BASEL III, DERISKING, DIGITAL FINANCIAL SERVICES AND SMALL & MEDIUM ENTERPRISES (SMEs)

WHAT'S HAPPENING IN THE MARKETS TODAY? HOW SHOULD WE RESPOND?



Bill Haworth February 1, 2017



Introduction

- IFC believes that SMEs are essential for economic development and job creation
- However, Basel rules and KYC/AML rules are causing a pull-back by Global Banks from smaller EMs – This is potentially threatening international clearing and settlement activities, correspondent banking networks and Trade Finance
- In addition, Basel rules seem poised to require higher risk weights on SMEs and Trade and this seems to be suppressing access to finance for SMEs
- This combination of higher capital, higher KYC/AML costs, and reduced network effects seems poised to reduce SME access to credit, or greatly increase the price and reduce demand
- This problem is much admired, but is there something we can do about it?

Two Questions:

- 1. Do you agree this is a problem in your market? Capital weights? AML/KYC? Reduced correspondent network? Increased transaction costs?
- 2. What might IFC do to help resolve these problems? With International Regulators? With Local regulators? As correspondents?



The Financial System Is Facing Structural Changes Driven by 5 Fundamental Forces...

- **1. Re-regulation** following the financial crisis aimed at reducing risks and **increasing capital** cushions and lowering leverage. This is **reducing profitability** for the entire regulated industry
- 2. Increased scrutiny and costs related meeting regulatory requirements around Know your Customer (KYC), Anti-money laundering (AML), Combatting the Financing of Terrorism (CFT), and dealing with offshore financial centers this is raising costs for the entire industry and also reducing profitability
- 3. Increased use of **digital currencies** and the move away from cash this is increasing inclusion and opening opportunities for Fintech Companies with mixed impact on banks and other FIs. Technology is reducing entry barriers in banking, but it is also increasing the strategic penalties from lock-in and creating tension between high cost branches and low cost internet delivery approaches. Adding to the complexity, are issues around differential adoption rates in different segments in different countries. In the end, Citibank estimates that we should expect a 30% decline in core revenues, and a 44% market share shift over the next 10 years. This is significant, and there will be clear winners and losers from this disruption.



... Financial System Is Facing Structural Changes Driven by 5 Fundamental Forces....

- 4. The emergence of **thousands of Fintech companies** that offer a wide array of both disruptive and complementary products and services that can dramatically change the product and delivery economics for customers and FIs – this is eroding margins in banks and other FIs, but also offers cost reduction opportunities that will enable some FIs to become clear cost leaders in their chosen fields.
- 5. The proliferation of **Big Tech "platform business models**" that are changing channels and distribution economics in radical ways that also effect finance this is providing a potential substitute to many FI functions. Looking at the evolution of Alibaba and Ant Financial in China, this seems to be the most fundamental threat to incumbent FIs and Fintechs, and this is just starting...

We believe that these trends are likely to accelerate and that this will lead to a **significant consolidation of banks and other FIs and globally and to the emergence of new financial players** particularly in the Big Tech space and to a lesser degree in the Fintech space going forward. We think this process will be very disruptive and will lead to a redrawing of the map of the global financial system. This is already underway.



SMEs: Crucial to development, lacking access to finance

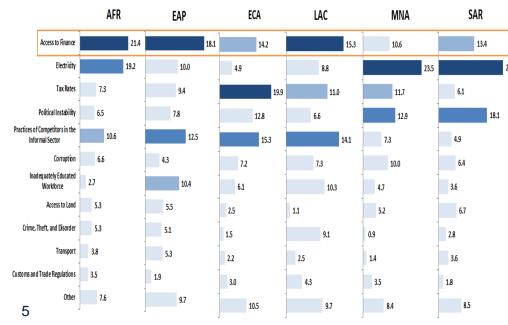
SME growth is directly linked to job creation, poverty reduction and shared prosperity

SMEs account for:

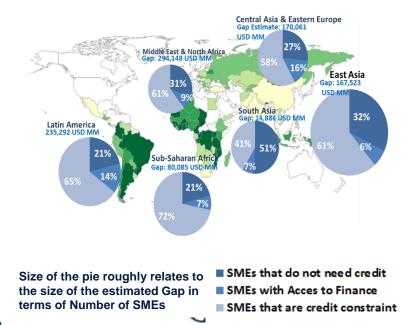
- ✓ over 90% of formal jobs in lower income countries
- ✓ 80% of new formal jobs in emerging markets

SMEs LACK ACCESS TO FINANCE:

biggest obstacle for SMEs in over 70% of countries



SMEs ARE UNDERSERVED: 60% of formal SMEs are underserved globally



Sources: World Bank Enterprise Survey; IFC Enterprise Finance Gap Database (2011)

How Digital Financial Services (DFS) can help SMEs

Digital finance could increase the GDPs of all emerging economies by 6 percent, or a total of \$3.7 trillion, by 2025

Digital finance could provide access to **1.6 billion** unbanked people, more than half of them women, increasing markets for SMEs.



1.6 billion newly included individuals

\$4.2 trillion

\$2.1 trillion

Expanding customer base could sustainably increase deployable deposits by as much as **\$4.2 trillion**.

in new deposits

annual reduction in government leakage

Governments could gain **\$110 billion** per year by reducing leakage in public spending and tax collection with digital vs paper currency.

in new credit

McKinsey&Company | Source: McKinsey Global Institute analysis

An additional **\$2.1 trillion** of loans to individuals and SMEs could be made sustainably, as providers gain newfound ability to assess credit risk for a wider pool of borrowers quicker, cheaper, and more effectively.



What DFS Can Bring

| TRANSPARENCY | ID numbers, biometrics and distributed ledgers can make personal identity, asset identity, transactions records, and validation cheap, easy and effective |
|------------------|---|
| SECURITY | Encryption and distributed information can ensure privacy, reliability and redundancy (backed-up, immutable records). Digital currency is safer than cash |
| STANDARTIZATION | Technology requires standardization and this drives interoperability, efficiency and reinforces transparency. Digital currency is easier to transfer |
| INFORMATION | Digital Financial information available for lenders/investors Assets and liability records available for lenders Links to credit bureaus and collateral registries decrease risks and increase credit quality |
| ACCESSIBILITY | Web-based applications can make different levels of data available to different users at different security levels, everywhere |
| SPEED & ACCURACY | Rules based decisions and artificial intelligence can greatly reduce processing times and focus human intervention on only critical decision points –reducing costs, increasing accuracy and speeding decisions |
| COMPETITION | With transparency, security, standardization and accessibility, competition can increase and the supply of capital available to SME can surge |
| 7 | |

Areas Where Technology Can Help SMEs

DIGITAL BUSINESS RECORD ACCESSIBILITY SME AND SME OWNER IDENTIFICATION Individual owner/shareholder IDs Registrations, Tax IDs, ownership, management, Company IDs linked to individual Biometrics operating locations, asset locations, credit Meeting KYC/AMC transparency standards information TRANSACTION RECORD ACCESSIBILITY AND **BUSINESS PERFORMANCE VALIDATION OWNERSHIP** Financial records can be available on-line and can Can make secured transaction processing much cheaper, faster and more reliable be audited and/or cross-validated with supply- "Block chain or :distributable ledgers" chain data on purchases, sales, inventory levels,

Technology can support asset trading and transfer

FINANCIAL TRANSPARENCY

- Linked to tax compliance, insurance, payrolls, etc.
- Meet global KYC/AML standards

payables, etc. This will increase business partners

and lender confidence, reduce risks and increase



supply of credit

Role of Governments

Introduce policies that ensure universal internet access

Digital IDs for all individuals and Legal Entitiv Identifiers (LEIs) for all businesses

Financial statements and tax records for all businesses available through **credit bureaus** and other providers

WHAT GOVERNMENTS CAN DO

Adopt national "**digital currencies**" for all transactions, eliminate or greatly reduce cash

Link individuals to all financial transactions and to all LEIs

Private credit bureaus, collateral registries, and assurance providers as part of process

Financial transparency and disclosure for all **public figures**

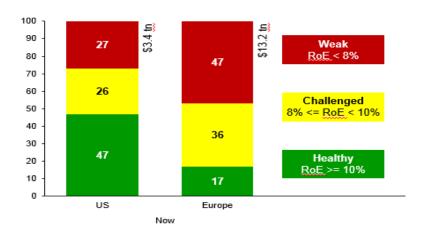
Assure **requirements for all formal businesses**

Adopt **"big data" approaches** to fraud detection

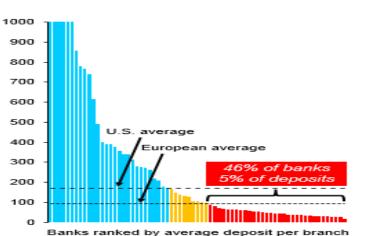
Outlaw informality, enforce tax compliance (linked to eliminating cash)

Long Predicted, the Decline of Branch Banking May Finally Be at Hand... Except in Africa and Asia...

Share of Banks with Sustainable Profitability (percent of total assets)



Low Bank Branch Efficiency



(millions of U.S. dollars)

Figure 63. Traditional Bank Channels by Region per 100k People

| | Developing | | | | | | |
|--------------------------|--------------------|-------------------|-------|--------|---------------|-----------|--|
| | OECD (High Income) | Sub-Sahara Africa | LatAm | Europe | /Central Asia | East Asia | |
| ATMs | 75.8 | 5.2 | Z | 13.3 | 52 | 23 | |
| Bank Branches | 25.6 | 3.9 | | 19 | 21.4 | 9.5 | |
| Total | 101.4 | 9.1 | 6 | 52.3 | 73.4 | 32. | |
| Source: Citi Research, V | | 5.1 | C | 02.5 | 75.4 | | |



C

Fintechs Attack Weaker Service Points....

| Devels Drofite | | Payments | Savings and Investment | Lending | Capital Markets | Overall |
|-------------------------|---|--|--|---|------------------------------------|----------------------------------|
| Bank Profits | Personal/SME | 4% | 12% | 29% | 1% | <mark>4</mark> 6% |
| | Corporate | 3% | 6% | 21% | 5% | 35% |
| | IB/Markets | 0% | 3% | 6% | 10% | 19% |
| | Overall | 7% | 21% | 56% | 16% | 100% |
| | are based on company report product segments is estima | | | | | e profit splits by |
| | | ted base of sele | cted banks that dis | closes revenue sp | blits by products. | |
| | product segments is estima | sted in Private | e FinTech Comp | closes revenue sp | uct and Custon | ner Segments |
| - intech Investments | product segments is estima | sted in Private | e FinTech Company avings and avings ment | anies By Produ | uct and Custon | ner Segments |
| Fintech Investments | Figure 15. Dollar Inve | ted base of select sted in Private Payments Sa | e FinTech Company avings and avings ment | closes refenue sp anies By Produ ding Capit | uct and Custon al ets 10% | ner Segments e Overall |
| intech Investments | Figure 15. Dollar Inve | ted base of select sted in Private Payments Sa | e FinTech Company avings and avings avings av | closes refenue sp anies By Produ ding Capit Marke 7% 0% | uct and Custon al ets 10% | ner Segments e Overall 92% |

Figure 22. Global Banks Profit Breakdown By Product and Customer Segments

Source: CBInsights, KPMG, Crunch Base and Citi Research; Based on ~120 private companies from CBInsights FinTech Periodic table Dec 2014; KPMG's top 50 most prominent FinTech innovators Dec 2015; Valuation based on Crunch Base Total Equity Funding for private companies and exit value for acquired companies



11 Source: Citgroup GPS Digital Disruption Report (Mar 2016)

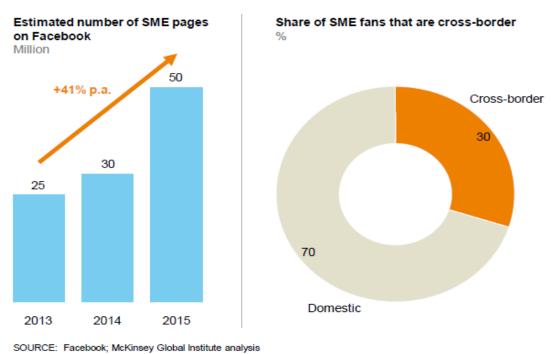
75% of Fintech Investments Come From Outside Banking... While Banks Spend 10 Times More on Legacy Systems...

| Exhibit 7: Global Banks' IT Investment by Type, 201 | 15 | |
|---|----|--|
| Bank IT spending for new investments ~ \$50Bn | | |
| Fintech Investments ~ \$22Bn | | |
| Value of fintech deals with banks as investors ~ \$5Bn | | |



Big Techs May be the Greatest Threat of All

50 million SMEs use Facebook to find customers, and 30 percent of their fans are from other countries



- ⁵² Amazon.com company facts, corporate website; Jack Ma, "America's online sales opportunity in China," The Wall Street Journal, June 8, 2015.
- ⁵³ 2015 third-quarter financial results, Etsy.
- ⁵⁴ Khrystyna Kushnir, Melina Laura Mirmulstein, and Rita Ramalho, Micro, small, and medium enterprises around the world: How many are there, and what affects the count? World Bank/IFC, 2010.

- Big Tech Platforms have proven to scale rapidly at low capital costs
- Alibaba and Ant Bank now have nearly \$1Tr in float to manage and have established a bank to do this
- The Platforms have huge data management systems advantages and can use this data to make better faster credit judgements that banks
- The question is do others follow Alibaba and get squarely into the banking business?



13 Source: McKinsey Digital Globalization Report (Feb 2016)

DFS/Fintech Disruption is real and is accelerating globally

Digitalization of Money

- Drivers: ecommerce, convenience, government action, transport, money transfer
- Main opportunities: ASPs, CCNs, regulatory work, like payments regulation,
- Where: Everywhere, populous countries first
- Investment thesis: Massive concentration of power to few / one player
- Examples: Ant Financial, PayTM, bKash, mPesa

1.5 billion wallets / 6 yrs

Digitalization of Invoicing

- Drivers: business need and possibility, government push for transparency and even tax base,
- Opportunities: e-invoicing companies, factoring, supply chain finance,
- · Where: regional and cross border
- Investment thesis: few large regional and global players. Accelerated concentration within 5-7 yrs
- Examples: invoinet, eFactor, FIT, Trulia

Over US\$1T p.a. in LAC alone

Digitalization of Origination

- Drivers: market need for efficient origination, consumer demand for transparency, financial advice
- Main opportunities: Originators, marketplaces, PFAs
- Where: large markets, regions;
- Investment thesis: Massive market concentration into few/one players
- Examples: CompareAsia, ComparaOnline, BankFacil, Kabbage,

Globalization of Payments

- Drivers: Global trade, ecommerce, business and leisure travel.
- Main opportunities: Money transfer operators, cross border payment networks, FX operators; new money;
- Where: global; main trade corridors
- Investment thesis: Rapid movement towards immediate settlement, rise of new reserve currencies.
- Earthport, Payoneer, Remittly

Digitalization of Cash

Transfers • Drivers: government efficiencies, direct

- Drivers: government efficiencies, direct policy implementations, reduction of fraud
- Main opportunities: government payment contractors;
- Where: main markets first, markets with significant cash transfer programs
- Investment thesis: Governments may unintentionally create the country's largest payment banks
- Examples: Net1, PagaTodo, Fino

Over 300M accounts

Digitalization of Identity

- Drivers: online activity, increase of remote transactions, frequent need to establish identity
- Main opportunity: non-Government Identity Service Providers; government regulation advice
- Where: country specific and global
- Investment thesis: Identity eventually to become global and totally private.

Digitalization of Lending

- Drivers: availability of more data, automation, identity, financial literacy, convenience/
- Main opportunity: Digital Lenders, regulatory and perception work
- Where: every country; large demographics present largest opportunities
- Investment thesis: Power will shift to capital pools and shadow banking
- Examples Kreditech, Kabbage, Moni

US\$34B in China

Globalization of Capital Markets

- Drivers: search for global returns
- Main opportunities: back office operations, main exchanges (stock, currency, bonds, derivatives, commodities)
- Where: Current financial market capitals
- Investment thesis: Capital markets will be global and utilities underneath will also be global utilities; players from main markets will dominate the space

3B+ people without ID

ID I

Massive national, regional and global opportunities will create very few ultimate winners; exits by M&A will be important and understanding rather than trying to catch the ultimate winners is more critical;

Investment thesis should calculate M&A exits and allow for very large "jackpot" probabilities Investments should remain along identified and approved investment themes and done on a portfolio approach



G-20 High Level Principles for Digital Finance

G20 High Level Principles for Digital Financial Inclusion

he G20 stands at an unprecedented time when our leadership has the potential to drive the growth of inclu-The vary stands it an unprecauched time when our neuranity rises use pointiants univer any governon inclu-sive occommissibly premovable digital financial services. Twee billion adulta gitability do not have access as for-mal financial services and are excluded from opportunities to improve that lives. While transmission premoving financial services and are excluded from opportunities to improve that lives. While transmission provides the services are service to the services are services and the services to the services are services and the services are services to the services are services and the services are services and the services are services are services and the services are services are services and the services are services a maybe digitally enabled), are essential to close the remaining gaps in financial inclusion.

Digital technologies offer afferdable ways for the financially excluded-the majority of whom are v to save for school, make a payment, get a small business loan, send a remittance, or buy insurance. The 2010 G20 Principles for Innovative Phancial Inclusionsourred initial efforts and policy actions. These 2016 High Level Principles for Digital Financial inclusion build on that success by providing a basis for country action plans reflecting country context and national circamotances to leverage the huge potential offered by digital technologies

PRINCIPLE 1: Promote a Digital Approach to Financial Indusio

Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, minisorid, and evaluated rational services and action plens.

Achieve Digital Financial Inclusion Balance promoting innovation to achieve digital financial

inclusion with identifying assessing monitoring and manapeline new risks. PRINCIPLE 3: Provide an Enabling and

Proportionate Legal and Regulatory Framework for Digital Financial Inclusion Provide an enabling and proper elonase legal and regulatory framework for digital financial inclusion, taking two account relevant G20 and international standard setting body standards and gatlance.

PRINCIPLE 4: Expand the Digital Financial Services Infrastructure Ecos

15

Expand the digital financial services ecosystem—including Anarcial and information and communications technology infrateruceure-for the safe, reliable and low-cost provision of digital financial services to all relevant geographical areas, especially underserved rural areas.

Financial Practices to Protect Consumers Euclitish a comprehensive approach to consumer and data protection that focuses on issues of specific relevance eodigied financial services. PRINCIPLE & Strengthen Digital and Financial Literacy and Awaren

PRINCIPLE R: Establish Responsible Digital

Suppore and evaluate programs that enhance distiniand financial literacy in Tight of the unique characterisets, aivantages, and risks of digital financial services and

PRINCIPLE 7: Fadilitate Customer Identification for Digital Financial Services

Factificate access to digital financial services by developing, or encouraging the development of castomer identity syste produces and services shas are accessible, affordable, and wrifiable and accommodase multiple needs and risk levels for a risk-based approach to customer due difigence.

PRINCIPLE & Track Digital Financial Inclusion Progress Track progress on digital financial inclusion through a

comprehensive and robuse data measurement and evaluation system. This system should leverage new sources of digital data and enable stakeholders to enalyze and monteer the supply of-and demand for-digital financial services, as well as assess the impact of key programs and referms.

these eight principles are based on the rich experience reflected in G20 and financial standard-setting bidly technical guidance. They also recognize the need to support innevation while managing risk and encouraging development or digital financial products and services.



PRINCIPLE 1:

PROMOTE A DIGITAL APPROACH TO FINANCIAL INCLUSION

PRINCIPLE 2:

BALANCE INNOVATION AND RISK TO ACHIEVE DIGITAL FINANCIAL INCLUSION

PRINCIPLE 3:

PROVIDE AN ENABLING AND PROPORTIONATE LEGAL AND REGULATORY FRAMEWORK FOR DIGITAL FINANCIAL INCLUSION

PRINCIPLE 4:

EXPAND THE DIGITAL FINANCIAL SERVICES INFRASTRUCTURE ECOSYSTEM

PRINCIPLE 5:

ESTABLISH RESPONSIBLE DIGITAL FINANCIAL PRACTICES TO PROTECT CONSUMERS

PRINCIPLE 6:

STRENGTHEN DIGITAL AND FINANCIAL LITERACY AND AWARENESS

PRINCIPLE 7:

FACILITATE CUSTOMER IDENTIFICATION FOR DIGITAL FINANCIAL SERVICES

PRINCIPLE 8:

TRACK DIGITAL FINANCIAL INCLUSION PROGRESS



PRINCIPLE 2: Balance Innovation and Risk to

channels

We are approaching universal access to Mobile phones... Focus now needs to be on the Internet...

