



Benefits, Opportunities and Challenges of

FINTECH

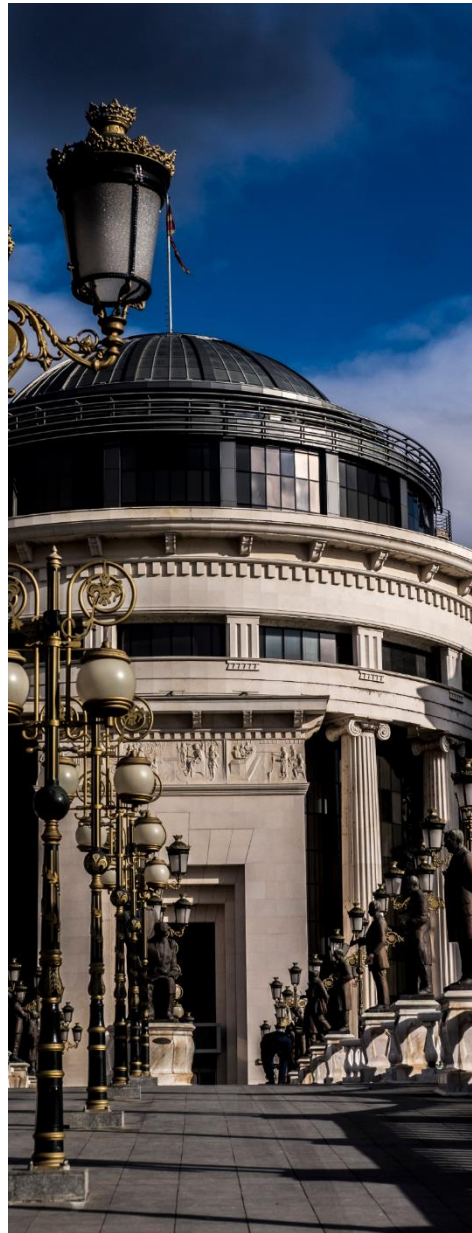
Led Transformation in North Macedonia



AGENDA

& Objectives

Exploring the possibilities opened up by Fintech, examining the challenges and sharing North Macedonia's journey to developing a National Fintech Strategy



1

Global & Regional Fintech Developments

Examining Fintech developments globally and in the region post COVID 19

2

Landscaping Fintech in RNM

Highlighting the approach and key finding of a Fintech landscaping exercise in RNM

3

Journey to National Fintech Strategy

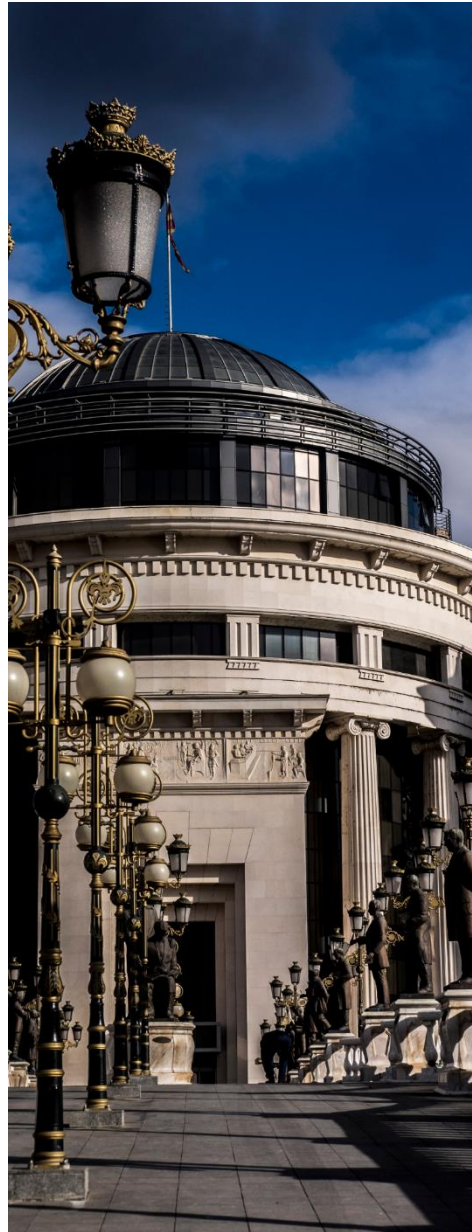
Examining progress made towards developing a Fintech Strategy in North Macedonia and engaging with Fintechs innovators thus far



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Fintech is Accelerating

Key Drivers Accelerating Fintech, Globally

1. COVID 19 accelerate digital transformation
2. Changing Consumer Demand
 - 50% of World's population is under 30 & digitally native (University of Cambridge & World Bank)
- Technology Advances
 - Mobile & Internet channels
 - AI, Machine Learning & Big Data Analytics
 - Blockchain & Distributed Ledger Technologies
 - Cloud Computing



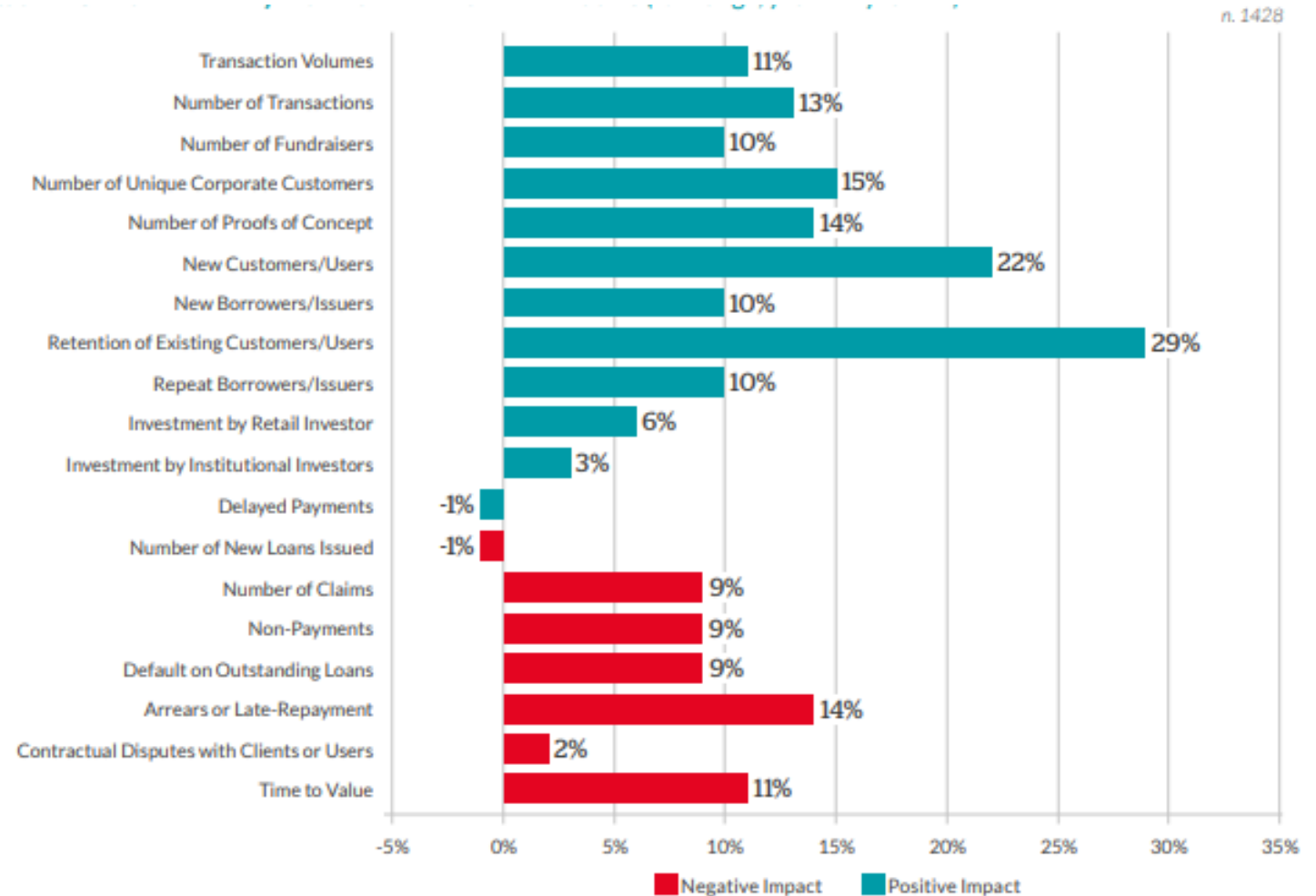
[Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.](#)

COVID 19 – A Positive Impact

Fintech continue to thrive

- 11% growth in transaction volume
- 12% growth in transaction numbers
- Indicating a consumer and SME shift to Digital & building trust in Fintech
- 22% acquisition of new customers
- 29% increase in retaining customers
- However, loan defaults and late payments are inevitable

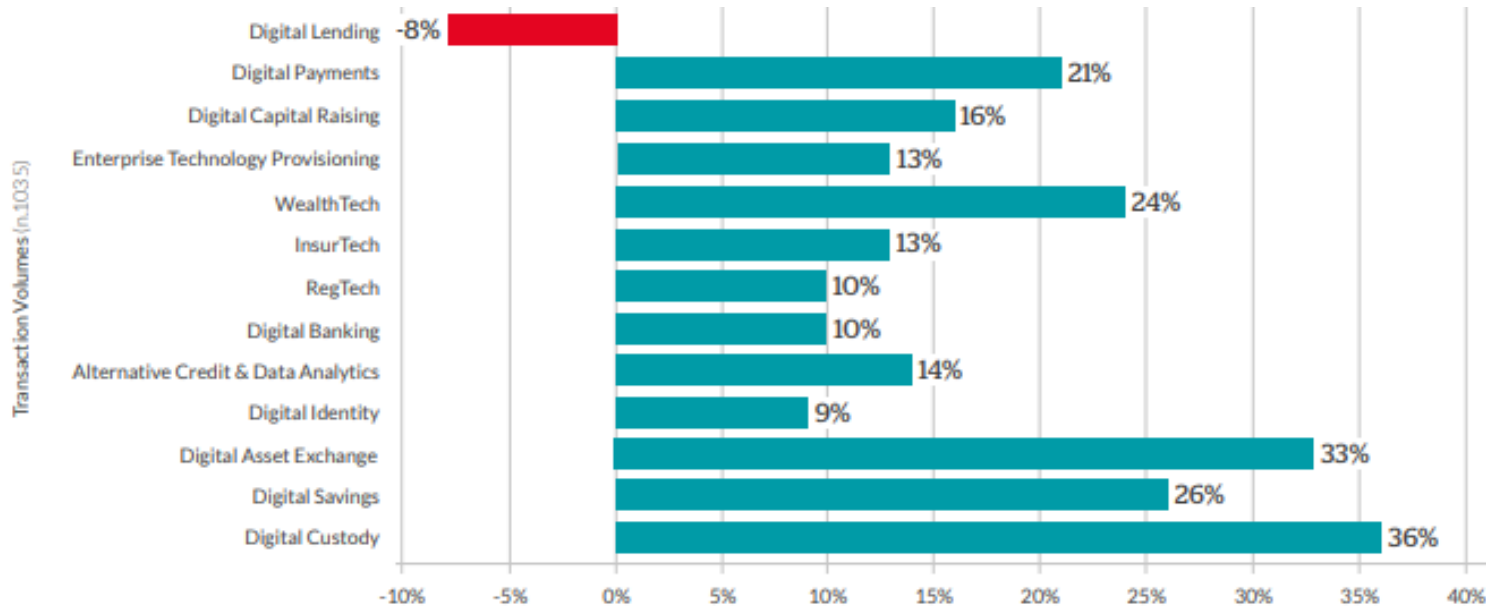
State of Global Fintech by Market Performance Indicators (%change, year-in-year H1)



Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.



Transaction Volumes, All Fintech Verticals (%
change, year-on-year H1)



[Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.](#)

Specific Areas of Growth

All Verticals Perform Well

- Lending is the only vertical shrinking
- Highest growth areas include:
 - Digital custody - Mobile, Web and Tablet Wallets
 - Digital exchanges & trading
 - Digital savings, including micro savings
 - Wealthtech on the rise

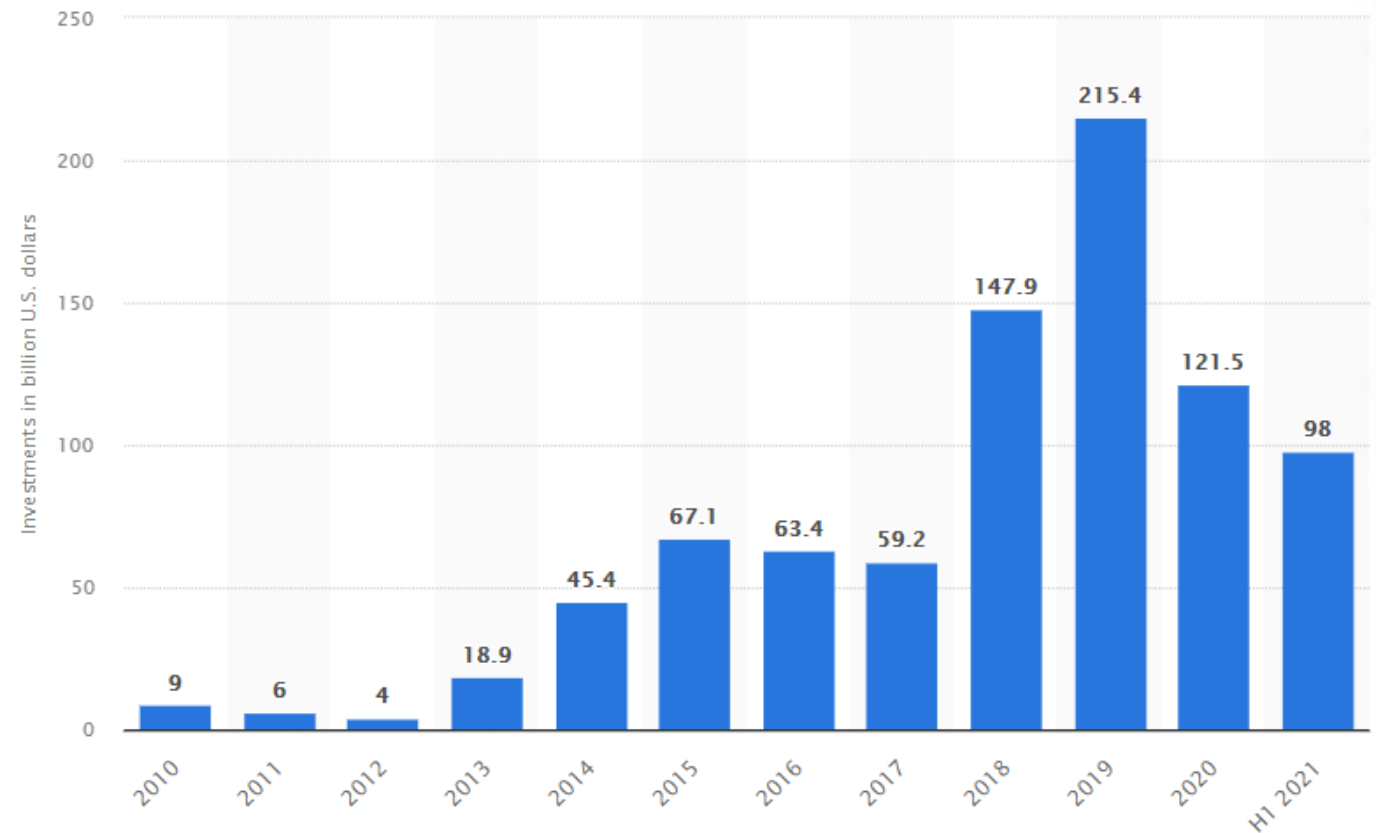


Investments in Fintech Globally

Down but not out!

- Surge in Fintech funding from 2010 to 2019
- COVID 19 see a one third drop in funding

Total value of Investments into Fintech companies worldwide from 2010 to 1st half of 2021 (in billion U.S. Dollars)



© Statista 2021



REGULATORS PERSPECTIVE

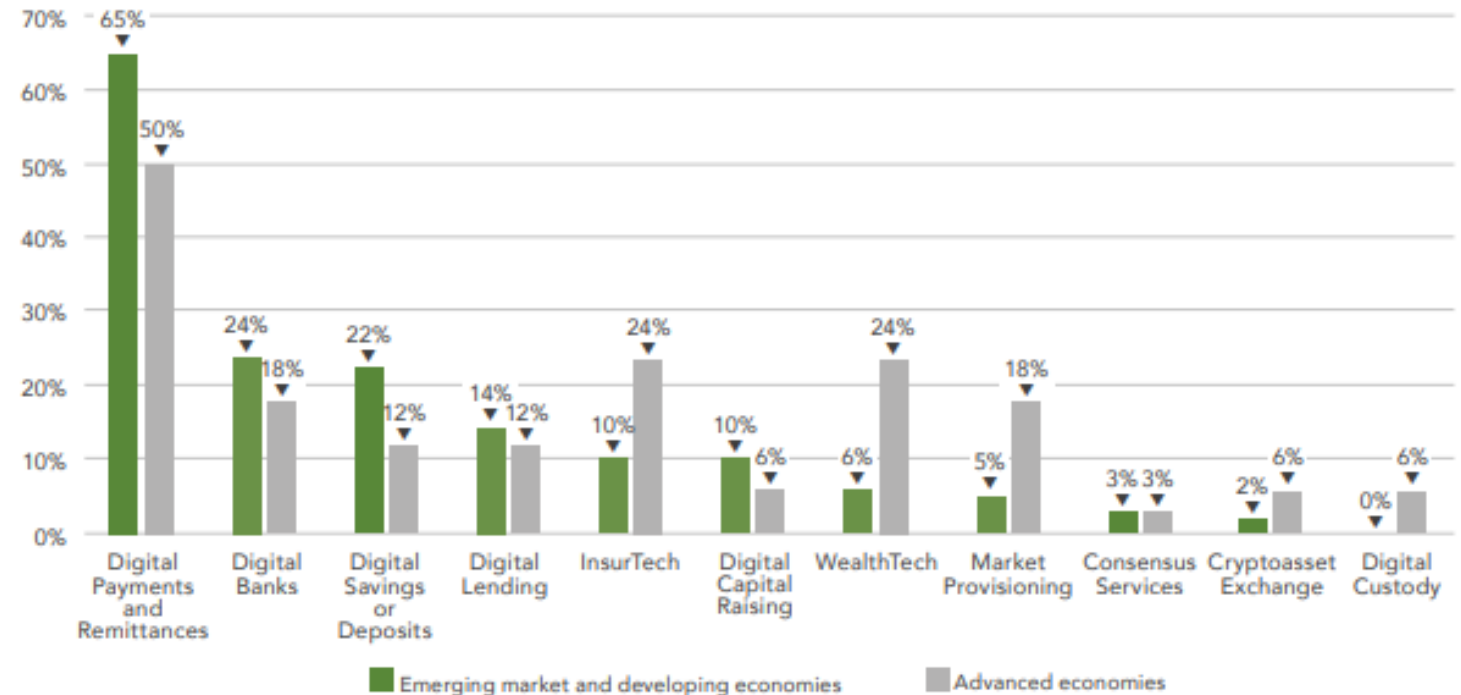


Post Covid Impact

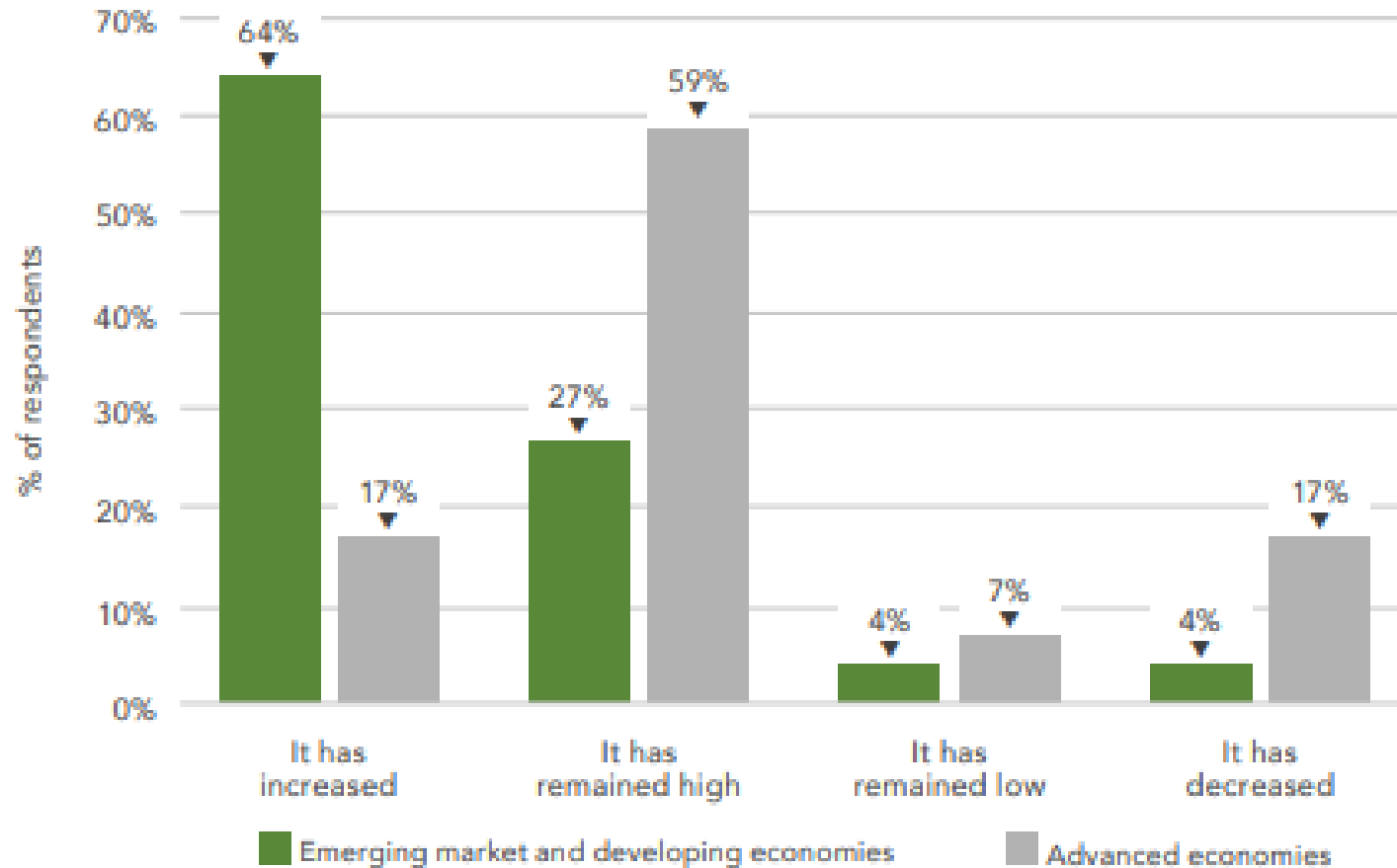
Regulator's Perspective

- Surge in digital payments and remittance
- Digital banks & savings on the rise
- Emerging markets seeing higher rates of growth

% of Regulatory respondents reporting an increase in Fintech usage or offering in light of COVID – Emerging Market vs Advanced economies (N=97)



Priority of Fintech within regulators in light of COVID –
Emerging Market vs Advanced economies (N=72)

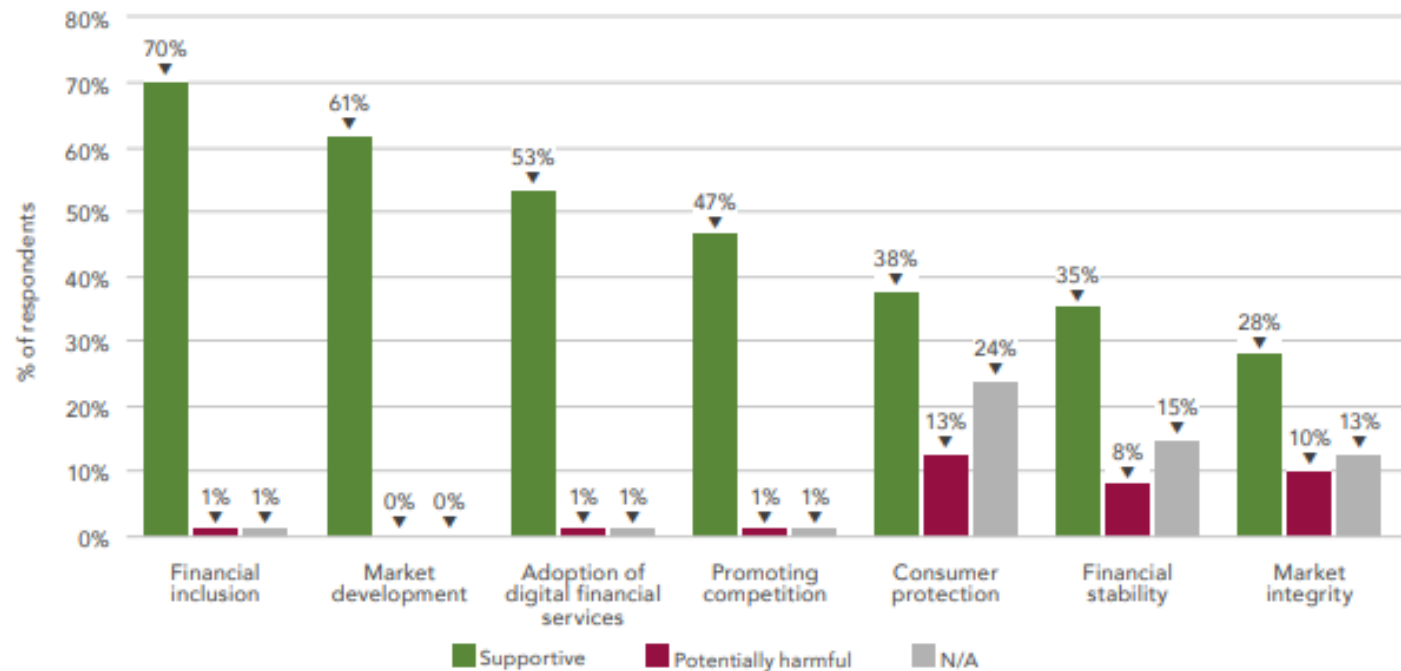


Fintech – A High Regulatory Priority

- COVID 19 has increased prioritisation of Fintech for All Regulators
- Central Banks have prioritise Fintech developments higher than other regulators (payments driven)
- Emerging markets have prioritised Fintech over Advanced Economies



Perceived impact of Fintech on Regulatory Objectives in light of COVID 19 (N=88)



Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.

Impact of Fintech

Regulatory Perspective

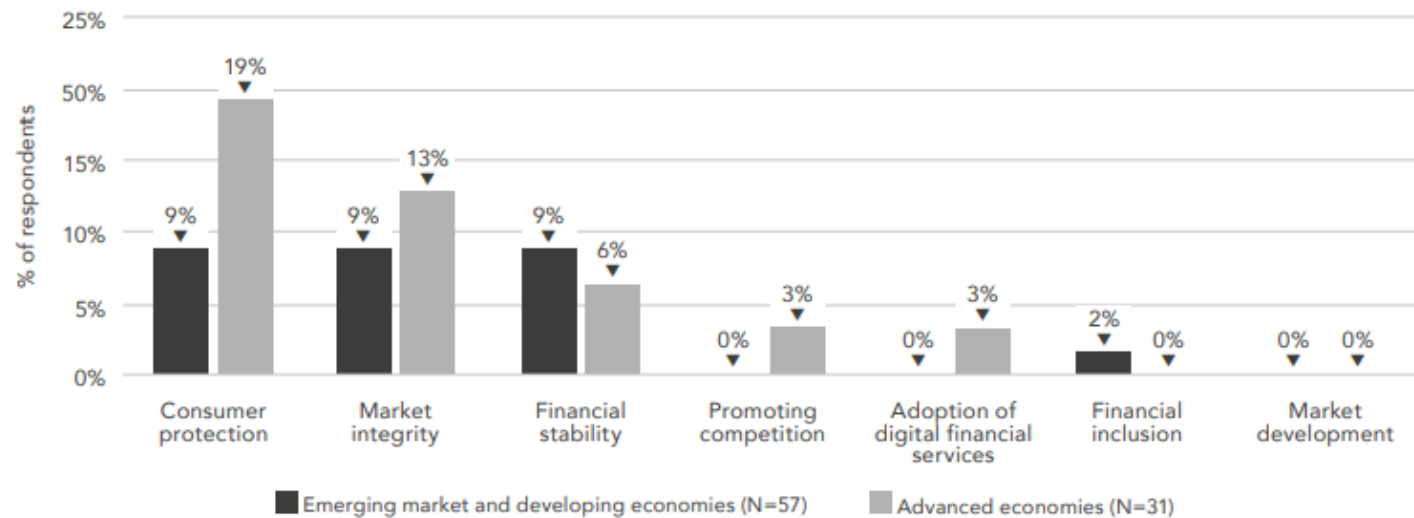
- Financial Inclusion driver
- DFS in incumbents
- Market developments

However

- Concerns about
 - Consumer protection
 - Financial Stability and
 - Market Integrity



Perceived Negative Impact of Fintech on Regulatory Objectives in light of COVID 19 (N=88) – Emerging Markets vs Advanced Economies



Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.

Perceived Negative Impact of Fintech

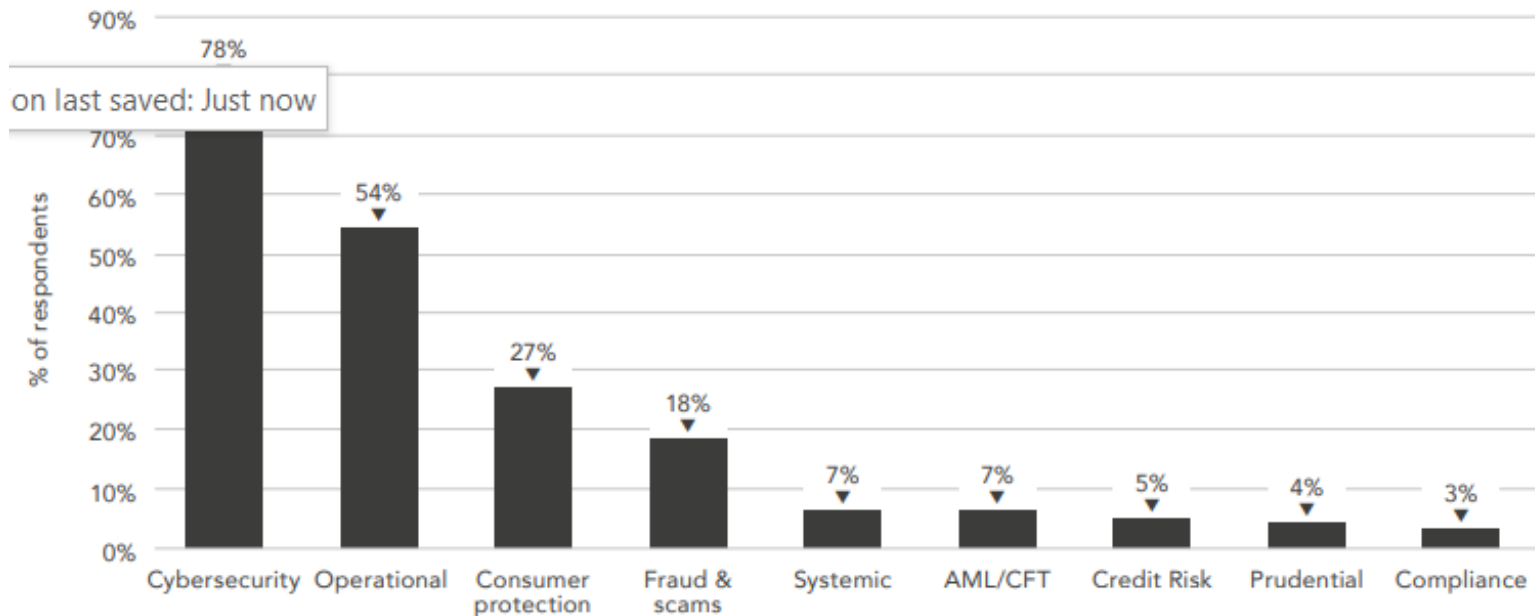
Regulatory Perspective

- Advanced economies are more concerned about consumer protection (19% vs 9%)
- 13% of Advanced economy participants see Fintech as potentially harmful to market integrity
- More Emerging Market participants (9%) are concerned that Fintech can negatively impact financial stability
- 2% of Emerging Market participants see Fintech as a threat to financial inclusion



Perceived Risks of Fintech

Top perceived increasing Fintech risks in light of COVID 19 (N=92)



- Cybersecurity is the highest perceived risk of Fintech post COVID (Advanced economies (90%) more concerned about this risk than Emerging Markets (73%))
- Operational risks and consumer protection is of concern
- AML/CFT does not seem to be a major concern
- Regulators are confident about compliance by Fintech newcomers

<https://www.jbs.cam.ac.uk/wp-content/uploads/2020/10/2020-ccaf-report-fintech-regulatory-rapid-assessment.pdf>

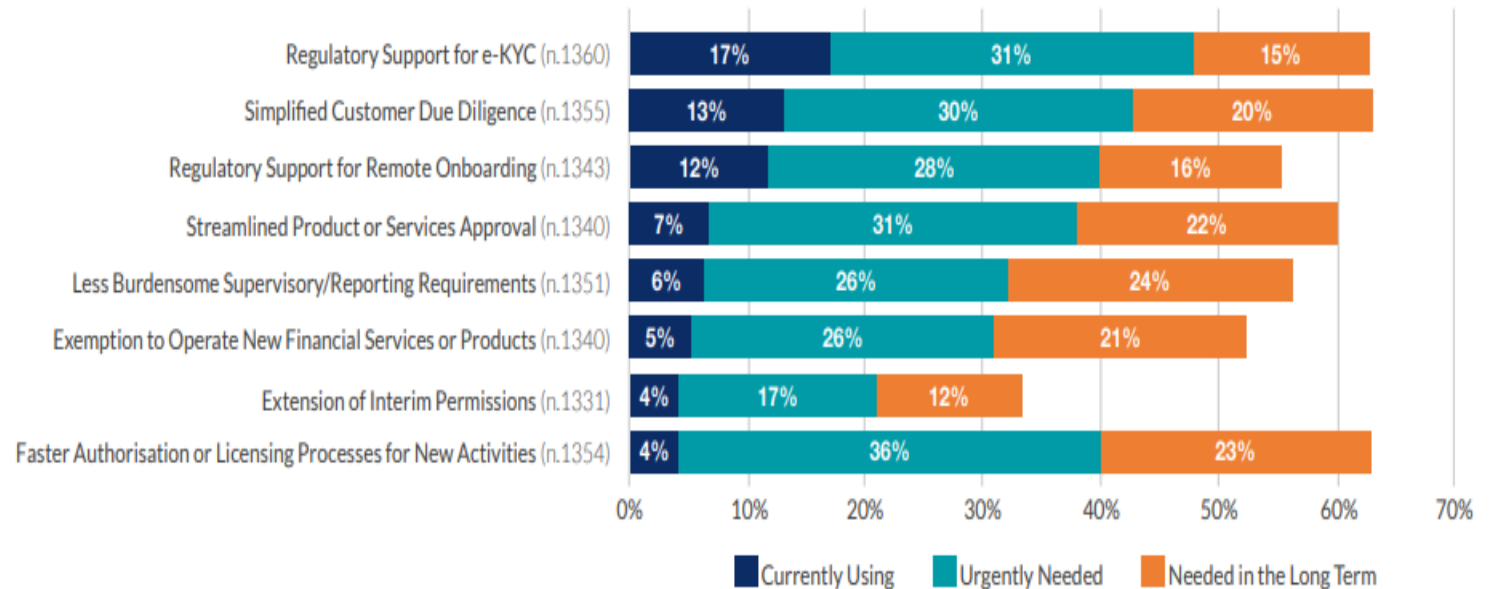


Fintechs want more Regulatory Support

Regulators are Accommodating Innovation

- Faster licensing
- Easing of regulatory requirements for smaller firms
- Simplified customer due diligence & remote onboarding

Regulatory Responses & Intervention, (% respondents)



**Note that "N/A" and "Unsure" responses have been omitted from this chart*

Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.



REGIONAL PERSPECTIVE



Western Balkans

DEMAND FOR FINTECH

- Financial inclusion is low at 61.3% compared to 95.3% in Europe
- Online payments increased by 7%
- However, only 8% used online banking services (58% in Europe)
- 80.3% of households have internet access
- 98.8% SIM card penetration
- Significant Market Potential for Fintech and Incumbent innovators**

2019 / 2018	Household level of internet access	Use online banking (%)	Make internet purchases	Don't make online purchases; payment security concerns	Individuals with basic or above basic digital skills	Employed ICT specialists (,000)
Albania	: / 2018	: / 2	5	:	28 / 21	:
Bosnia and Herzegovina	72 / 69	5 / 5	23 / 18	5 / :	24 / :	:
Kosovo	93 / 93	5 / 1	30 / 22	12 / 9	28 / 21	:
North Macedonia	82 / 72	15 / 9	29 / 25	12 / 16	32 / 32	12 / 12
Serbia	80 / 73	18 / 15	34 / 35	6 / 9	46 / 39	68 / 64
Montenegro	74 / 72	3 / 2	16 / 12	15 / 21	: / 50	5 / 5
Bulgaria	75 / 72	9 / 7	22 / 21	3 / 6	29 / 29	96 / 71
Croatia	86 / 83	47 / 41	49 / 41	14 / 20	49 / 50	166 / 156
Romania	84 / 81	8 / 7	23 / 20	3 / 8	31 / 29	190 / 185
European Union 28	90 / 89	58 / 54	63 / 60	6 / 7	58 / 57	9,000 / 8,500

Note: Figures denote percentage of population. Figures expressed in change between 2019 / 2018.

Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.

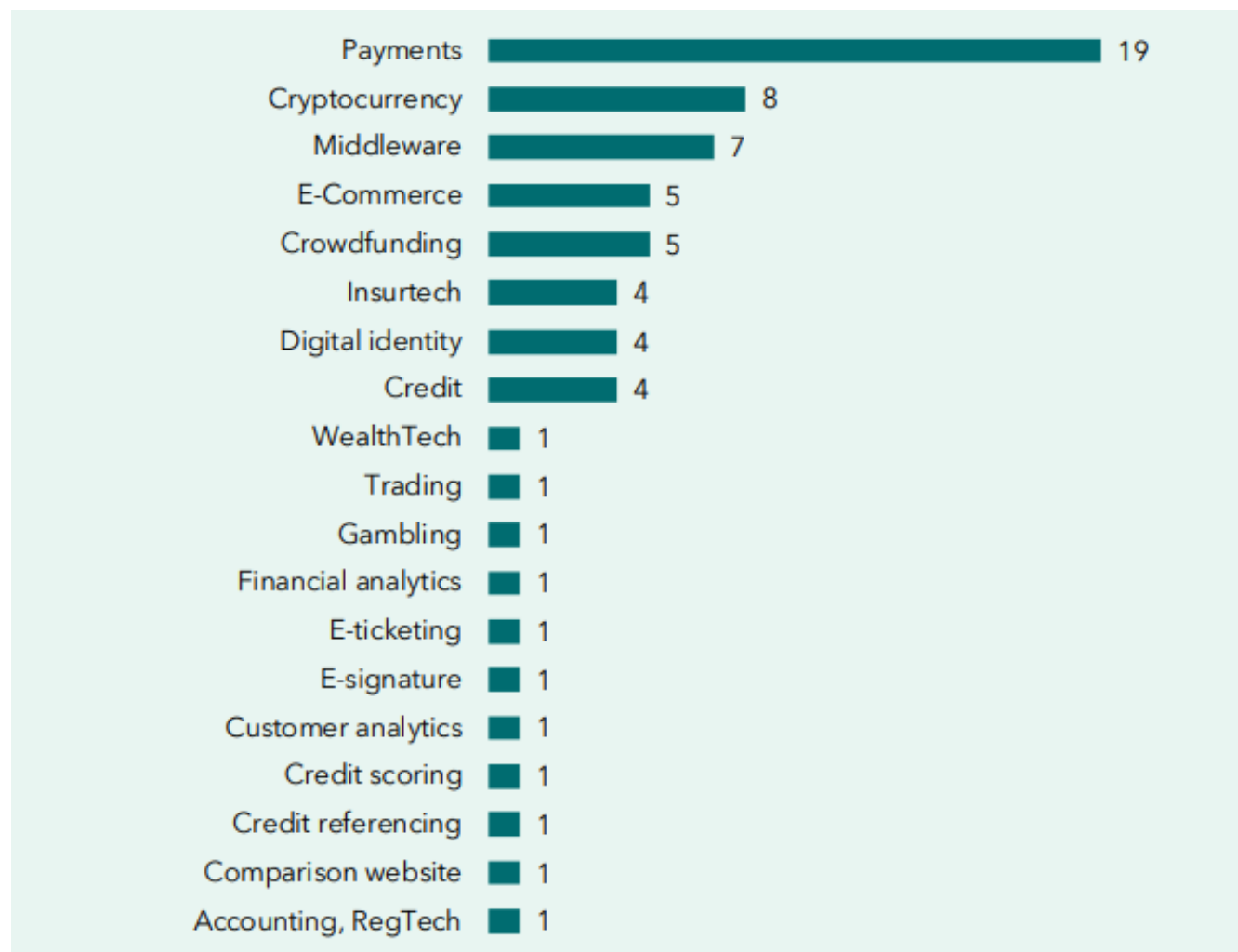


Fintech in Western Balkans

Developing at a steady pace

- 67 Fintech providers in June 2019
 - 35 in Serbia
 - 11 in Albania
 - 7 in North Macedonia
 - 7 in Bosnia and Herzegovina
 - 4 in Kosovo
- Majority in Payments space
- 25 firms applying for licensing
(mainly in Bosnia & Herzegovina, Serbia & Albania)

Western Balkan Fintech Firms by Category



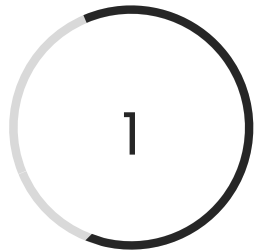
Source: World Bank & Cambridge Centre for Alternative Finance: Fintech Innovation in the Western Balkans.



Promoting Innovations & Competition

Regulatory Mandate

Promotion of competition & innovation is rarely a formal statutory objective for regulators in Western Balkans



Innovation Office

- North Macedonia
- Montenegro
- Others have single point of contact



Regulatory Sandbox

- Securities Commission of Montenegro (Sept 2019)

Fintech Enabling E-Commerce

Barriers & Challenges

1

Licensing

E-Commerce firms need license in Montenegro and Bosnia and Herzegovina – Deter European e-Commerce Retailers

2

Fewer Payment Gateways

Low competition means higher transaction cost for consumers and payment processing for merchants

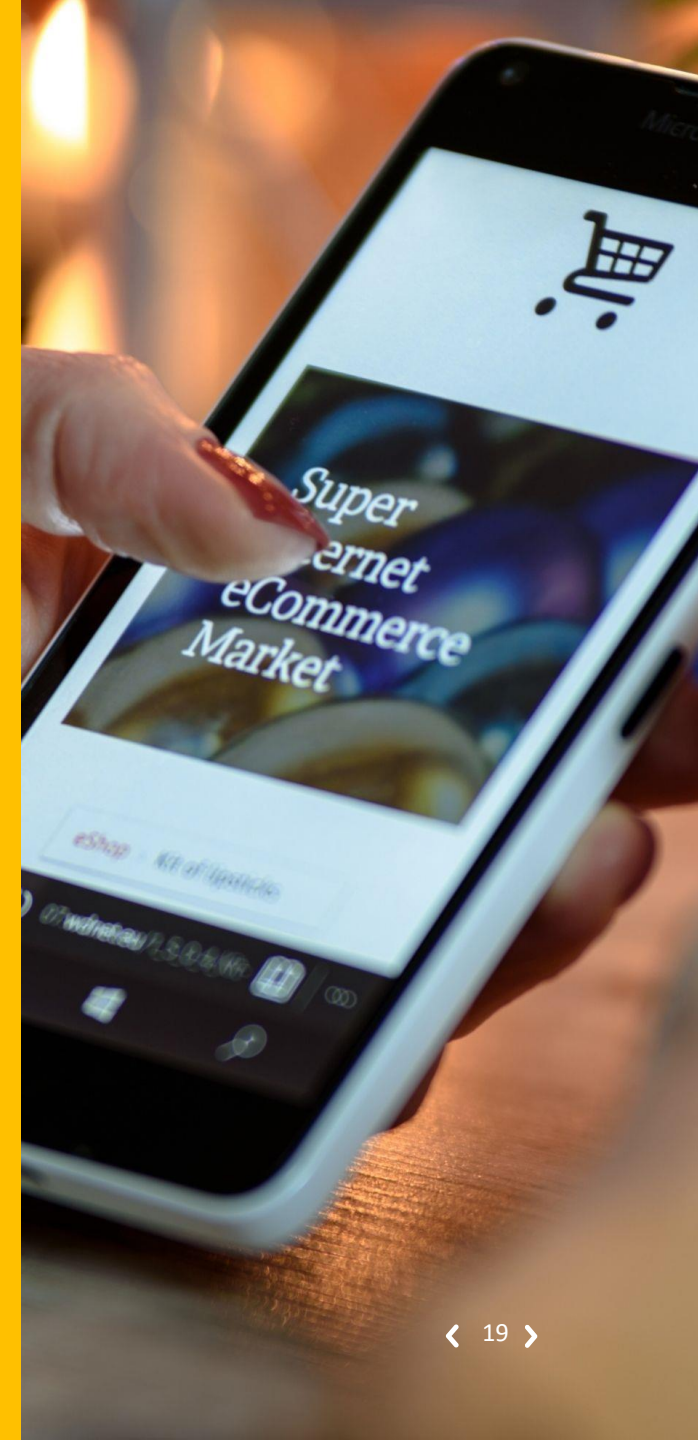
3

E-Signature

Consumers forced to pay cash on delivery due to lack of e-signature and online contracting

	Paid cash on delivery for internet purchase
Albania	..
Bosnia and Herzegovina	77.7
North Macedonia	46.0
Serbia	78.1
Montenegro	41.6
Kosovo	74.3
Romania	69
Croatia	42
Bulgaria	64

Source: World Bank & Cambridge Centre for Alternative Finance:
[Fintech Innovation in the Western Balkans.](#)



Some Regulatory Challenges

For Developing Fintech



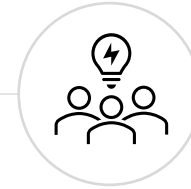
Digital Payments

1. PSD 2 still not in operation
2. More challenging for nonbank payment providers and e-money institutions to come to market
3. Strong banks dominate payments – no regulatory incentive to allow non-bank payment providers
4. Foreign exchange regulations are constraining



P2P Lending

1. Regulatory uncertainty around P2P regulation and licensing
2. Only North Macedonia currently allow P2P Lending
3. Uncertainty as to whether platform or lender needs to be licensed



Crowdfunding

1. Does prospectus regime apply?
2. Do collective investment scheme regulation apply, or can they be carved out?
3. Are they an investment broker and need a license for this?



Some Regulatory Challenges

For Developing Fintech



Crypto - Assets

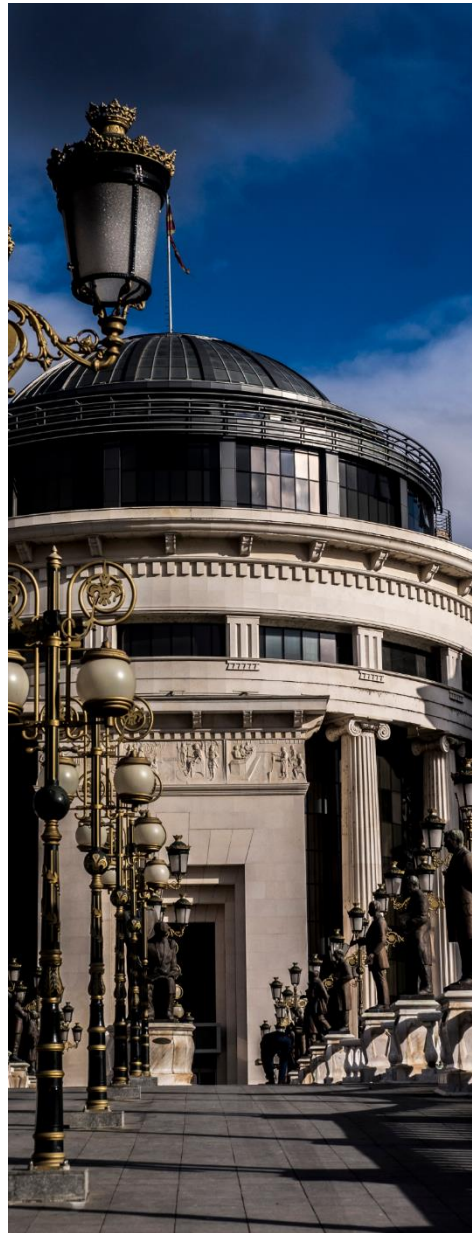
1. Regulatory uncertainty of how to regulate crypto assets.
2. Amid vibrant market developments
3. Citizens are engaging with foreign crypto firms – without protection
4. Some (e.g. Kosovo) have banned crypto assets



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RESPONDENTS to SURVEY

220 SURVEY RESPONDENTS

DRIVERS

Government

2 Respondents + 3 Interviews

Regulators

35 Respondents from 4
Regulators

Incumbents

43 Bank & 89 Non Bank
Respondents

Entrepreneurs

11 Alt Finance, 7
Entrepreneurs,

ENABLERS

Demand

Consumers &
Businesses Want
Change and Use Fintech
Products & Services

Infrastructure

9 IT Firm Respondents

Investors

Fund for Innovation &
Entrepreneurship

Accelerators / Supporters

3 Accelerators, 7
Associations, 9 NGOs /
5 Other e.g. consultants

Talent

Institutions Develop &
Nurture Constant Flow
of Highly Skilled Talent
that Drive
Transformation



North Macedonia FINTECH ECOSYSTEM



Capture Various PERSPECTIVES

1

Drivers Forcing Change

Without compelling drivers forcing change, the industry has very little change of success

Drivers could be needs driven, for example financial inclusion, economic prosperity, etc

2

Assessing Environment & Ecosystem

Is the environment conducive to change?

Is there a Fintech supportive ecosystem and & what does it look like?

Government & regulator attitude to financial transformation

Digital transformation at Incumbents

3

Exploring Benefits that Fintech can bring

Fintech is not worth pursuing if they don't bring real tangible benefits

Benefits can be a catalyst to changing hearts & minds & driving initiatives

4

Examining Barriers & Challenges

Explore barriers such as
Regulation / Licensing
New risks introduced

Lack of access to infrastructure, such as payment system , bank accounts

Risks, Costs & Funding

5

Formulating Strategic Recommendations

Based on research, formulate strategic pathways (recommendations) for discussion with stakeholders.

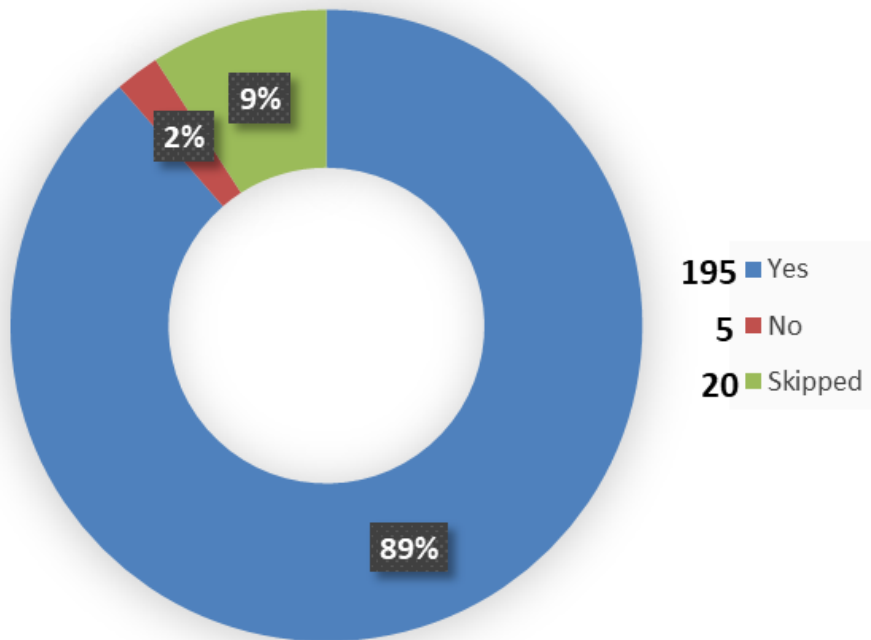
Assess appropriateness and workability of strategies in RNM context.



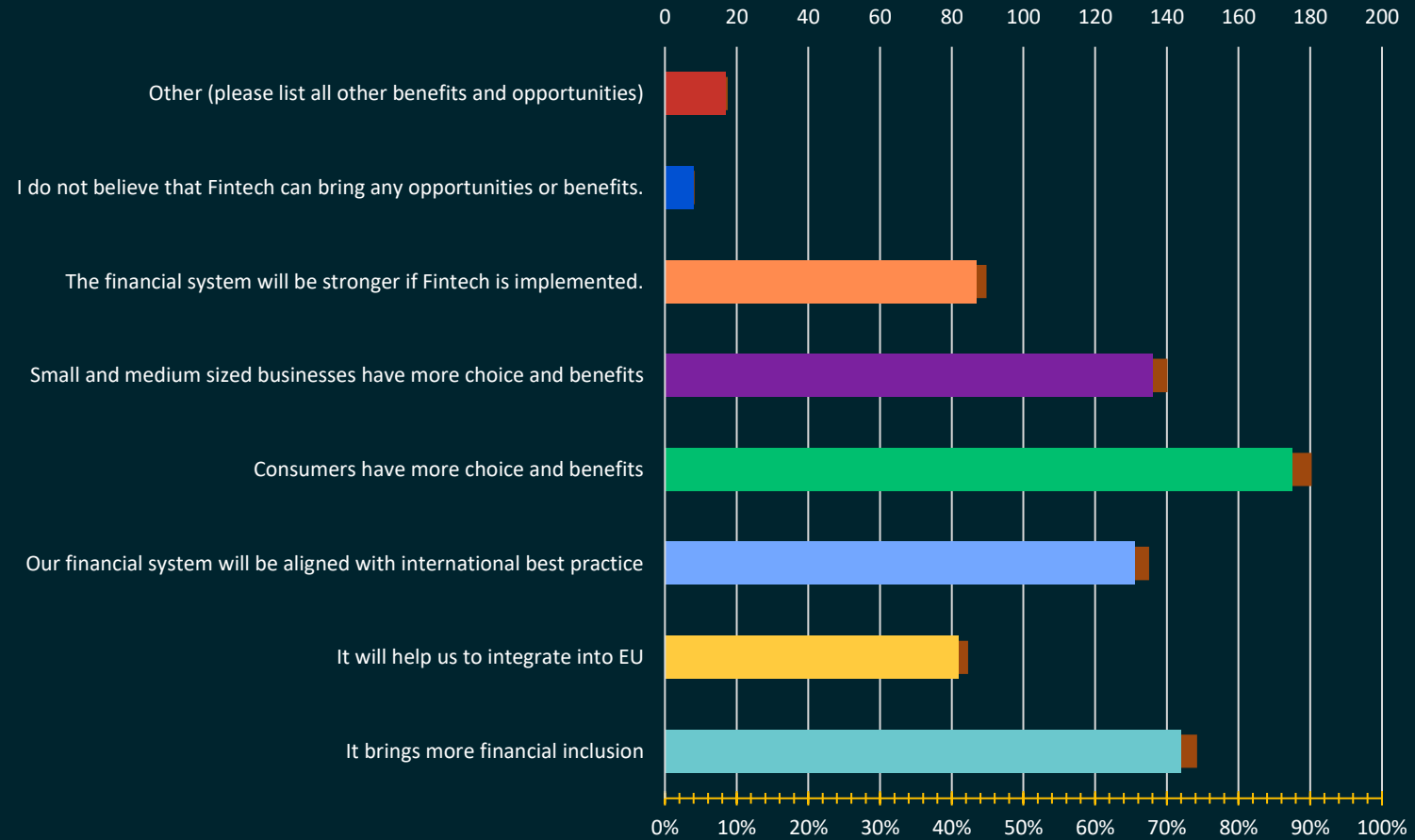
Survey Result Highlights



NEED for FINTECH



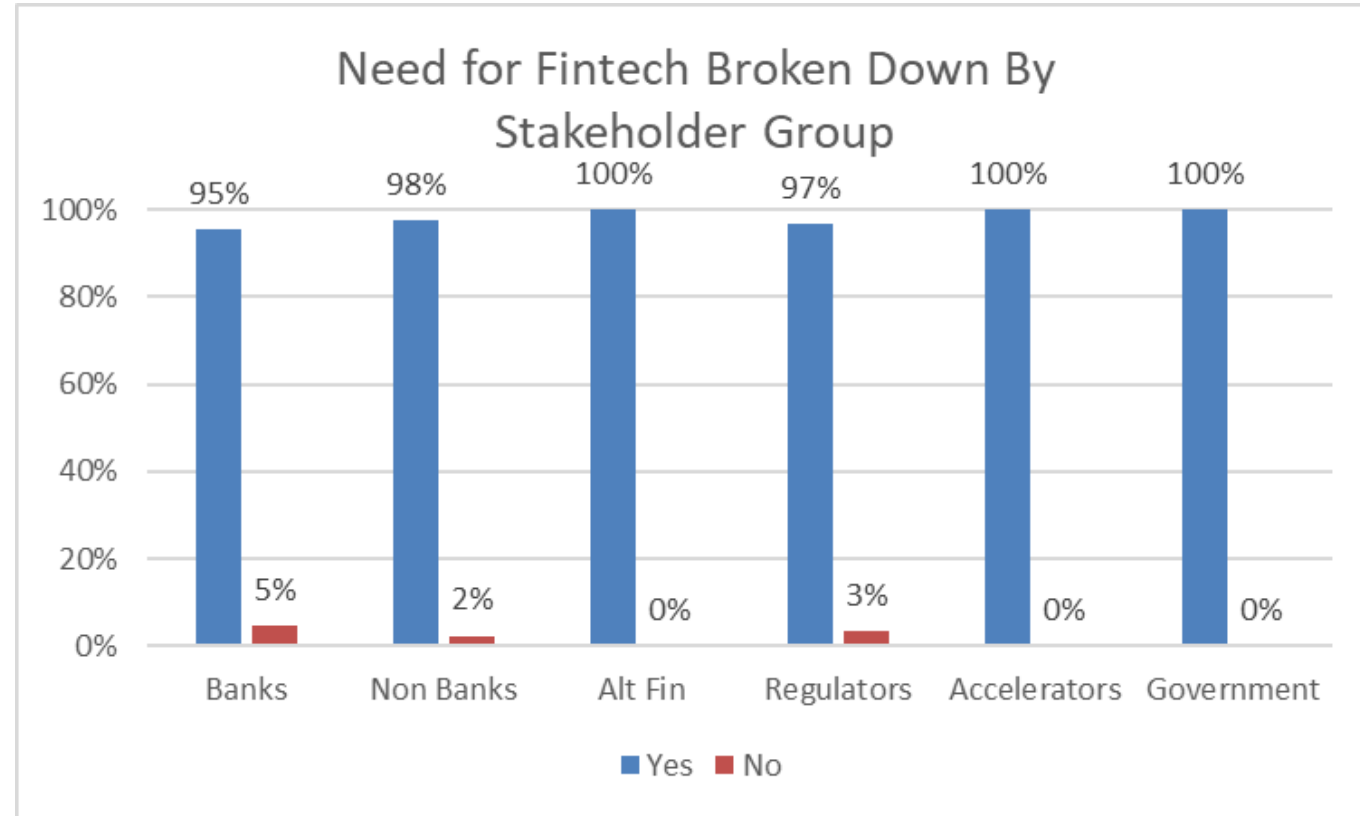
What Opportunities can Fintech Bring



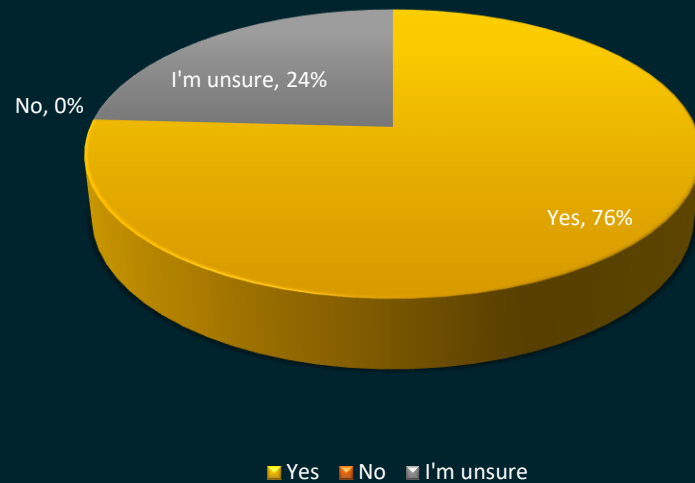
Rationale for “No”

- Traditional players have capacity to meet customer need
- Already highly competitive space with low growth and profitability
- Market is too small
- People are not ready to adopt Fintech solutions
- Cyber risks

NEED for FINTECH

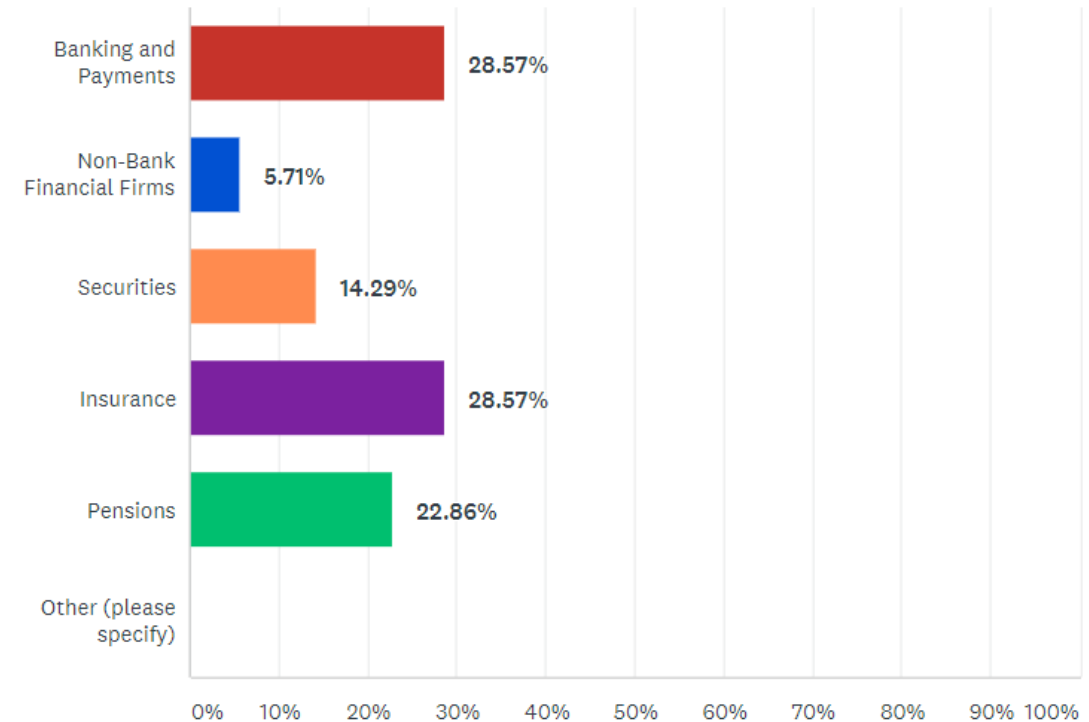


Should Regulators be Open to Fintech Newcomers?



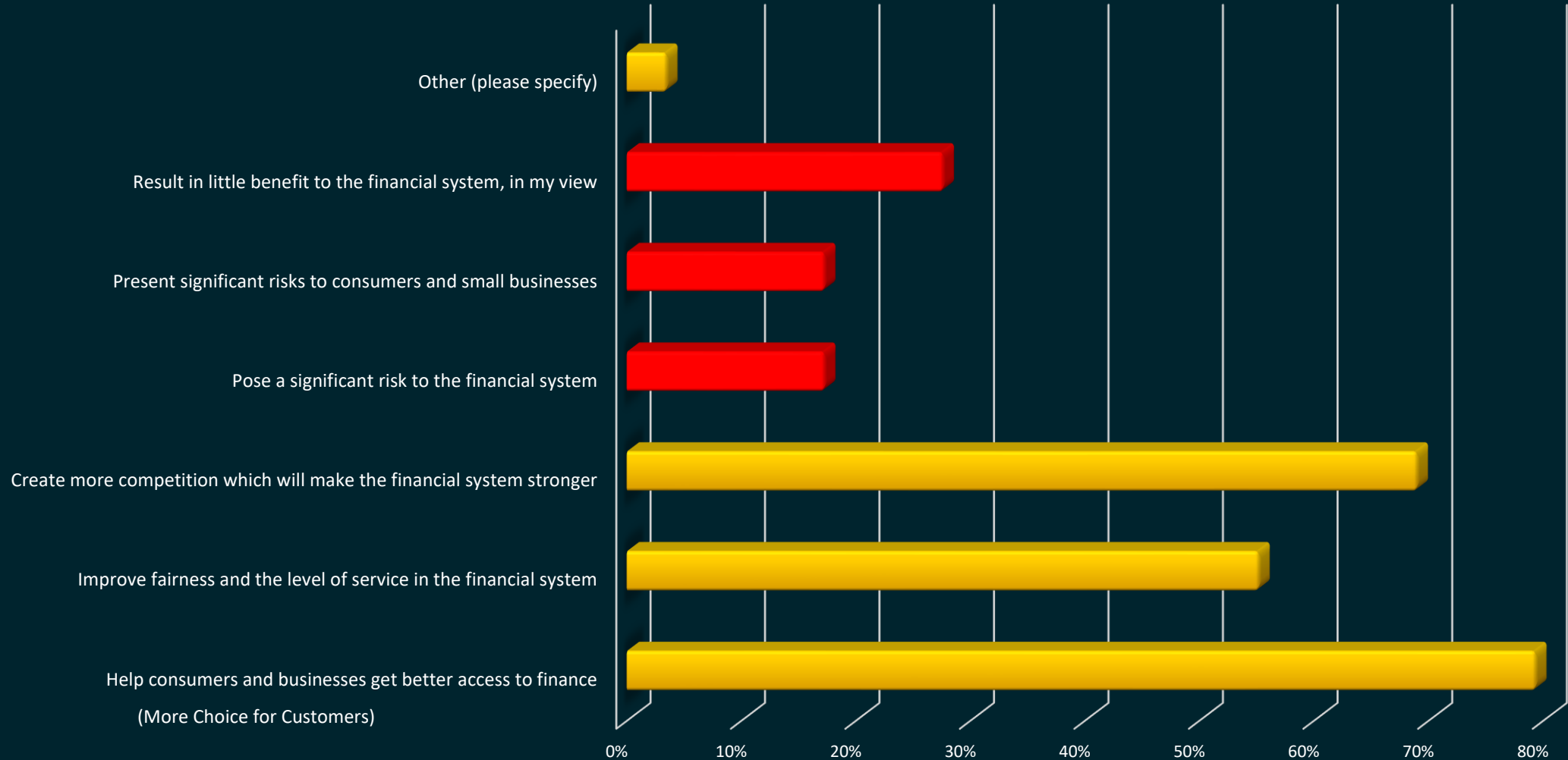
What best describes the sector that you regulate?

Answered: 35 Skipped: 0



REGULATORS see POSITIVE IMPACT of FINTECH

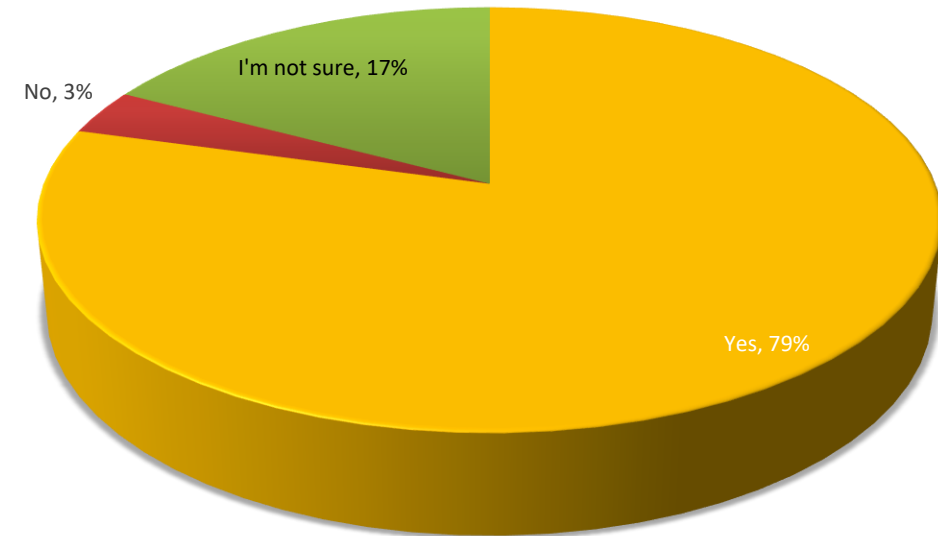
Impact of Allowing Fintech Newcomers or Innovation



REGULATORS Support a **SANDBOX**

- However, they need legislative support to allow experimentation
- New legislation that provide legal ground for functioning of a Sandbox
- Consumers / End Users must be afforded regulatory protection while transacting during sandbox testing

Support Developing Regulatory Sandbox?

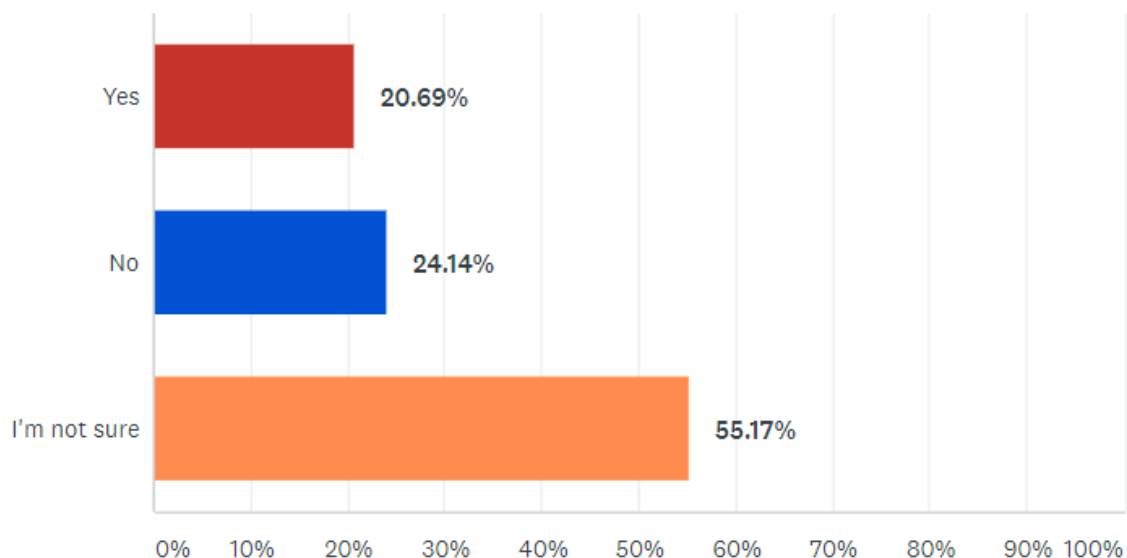


■ Yes ■ No ■ I'm not sure



/Will FINTECHs COMPLY?

Do you believe that Fintech newcomers are adequately prepared to comply with all regulatory requirements?



Yes

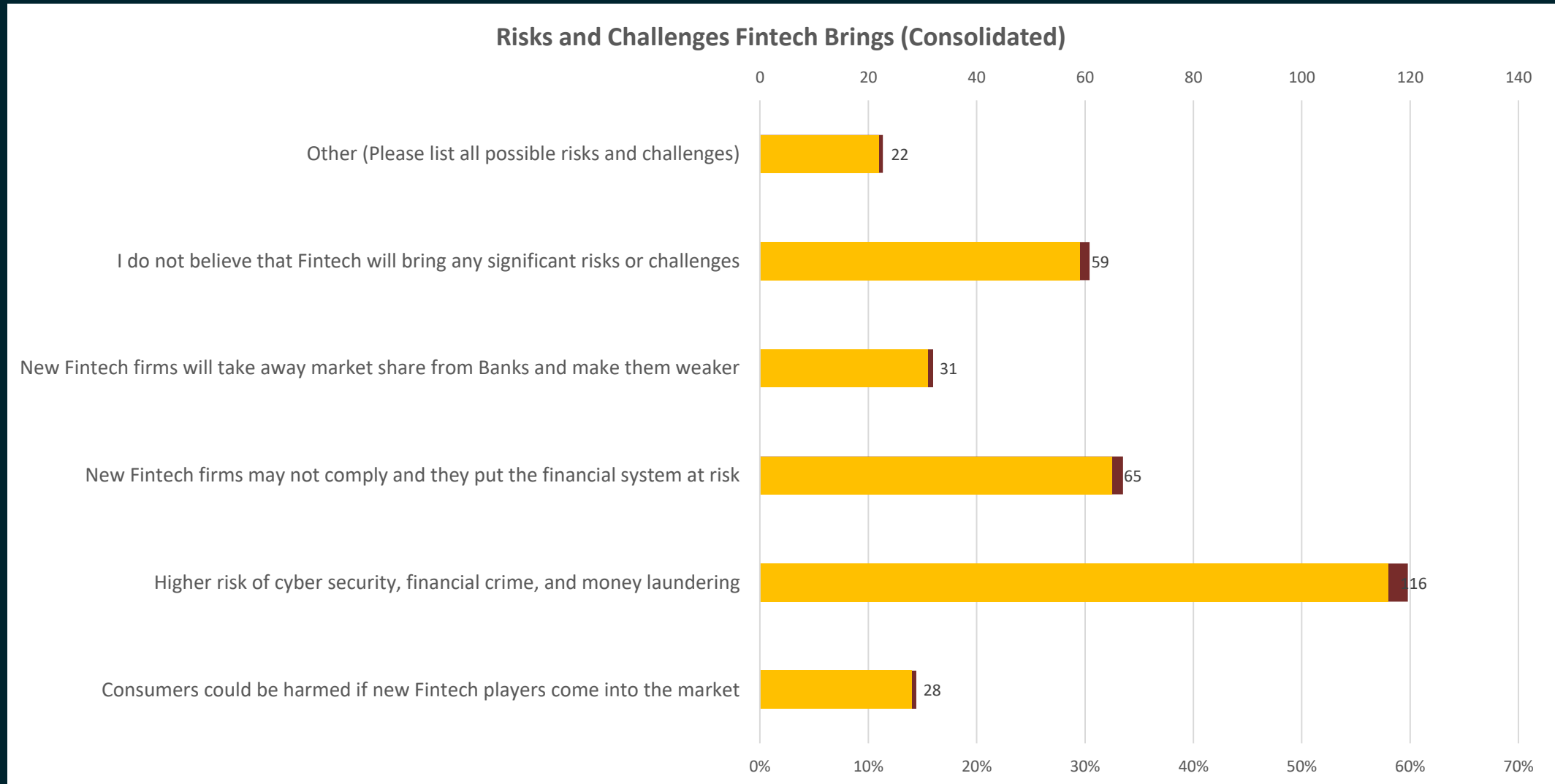
- North Macedonian Fintech firms will follow international firms, who are complying
- If regulation is tailored to their needs, they will be more likely to comply

No

- Fintech firms do not fully understand regulatory requirements
- Current regulatory framework is too burdensome
- Smaller companies who may not have compliance resources
- Conflict between market traction & compliance

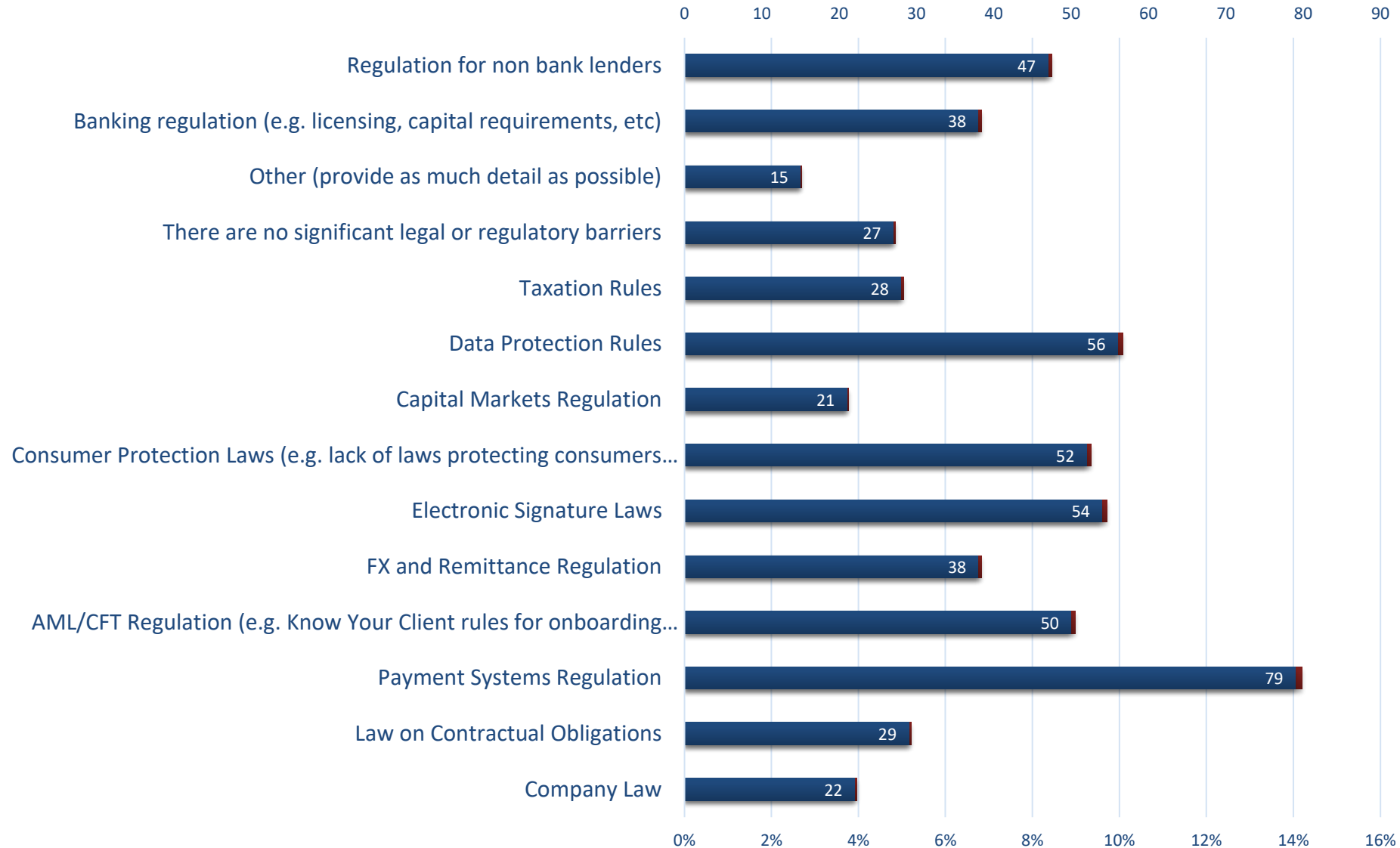


RISKS & CHALLENGES of FINTECH



LEGAL & REGUALTORY BARRIERS

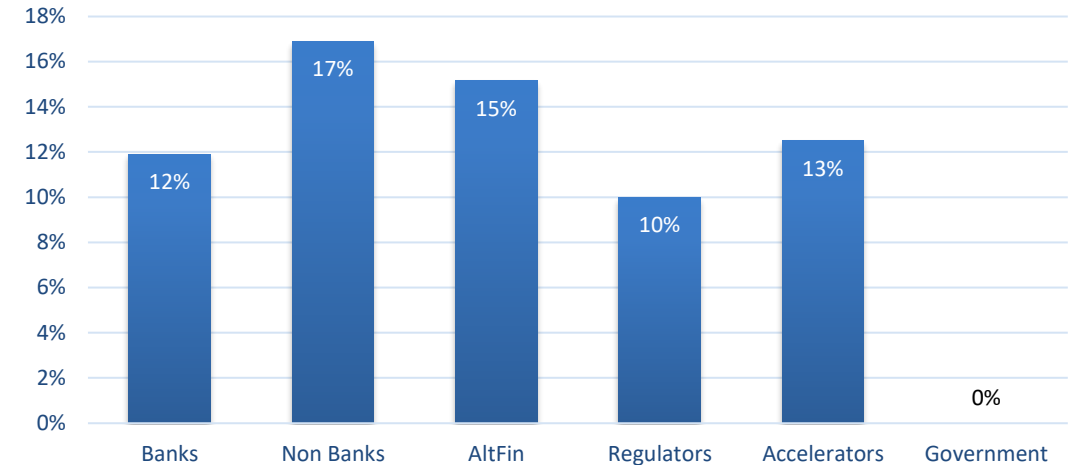
Biggest Legal & Regulatory Barriers



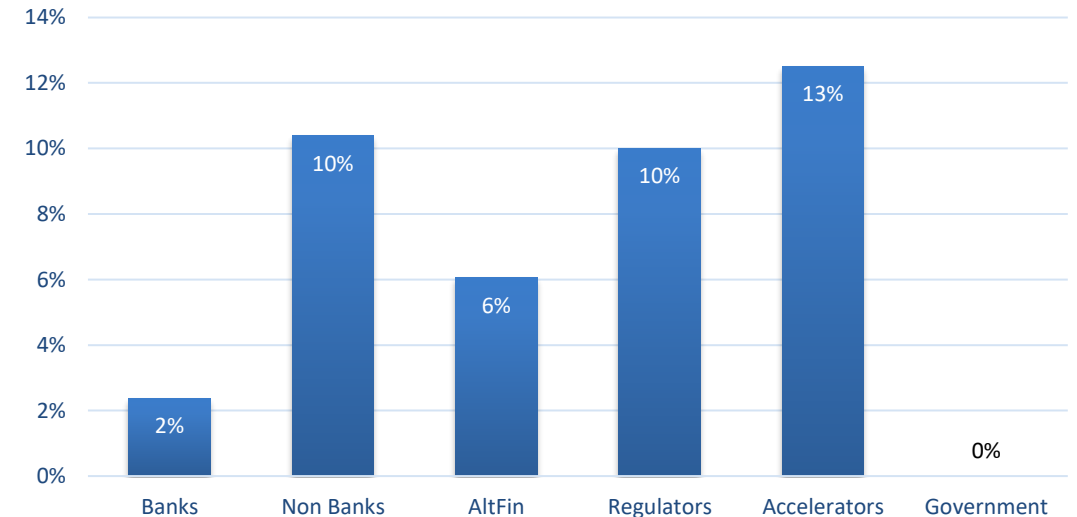
OTHER REGULATORY OBSTACLES

- Impractical & changing regulatory landscape
- Insurance Regulation (Solvency II)
- Inflexible Labour Law
- Sometimes laws can be overly protective or restrictive
- No specific legal framework for Fintech
- Overlapping regulatory requirements and supervision

There are no significant legal or regulatory barriers



Other (provide as much detail as possible)



/Suggestions

To Develop Fintech in RNM



CREATE DEMAND FOR
FINTECH



SUPPORTING
INNOVATION



COORDINATED
EFFORTS



REMOVING BARRIERS
to ENTRY

EDUCATION

Financial literacy and
creating awareness
and trust in Fintech
solution

EMPOWER

Empower
entrepreneurs and
innovators with
support / More
accelerators

COMMON PURPOSE

Better coordination of
Fintech initiatives to
ensure a successful
outcome

CONDUCTIVE ENVIRONMENT

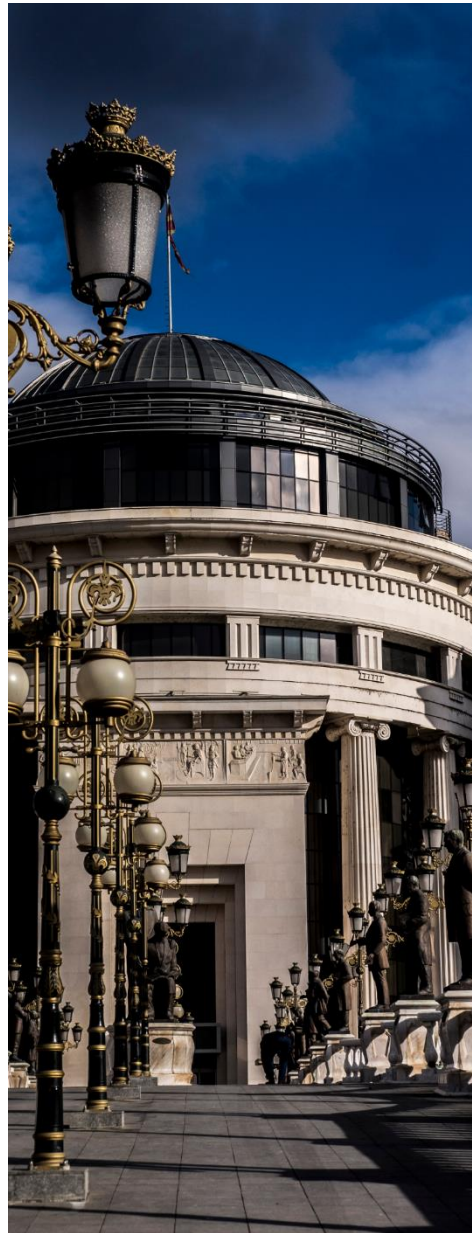
Lower Regulatory
Requirements
Regulatory Support



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NBRNM Roadmap

National Fintech Strategy

Developing a National Fintech Strategy
with recommendations for all
Stakeholders.

Landscaping

Understand the current landscape and
how conducive it is to Fintech
development

Regulatory Education

Understanding the opportunities
& challenges of Fintech

Innovation Office

Fintech working group which sets the
Innovation Gateway as a platform for
engaging with Fintech

Governance & Coordination

Ensure we bring all ecosystem
stakeholders together and develop a
governance framework that will drive
action





→

NBRNM Experience

Our Journey Thus Far

- Innovation office – representatives from different Departments within the Bank
- Almost 30 queries received since the start of the Innovation Office
- Most of them related with the innovations in the payment area, but questions for clarification for crypto-assets as well
- Coordination with regulators and other stakeholders
- Senior Management Engagement



Structuring Innovation Hub & Sandbox

Joint and Joined Up Approach

- Cross Regulatory Innovation Hub and Sandbox
- Seamless engagement for Fintech & Incumbent Innovators
- Facilitate cross regulatory testing and licensing of ideas
- Ensure consistency in support, testing and licensing



Key Opportunities

Driving RNM Ahead

- Competition
- Financial Accessibility (increasing depth of the market)
- Financial Stability (increasing breadth of the market)
- Motivate incumbents to transform and tap into untapped markets



Key Challenges

Addressing Concerns

- Governance & Coordination
- Capacity Building
- Resourcing
- Risk assessment – Consumer and risk to financial stability
- Broad range of innovation landing on our desk





THANKS!

Any QUESTIONS?

