

# Digital transformation in the financial sector

A multiform/multiservice technological shock, opportunities for financial inclusion, risks for financial stability



HIGH LEVEL SEMINAR  
BANKING SUPERVISION AND FINANCIAL STABILITY IN EURO-MEDITERRANEAN COUNTRIES  
DIGITAL TRANSFORMATION IN THE EURO-MEDITERRANEAN AREA: FINANCIAL INCLUSION AND STABILITY

# 1. A multiform/multiservice technological shock (1/4)



The Future of Financial Services  
– juin 2015

# 1. A multiform/multiservice technological shock (2/4)

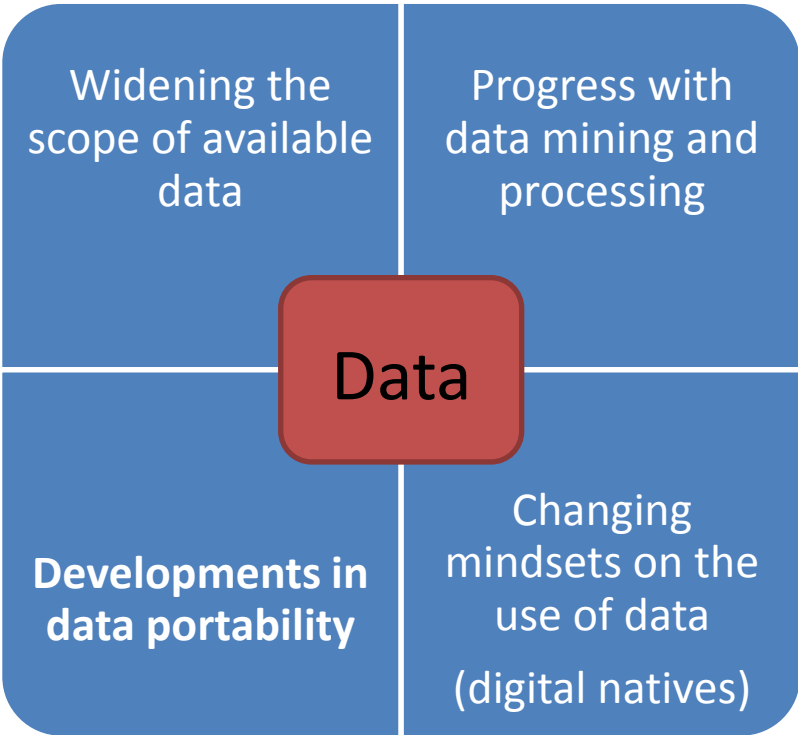
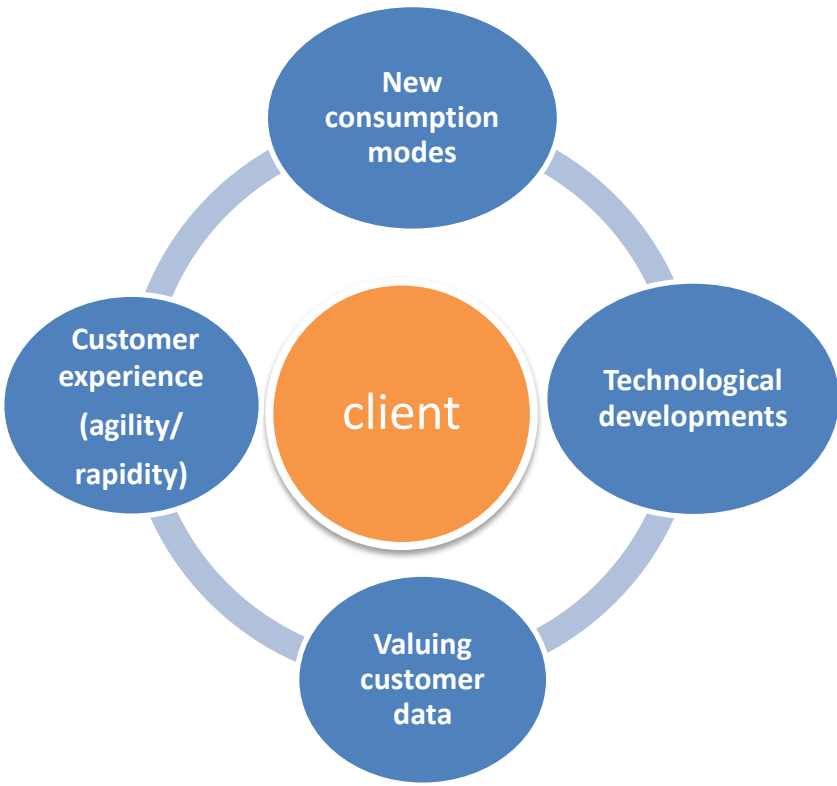
- ❑ **Infrastructure** : new platforms and decentralized technologies provide new ways of pooling and analyzing information; they improve connectivity and reduce marginal costs for access to information and financial endeavour
- ❑ **Automating high value added activities**: very many products and alternative services are based on high powered algorithms for automating activities that used to be processed manually, affording less expensive, quicker and more scalable services
- ❑ **Reducing intermediation** : innovation rationalises or eliminates traditional intermediation by offering lower prices and/or better performance for customers
- ❑ **Strategic role of data** : innovation affords access to new data structures offering new ways of understanding customers and markets
- ❑ **Niches and highly specific products** : new highly specialized stakeholders create carefully targeted products and services; they increment competition in these domains and push the traditional model to integrate innovation
- ❑ **Empowering the customer** : innovation offers customers a much broader access to activities and services, with more visibility of products and choices in addition to tools enabling them to be proactive customers
- ❑ **Mobile technologies** : pivotal role for bankarizing LDCs (penetration of mobile technology), improving telephone networks to mitigate the isolation of rural areas, capitalizing on vendor networks, developing *mobile money* (transfers and payment accounts) and now *mobile banking* (savings and loans, by SMS, for instance)

# 1. A multiform/multiservice technological shock (3/4)

## Two mainstream trends

Refocussing on the customer

Customer data are an asset



# 1. A multiform/multiservice technological shock (4/4)

## A core issue for our seminar

- To what extent and in which conditions can financial inclusion objectives converge with other objectives for financial stability, protecting consumers and mitigating money laundering and the financing of terrorism « AML-CFT »
- What are the adequate regulatory and supervisory measures for Fintechs in addition to financial innovation in such an environment ?

## 2.

# Opportunities for financial inclusion (1/5)

Financial inclusion must not only aim at mitigating poverty (access to basic financial services, loosening budget constraints) it must also enhance powerful economic growth that everyone can benefit from along with improvements in allocating savings and increasing productivity)

1. What are **the most promising** types of financial innovation for financial inclusion (innovation encompassing technology, products / services, commercial models, distribution channels) ?

- new technologies (mobile technologies, biometrics), new and secure means of payment (*mobile money / mobile banking* accounts, digital payments)
- methods for analyzing data and using new sources of data to extend credit to new people (cf microcredit), to people or (small) companies with limited credit histories
- new services that would make savings management easier and more secure for poor people (in addition to creating savings or microsavings)
- lowering costs for financial services thanks to more competition and new technologies
- digital distribution channels (cf. mobile telephony penetration rates ) facilitating onboarding and accessibility

## 2. Opportunities for financial inclusion (2/5)

### 2. What are the obstacles that can limit benefitting from such opportunities ?

- Knowledge and control of the regulatory environment by innovative start ups
- Lack of infrastructures (data, market, payment) that are still necessary even in a digital world
- Behavioural or cultural barriers : need to ensure financial literacy/ literacy for all in a digital era (financial innovation is dependent on consumer appetite for new products and services)

### 3. On the other hand, what measures **can enhance** financial inclusion ?

- The right to a bank account
- Digital identity
- Key importance of infrastructures and interoperability (*cf. interoperability problems of operators that are developing e-wallets in some less developed countries*)

## 2. Opportunities for financial inclusion (3/5)

### 4. What risks related to digital transformation can limit financial inclusion objectives.?

#### ➤ Consumer protection

- Risks related to data confidentiality and security: huge problem in view of the regulatory shortcomings that might become potentially significant in every region concerning the protection and the use of consumer data in the financial sector
- Possible malevolence in the use of customer data
- Exclusion risk : consumers are not all equal in terms of what they know about and how they use new technologies, discrimination risk with people who might refuse to share their data, use certain shops or social networks
- High consumption risk: people who do not control how their data are used, targeting more vulnerable consumers, risk of overindebtedness
- Risks attached to new, non guaranteed and alternative means of payment (fraud, distrust of new means of payment)
- Insufficient protection of customer funds



### 4. What risks related to digital transformation can limit financial inclusion objectives.?



#### Mitigating money laundering and the financing of terrorism

- The 2015 report « Trends and analyses by Tracfin » (the French Financial Intelligence Unit that processes information and engages in action to counter illicit financial networks) stresses the new risks related to AML-CFT in the light of the technological revolution and more broadly the Fintechs
- FATF considers that sending funds and remote customer relations are high risks
- In Europe and France: special attention paid to anonymous e-money and especially prepaid cards
- FATF 2013 Directives on AML-CFT and financial inclusion : reasonable knowledge of the customer has to be worked out on a risk based approach
- After the FATF 2016 guidelines on fund transfers, the Joint Committee (EBA, EIOPA et AEMF) launched a public consultation in April 2017 on draft guidelines to define what PSPs can do to detect and prevent the misuse of fund transfers in the context of AML-CFT

## 2. Opportunities for financial inclusion (5/5)

### 5. A large number of initiatives from different international bodies

- Digital finance is a major item for the G20 German Presidency and financial inclusion (work done by the GPFI) in addition to financial stability (work conducted by the FSB). The German Presidency lends a great deal of importance to the refugee question and international fund transfers
- The work done by the Global Partnership for Financial Inclusion (GPFI) is a cornerstone for the action engaged by the G20. Action plan implementation is involving 4 WGs (1) SME Finance (2) Regulation and Standard-Setting Bodies, (3) Financial Consumer Protection and Financial Literacy (4) Markets and Payment Systems.
- The work done by the Basel Committee on Banking Supervision (BCBS) on the application of Basel principles in the light of the September 2016 financial inclusion objectives

## 3.

## Risks for financial stability (1/3)

The FSB has identified 3 key features regarding FinTechs and encapsulates the expected advantages and the risks for financial stability

<b><i>Feature</i></b>	<b><i>Examples</i></b>	<b><i>Expected advantages</i></b>	<b><i>Potential risks</i></b>
Greater access to and convenience of financial services	Mobile banking International payments e-wallet Aggregators Crowdfunding	Benefits for the consumer  Financial inclusion and especially in emerging economies  Diversification of credit offerings	Financial risks related to the lower quality of bank loans ( <i>online marketplace lenders</i> )  Operational risks and cyber attacks related to the arrival of less well protected newcomers  Shocks will involve more serious reactions from consumers (gregarious behaviour)

## 3.

## Risks for financial stability(2/3)

<i>Feature</i>	<i>Examples</i>	<i>Expected advantages</i>	<i>Potential risks</i>
Greater efficiency of financial services	<p>Distributed ledger technology for back office operations</p> <p><i>Smart contracts</i></p> <p><i>Big data</i> and artificial intelligence for <i>robo-advisors</i></p> <p>On line platforms for quicker decision making</p>	<p>Mitigating counterparty risk thanks to better DVP procedures</p> <p>Reducing data asymetry via the use of <i>big data</i></p> <p>Lower operational costs for stakeholders</p>	<p>The speed with which decisions are made may ultimately cause bigger losses if the market dips (less error correction on investments)</p> <p>Correlation risks and market volatility if automated strategies lead all stakeholders to adopt the same strategy</p> <p>Bigger operational risk, especially for information systems on account of the push towards more digitization for processes</p>

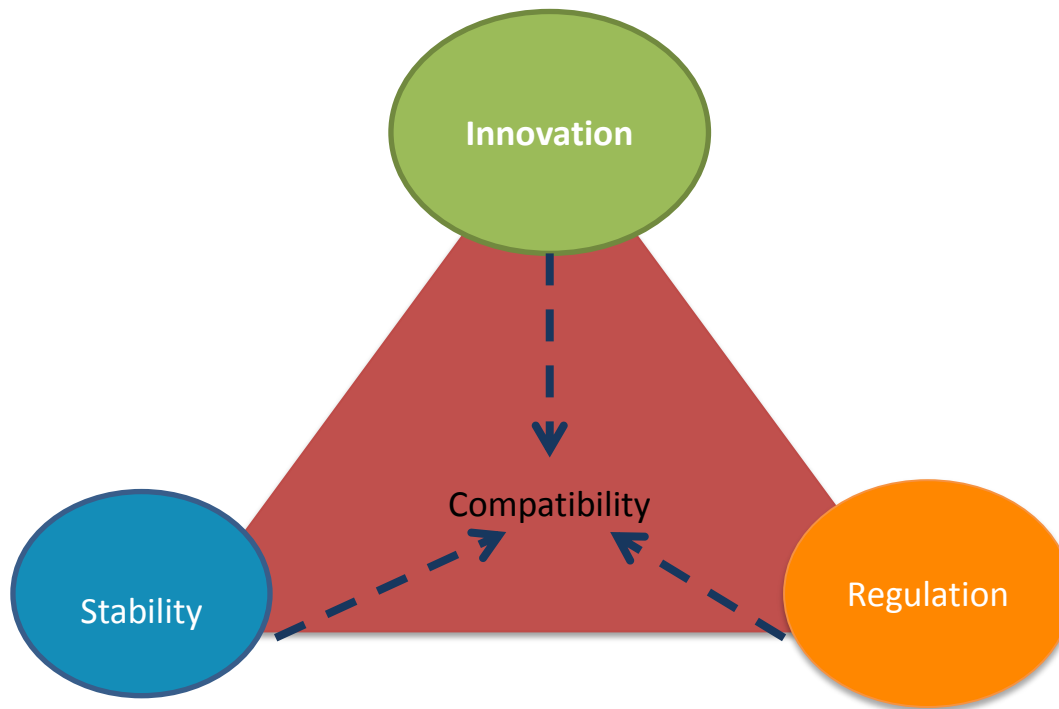
## 3.

## Risks for financial stability (3/3)

<b>Feature</b>	<b>Examples</b>	<b>Expected advantages</b>	<b>Potential risks</b>
A more decentralized financial system in which fintech firms may be disintermediating traditional financial institutions	<p><u>Decentralisation</u> Far more FSPs and fragmented offerings</p> <p><u>Disintermediation</u> Financial intermediaries are being squeezed out (crowdfunding) or replaced (<i>blockchain</i>)</p>	<p>Financial system is less focussed on systemic players</p> <p>Better dampening of shocks thanks to stakeholder diversification</p>	<p>Risks tied to financial solvency of newcomers</p> <p>Profitability risk for well established stakeholders</p> <p>Bank control and supervision are harder as a result of the increase in stakeholders who sometimes disregard the regulations (regulatory arbitrage risk)</p> <p>Far harder to identify risks that are scattered throughout a decentralized system</p>

# 4. What are the adequate regulatory and supervisory measures?

## Build a compatibility triangle



François VILLEROY DE GALHAU Banque de France Governor  
Financial stability in the digital era  
Banque de France – Financial stability Review • N° 20 • April 2016