

Fintech: What are Countries Seeing and Doing?

Seminar for Senior Bank Supervisors from
Emerging Economies
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1. The impact of fintech











Fintech is transforming the financial industry and value chain

User Needs	Traditional Model	Gaps ¹	Technological Innovations ³				Fintech Solutions
			AI/ML	Data/Cloud Platforms	DLT/ Crypto	Mobile	
Pay	Cash/ATM Check Wire/MTO's Debit/Credit Cards Centralised Settlement	Speed Cost Transparency Access Security	L	H	H	H	Virtual currencies Remittances Mobile payments Mobile PoS P2P payments B2B transactions DLT-based settlement
Save	Bank deposits Mutual funds Bonds Equities		L	H	H	L	Virtual currencies Mobile market funds Blockchain bonds
Borrow	Bank loan Bonds Mortgages Trade credit		H	H	H	L	Credit modeling Platform lending Crowd-funding Blockchain bonds Auto-underwriting
Manage Risks	Brokerage underwriting Structured products Trading regulatory Compliance KYC Insurance		H	L	H	L	Regtech, Smart contracts Supertech Crypto-asset exchanges eKYC, Digital ID
Get Advice	Financial planner Investment advisor		H	M	L	M	Robo-advising Automated wealth management

Source: World Bank and IMF (2019). Fintech: The Experience So Far.

Fintech is already impacting a wide range of financial services

Digitization Of:	Money	Cash Transfers	Identity	Origination / Lending	Payments	Capital Markets Infrastructure	Supply Chain/ Invoicing	Insurance and Savings
Drivers	<ul style="list-style-type: none"> Ecommerce Convenience Govt action (e.g. India) Transport 	<ul style="list-style-type: none"> Govt efficiencies Govt policy programs Fraud reduction 	<ul style="list-style-type: none"> KYC, security SIM reg., govt payments E-services, elections Falling costs biometrics Mobile devices 	<ul style="list-style-type: none"> Big data (KYC automation) Need for transparency + efficiency Convenience Digital identity 	<ul style="list-style-type: none"> Global trade Ecommerce Business & leisure travel 	<ul style="list-style-type: none"> Search for global returns Convenience of personal investments Democratization of share ownership 	<ul style="list-style-type: none"> Business need for efficiency, convenience, transparency Govt push for transparency + tax compliance 	<ul style="list-style-type: none"> Data analytics & underwriting Falling interest rates & invest income Business need for efficiency & risk assessment
Opportunities	Account service providers; cash collection networks; regulatory advice to govts	Govt payment contractors (govts may unintentionally create largest payment banks)	Govt platforms for digital ID followed by innovative private-sector led applications	Digital lenders, marketplaces, originators, Scale SME Lending, Robo advice	Money transfer operators, cross border payment networks, FX operators	Back office operations, main exchanges (stock, currency, bonds, derivatives)	Back office operations, exchanges, value chain securitization	Direct insurance, online brokers & advisors, data and analytics, aggregators
Location	Global - populous countries first	Markets with cash transfer programs	Country specific and global (ID4D is global, regional, country specific)	Global - focus on large demographics	Global - main trade corridors	Financial market capitals (NY, London, Tokyo)	Regional & cross border	Global, regional and country specific
Impact	1.5 Bn wallets in 6 years	Over 300m accounts	1.5 Bn people without ID	\$34 Bn in China alone	\$3.6Trn value globally p.a.	\$20Trn p.a. global flows	>\$1Trn p.a. in LAC alone	>5 Trn GWP, >15 Trn AUM
Examples								

Industry transition is an endogenous process

Forces

Regulation

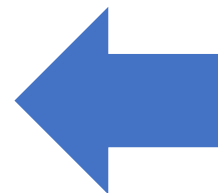
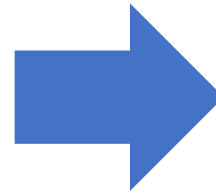
- Perimeter and arbitrage: Entity- or activity-based
- Proactive or “wait and see”
- Coordination across regulators
- Cyber, anti-trust, data protection, privacy

Technology

- Low-cost (cloud) computing and data storage
- Data analytics
- Automation and straight-through processing
- Ubiquitous connectivity
- Digital infrastructure and interoperability (e.g. APIs)

Market factors

- Explosion of proprietary data
- Customer expectations
- Lack of incumbent agility (e.g., legacy assets)
- New providers from outside the sector



Outcomes

Policy objectives

- Stability
- Integrity
- Inclusion
- Competition
- Consumer and investor protection

New business models, products, and services

- Value chain decomposition and recombination
- Disintermediation
- Tailoring of products in real-time
- Blurring boundaries of the firm and sectors
- Platforms and eco-systems

Industry structure, competition, and profitability

- Incumbents
- Newcomers
- Bigtechs
- Third-party service providers

2. Fintech around the world



Regional overview (1/2)

East Asia and Pacific

*Significant **advances** in nearly every aspect of Fintech, however **regional disparity**.*

*Some Fintech products have shown **significant risks** for consumer protection, investor protection, AML/CFT and also stability.*

*Significant **intra-regional** Fintech related investments from China and Singapore.*

*Strong **support from public authorities** in ASEAN countries.*

***Regulatory interventions** on payments, alternative lending and crypto.*

South Asia

*Steady rise in the use of digital payments, though **lagging behind** other regions.*

***Strong potential** for harnessing Fintech for financial inclusion and closing the gender gap.*

***India** is fast growing into a major fintech hub in Asia.*

***Bangladesh** is also making steady progress in fintech innovation and adoption.*

*Fintech innovation and investment in **Pakistan, Nepal and Sri Lanka** are in their nascent stages.*

Middle East and North Africa

*High-income countries making rapid strides, the **rest of the region** has had a slow start.*

***Persistent gaps** in financial inclusion across countries and gender.*

***Four countries** (Egypt, Jordan, Lebanon, and UAE) account for 75% of fintech startups.*

New growth centers have also emerged in Bahrain, Iran, and Saudi Arabia.

Regional overview (2/2)

Sub Saharan Africa

Leaders in **mobile money** adoption resulting in significant gains in financial inclusion.

East Africa has maintained an overall lead. **Southern and Central Africa** has significant room for further gains.

West Africa well-positioned to take advantage of digital technologies.

Gaps in **foundational infrastructure and legal and regulatory frameworks** could constrain further growth.

Europe and Central Asia

Tremendous **potential** given the high mobile phone and internet access.

Major **regional differences** between high income and middle-income countries (EU and non-EU)

The region has been home to some major fintech startups and **cryptocurrency** mining centers in recent times.

Authorities across the region have been **proactive** in encouraging development of fintech, as evidenced by the survey results.

Latin America and Caribbean

Adoption of digital payments and mobile money services **low**, despite relatively high mobile and internet penetration rates.

Fintech startups are growing, albeit from a low base.

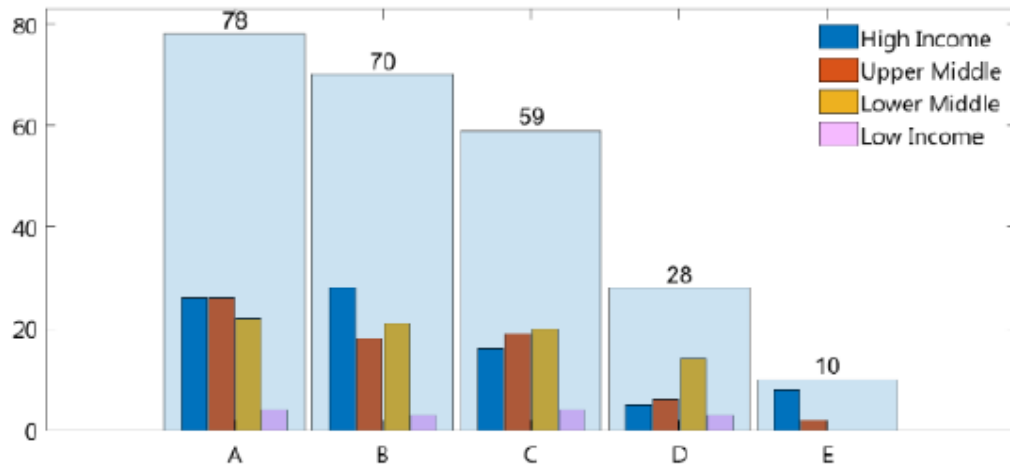
Pro-active regulatory responses – Mexico Fintech Law, Regulatory adaptations in Colombia and Brazil.

Several central banks are exploring the possibility of issuing **CBDC** (Central Bank Digital Currency).

Global Fintech Survey (1/5)

- 1 Countries recognize the broad benefits of fintech, including for **financial inclusion...**
 (for households (84%) and MSMEs (73%) and reduce the urban-rural gap)

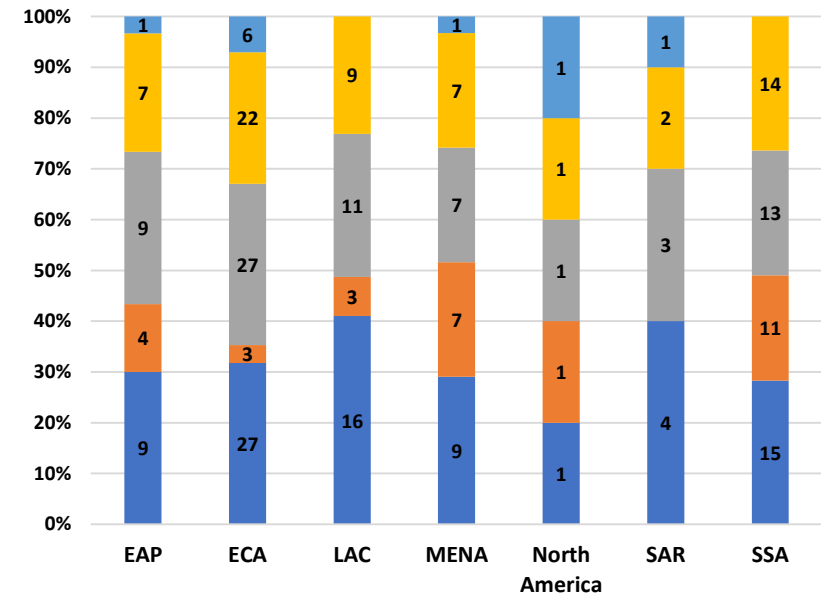
Fintech and financial inclusion



Do you expect fintech to significantly expand access and usage of financial services in your jurisdiction within the next five years (please check all that apply)?

- A: Increases overall financial inclusion for households.
- B: Helps close the Micro, small, and medium-sized enterprise gap.
- C: Helps close the Rural and remote areas gap.
- D: Helps close the Gender gap.
- E: Other. [Please provide brief description]

How fintech is expected to contribute to increase in access and usage of financial services

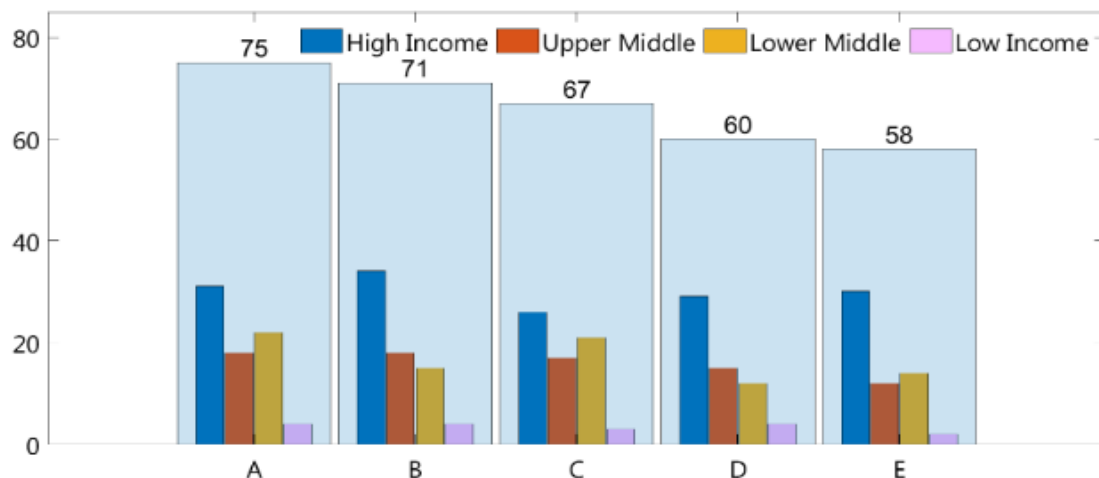


- Other.
- Helps close the Rural and remote areas gap.
- Helps close the Micro, small, and medium-sized enterprise gap.
- Helps close the gender gap.
- Increases overall financial inclusion for households.

Global Fintech Survey (2/5)

2 ... and are taking a *variety of policy measures* to foster these benefits

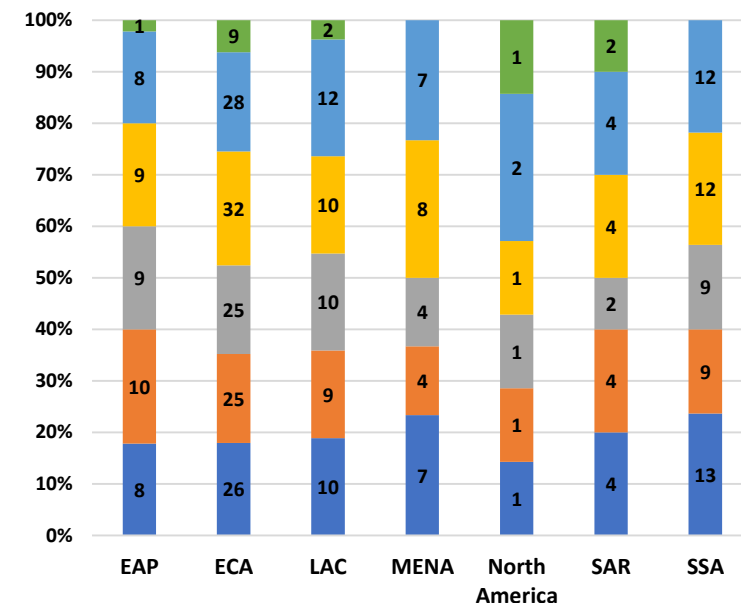
Actions taken for harnessing potential of fintech



To maximize fintech's benefits, does your jurisdiction actively undertake the following activities or expect to do so in the next two years (please check all that apply)?

- A: Improving consumer awareness and education.
- B: Reviewing and amending the policy framework to enable fintech investment, innovation, and adoption (e.g., similar treatment of similar activities and risks, proportionality).
- C: Strengthening of institutional capacity.
- D: Expanding outreach to stakeholders (e.g., financial incumbents, fintech companies).
- E: Adopting a cross-agency approach involving relevant ministries and agencies.

Actions taken for harnessing potential of fintech: Regional breakdown

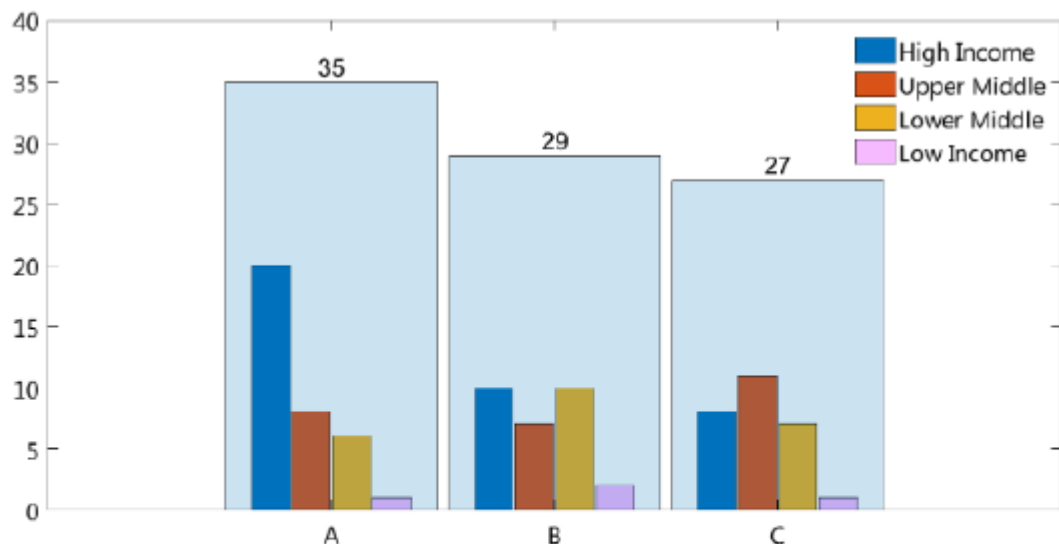


- Other.
- Reviewing and amending the policy framework to enable fintech investment, innovation
- Improving consumer awareness and education.
- Adopting a cross-agency approach involving relevant ministries and agencies.
- Expanding outreach to stakeholders (e.g., financial incumbents, fintech companies).
- Strengthening of institutional capacity.

Global Fintech Survey (3/5)

3 Many countries have a *fintech strategy* in place...

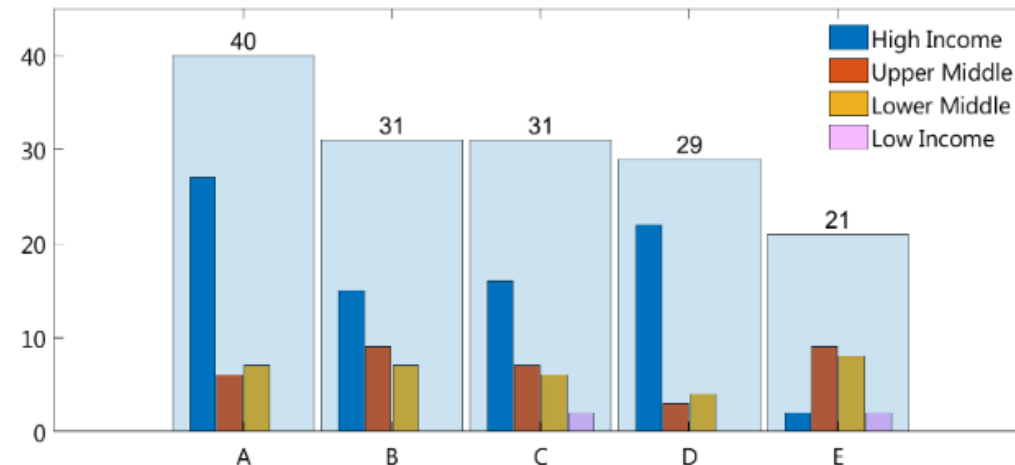
Fintech strategy



Does your jurisdiction have a national strategy in place to promote responsible innovation and adoption of fintech or expect to have one?
 A: Yes, a strategy has been developed.
 B: No, but a strategy is under development and will be in place in the next two years.
 C: No.

4 ...and have taken *regulatory actions* (76% have made modifications to their regulatory approach to facilitate the development of Fintech)

Regulatory and supervisory approaches



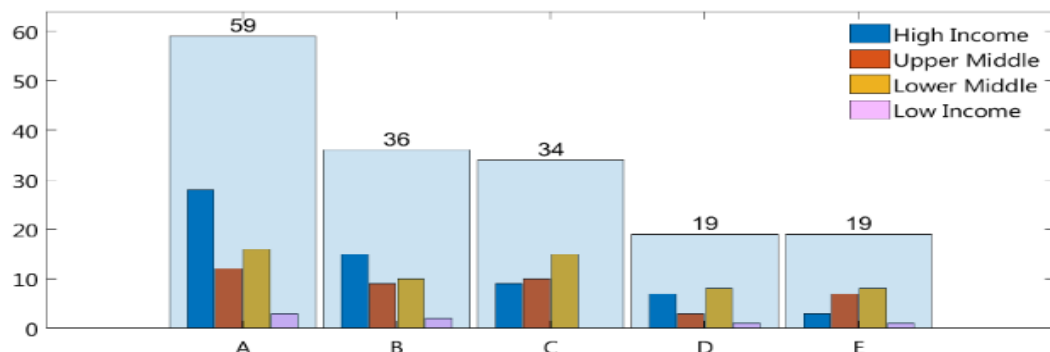
Have authorities modified their regulatory and supervisory approach to facilitate the development of fintech and/or develop supervisory capacity (please check all that apply).

- A: Set up special contact point for fintech questions.
- B: Allowed sandboxes.
- C: Other. [Please provide brief description]
- D: Established Innovation hubs.
- E: None.

Global Fintech Survey (4/5)

- 5 Countries observe various gaps in **regulatory frameworks** and have made modifications to address **new risks** (63% have observed increased fintech-related ML/TF risk, but few countries have adopted risk assessment mechanisms)

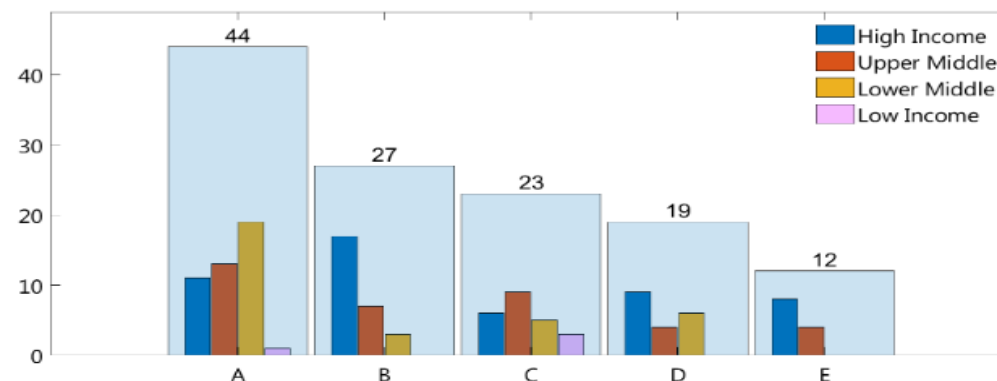
Gaps in regulatory frameworks



In which areas have authorities identified gaps in the existing regulatory framework, resulting from fintech developments, that need to be addressed (please check all that apply)?

- A: Crypto-Assets: Issuance, Exchange and Custody
- B: Peer to peer lending
- C: Mobile Money / payments services
- D: Investment Products with Robo-Advisors
- E: Lending Activities with artificial intelligence and machine learning on credit scoring

Modifications to regulatory frameworks



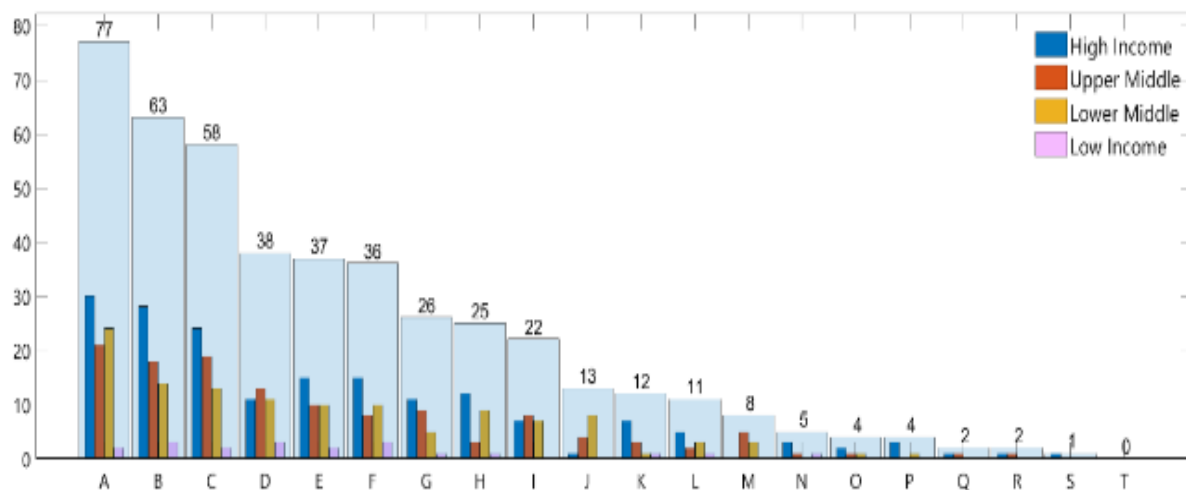
In which areas have authorities modified their regulatory framework (e.g. expanding the perimeter or introducing a new regulation) to address emerging risks from fintech activities (please check all that apply)?

- A: Mobile money / payment services.
- B: Crypto-assets: Issuance, Exchange and Custody.
- C: None
- D: Peer to peer lending.
- E: Others: [Please provide brief description]

Global Fintech Survey (5/5)

6 Countries clearly see a *need for international cooperation in various areas...*

Top 5 priorities for international co-operation on Fintech

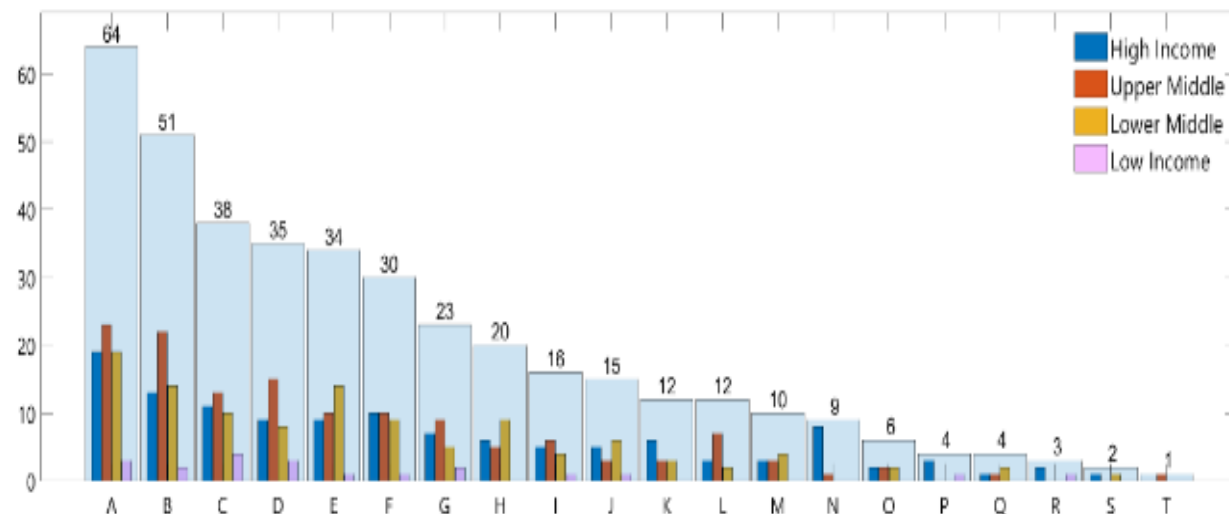


What are the top five priorities for greater international cooperation on fintech? (select up to five)

- A: Cybersecurity.
- B: AML/CFT.
- C: Legal, regulatory frameworks.
- D: Payments and security settlement systems.
- E: Cross-border payments.
- F: Supervisory frameworks.
- G: Data and statistics.
- H: Consumer and investor protection.
- I: Technological know-how.
- J: Financial development and inclusion for both households and firms.
- K: Crisis preparedness.
- L: Cross-border capital flows.
- M: Central banking.
- N: Correspondent Banking Relationships.
- O: Taxation.
- P: Other. [Please provide brief description]
- Q: Macroprudential policies.
- R: Competition policies.
- S: Insolvency framework.
- T: Other areas of financial regulation.

7 ...and request *capacity building and assistance*

Priorities for capacity building and bilateral advice from IFIs



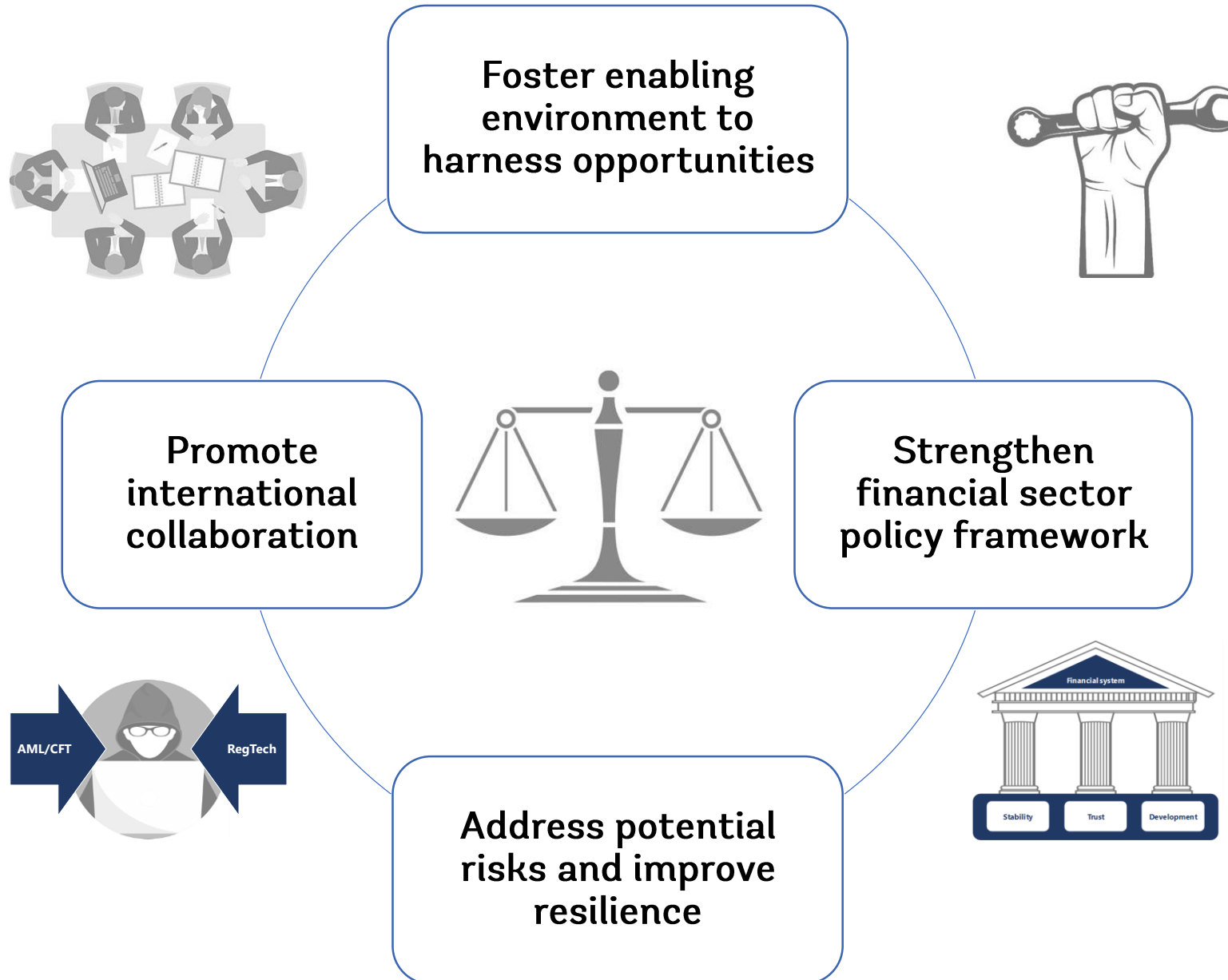
Would you consider receiving capacity building and bilateral advice from international financial institutions including the IMF, the World Bank (Please check the top five priority areas)?

- A: Cybersecurity.
- B: Legal, regulatory frameworks.
- C: AML/CFT.
- D: Supervisory frameworks.
- E: Payments and security settlement systems.
- F: Technological know-how.
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3. Emerging trends and policy issues

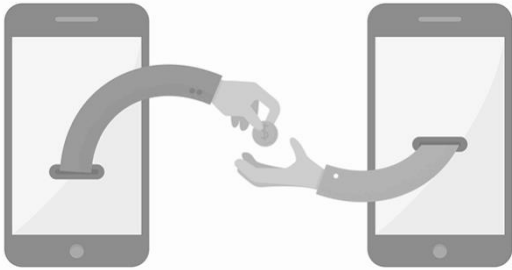


Bali Fintech Agenda: Need for a balanced policy approach to ensure a smooth industry transition



Emerging trends and policy issues (1/2)

Financial Inclusion



- ❖ Evidence of **positive impact**
- ❖ **Strong potential** for improvements to **capital mkts, MSME finance, Islamic fin & insurance**
- ❖ **Risks:** exclusion, discrimination, privacy and cyber

Monitoring Emerging Risks



- ❖ Many have setup a framework, but **enhancements needed**
- ❖ Largely proportional, but **challenges:**
 - Limited experience and resources
 - Cross-border regulatory arbitrage
 - Cyber-risks

Adapting Legal Frameworks



- ❖ Adapting to **new business models** and **technological capabilities**
- ❖ More openness to change **public law than private law**
- ❖ Policy implications for issues like **Data need changes in private law as well**
- ❖ **Private sector** using instruments like **contracts** to address gaps, **but these however have limits**

Emerging trends and policy issues (2/2)

Data Frameworks



- ❖ **Central to Fintech** with important **implications** for **competition, privacy, efficiency and inclusion**
- ❖ **Framework** should cover *collection, processing and storage; rights and obligations; individual controls; cyber security; and competition aspects.*
- ❖ **Global dialogue needed** including on issues like **data localization**

CBDC



- ❖ Multiple **experiments** and studies on Central Bank Digital Currency
- ❖ Need for close look on **implications for stability**
- ❖ Case for CBDC **based on context**, and needs to be weighed against **enhancements to existing arrangements**

Monetary system stability



- ❖ Fintech developments could lead to more **diversified and de-centralized** global financial system
- ❖ Potential **longer term** impacts on international monetary system
- ❖ Need for **international co-operation**

What's next? Emerging developments



Open data and APIs



Platforms and Bigtechs



Digital ID and infrastructures



Digital money

Policy challenges



Balancing competing policy priorities



Foundational legal, regulatory and infrastructure constraints



Data protection frameworks



Cybersecurity

Fintech is making inroads globally but has not yet reached disruptive critical mass

- Most advances in mobile payments with major impact on financial inclusion
- BigTechs are increasingly offering financial services and challenging incumbents, particularly in emerging markets
- Traditional financial institutions are adapting rapidly, increasing their digital footprint, but laggards will be under pressure
- Supervisory agencies are exploring fintech applications
- Impact on monetary systems and financial stability is limited at present