper financial inclusion. E.g. stringent anti-money laundering / combating the financing of terrorism (AML/CFT) requirements may create bias against low value added customers;
 - Example in the Philippines: requirements on risk management, capital, liquidity and others were applied proportionately to non bank providers. Ring fencing of e-money operations and transaction limits were applied;
 - Institutional coordination between area and sector regulators, between financial and telecommunication regulators, and between regulators of several countries;

Trade & regulatory frameworks for DFS

Coherent regulatory frameworks to harvest the potential of DFS

- DFS require coherence between regulatory objectives:
 - Regulatory focus includes competition, network interoperability, innovation, licensing for a level playing field, and information security risks;
 - Interoperability should emerge as a market solution but if regulatory intervention is required, it should neither be too late to avoid entrenched monopolies nor too early to avoid deterrence of innovation and investment;
 - Example: inclusion / competition goals were balanced in regulating M-Pesa. Considering high development costs, regulators allowed a 7 year dominant position through exclusivity arrangements. The system opened to competition in 2014, reducing transaction costs from \$4.91 to \$0.43;
- Regulatory principles:
 - Similar regulations for similar functions; risk-based regulations; and balance between ex-ante and ex-post regulations;
- Consumer protection needs to consider the whole DFS value chain:
 - Issues include fraud, transparency with regard to conditions and fees, lack of adequate dispute resolution and alternative recourse, network downtime and security; data privacy;
 - Protection of bank trust accounts, where eMoney is backed, is important for consumers to recover money in case of bankruptcy.



Trade & regulatory frameworks for DFS

Trade and regulatory coherence for DFS

- Lessons from UNCTAD's MYEM Trade, Services and Development:
- Trade liberalization has potential and risks for DFS:
 - Trade, under right conditions, may promote supply, efficiency & competitiveness;
 - Trade dimension of effective regulation is relevant for financial inclusion, for instance through universal access requirements, particularly when there is substantial presence of foreign providers in domestic financial markets;
- Smart regulations are a precondition to trade liberalization:
 - Trade liberalization needs to be adequately coordinated, paced and sequenced with domestic regulation to promote DFS;
 - Lessons learned from recent crisis should be considered in negotiations, to determine adequate levels of policy space and regulatory/institutional framework.
- De-risking has a development impact:
 - Some financial institutions terminate or restrict services, including withdrawing correspondent banking relationships, to avoid rather than manage risk;
 - Concerns increased with more stringent anti-money laundering / combating the financing of terrorism (AML/CFT) requirements but wholesale de-risking is not consistent with the advocated risk-based approach;
 - Regulatory & supervisory authorities should enforce effective risk management.



Trade & regulatory frameworks for DFS

Best practices on risk management

- Regulatory frameworks need to address challenges on:
 - Exchange controls licensing;
 - Varying anti-money laundering / combating the financing of terrorism (AML/CFT) and know your customer (KYC) requirements;
 - Central bank policies around clearing and settlement;
- Specifying KYC requirements:
 - Tiered access to avoid exclusion from undocumented (e.g. rural, migrants);
 - National identity schemes are beneficial to unbanked. Biometric components have potential to increase security and avoid payments to "ghost recipients";
- Requiring AML/CFT monitoring of suspicious activity:
 - Proportional approach is required not to discourage or impede usage from disadvantaged profiles, and not to make operational costs impeditive;
 - Effective risk management, rather than avoidance is needed (e.g. de-risking);
 - AML/CFT reporting of suspicious activity required even for lower-risk accounts;
- Agents can support the appropriate user identification/registration:
 - Agents should be properly trained and monitored to follow customer due diligence procedures upon account opening (and as required for cash-in, cash-out, payments, etc.).



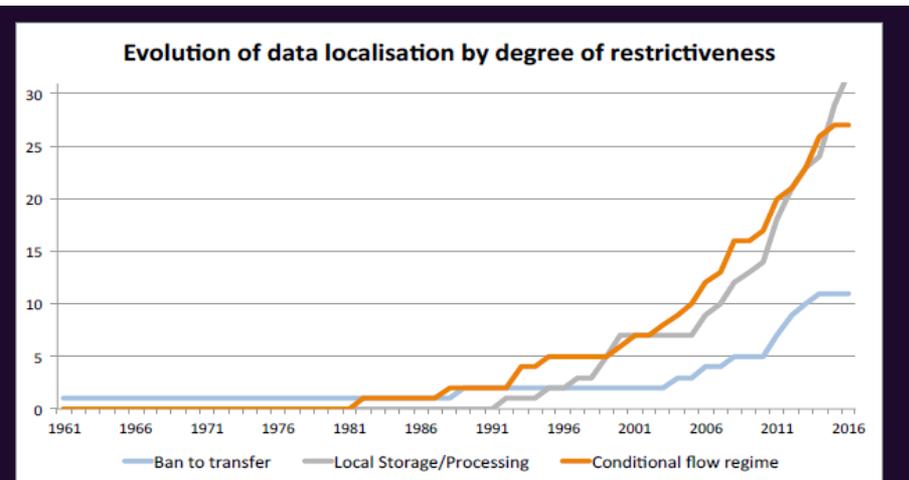
Trade & regulatory frameworks for DFS

Trade and regulatory coherence for DFS

- Data flows are increasingly important for DFS:
 - Flows grew 45-fold in only a decade, and might grow another nine-fold by 2021, and have had a larger impact on global growth than traditional flows of goods;
- Balance between data flows for trade and privacy objectives:
 - Policy objectives (cyber security, data privacy and protection, IPR protection) may lead to regulations such as commercial presence/localization requirements;
 - RTAs increase binding commitments but concerns remain on overly aggressive provisions. Data protection issues may be addressed by mutual recognition of consumer protection systems instead of local presence requirement;
 - Important to determine the best technological and regulatory means of ensuring policy objectives without excessive burden on trade.

Evolution of data localisation by degree of restrictiveness

Source: WTO, based on ECIPE, Digital Trade Estimates Database.



Note: The graph does not include four measures whose date of entry into force is unknown.

Trade & regulatory frameworks for DFS

Main recommendations to policy makers and regulators

- Lessons learned from the ITU Focus Group on Digital Financial Services, chaired by the Gates Foundation:
- Support an open ecosystem for DFS that promotes innovation and competition;
- Should have accurate and timely information on direct and indirect prices consumers pay to access DFS and ensure market prices are not a barrier to use;
- Encourage merchants and other payment acceptors to accept ePayments;
- Encourage identity systems to help account opening, ePayments and security;
- Public support to DFS is necessary (e.g. digitization of Government services, G2P bulk payments, education and infrastructure policies);
- Leverage existing infrastructures and capabilities to avoid duplication of costs, including using postal networks to support the DFS ecosystem.





Thank You

Mina Mashayekhi

Head, Trade Negotiations and Commercial Diplomacy Branch

DITC, UNCTAD

mina.mashayekhi@unctad.org

More information on services, trade and development:

<http://unctad.org/en/Pages/DITC/Trade-in-Services.aspx>

More information on financial inclusion:

<http://unctad.org/en/pages/MeetingDetails.aspx?meetingid=495>



UNCTAD