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Fintech in Latin America and the Caribbean

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- Startup landscape
- Opportunities
- Risks
- Central Bank Digital Currencies
- Further reading

The advances in technology that have the potential to transform the provision of financial services spurring the development of new business models, applications, processes, and products.

Payment System

- Mobile payment and wallet
- International money transfers (remittances and others)

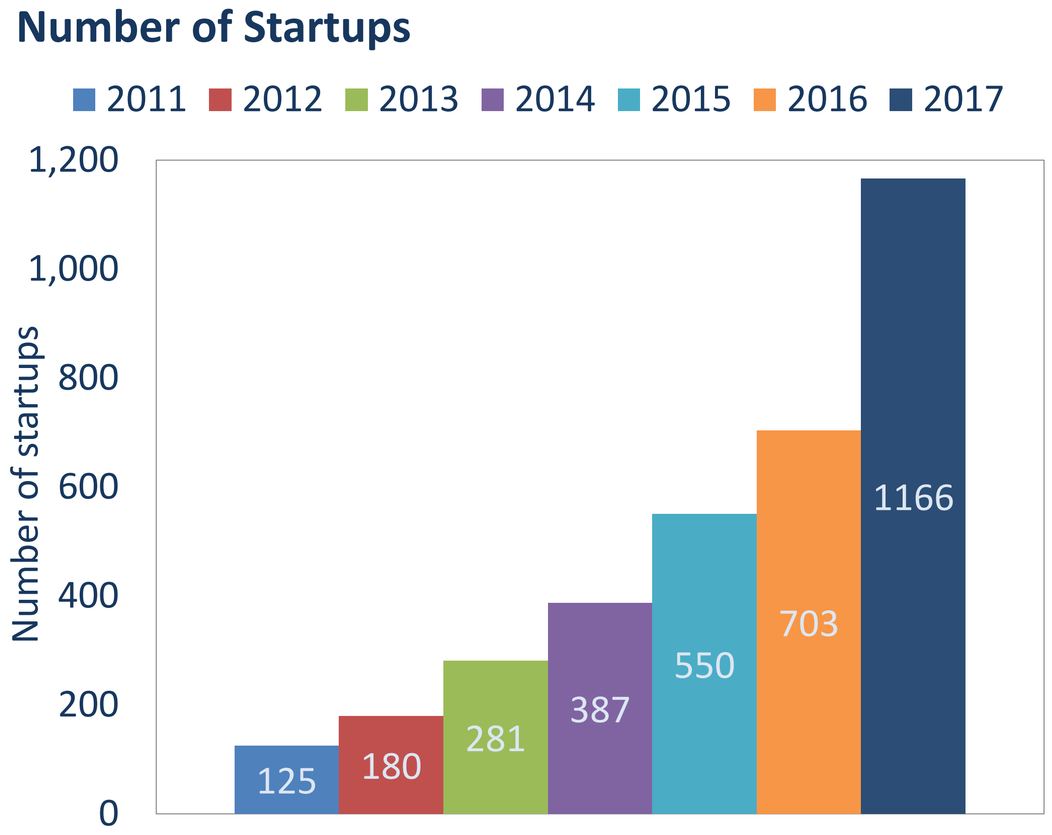
Lending

- Crowd funding: Investment and non-investment
- P2P lending: Consumer and Businesses
- Balance sheet lending: Consumer and Businesses

Financial Service & Risk Management

- Personal Financial Management
- Enterprise Financial Management
- Asset management

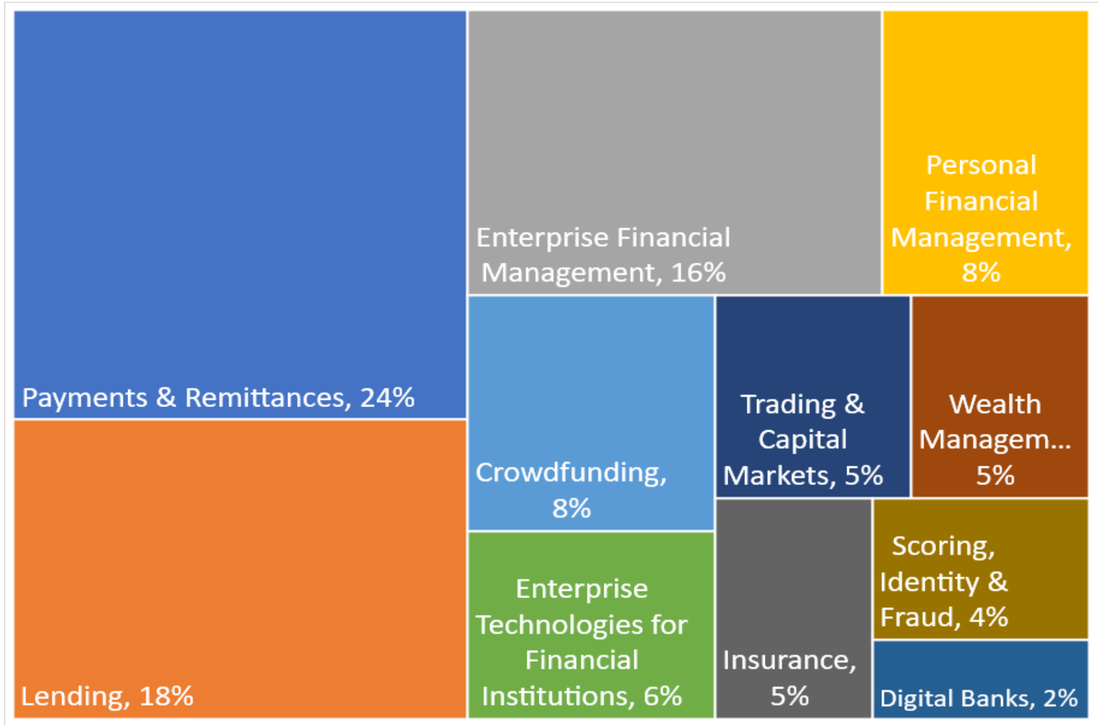
Fintech activity in LAC is expanding rapidly



Source: IDB/ Finnovista 2018.

Startups mostly focus on payments and alternative financing

Number of Fintech Startups by Segment of Service (2018)



Source: IDB/ Finnovista 2018.

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Fintech—opportunities

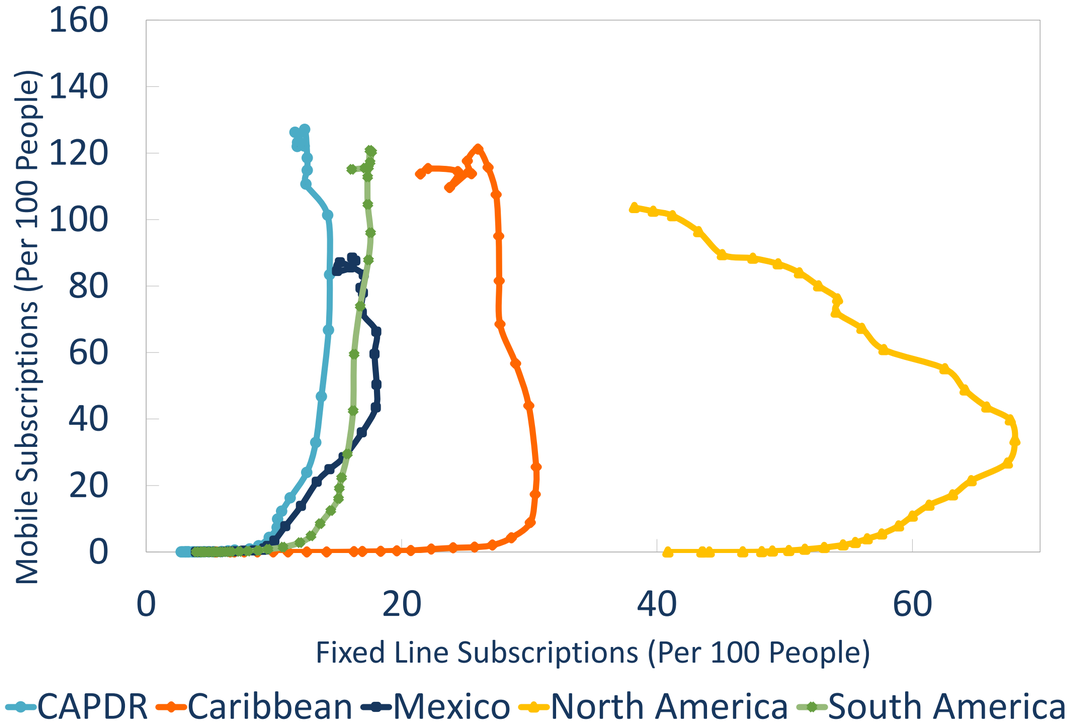
- Lower costs of transactions, services, and remittances
- Enhanced financial sector competition and improved intermediation
- Further progress in financial development and inclusion

IMF survey of country authorities (2019)

- In the region, fintech is widely seen as a useful tool to improve financial inclusion for households and small enterprises, and to reduce the rural/urban inclusion gap
- Almost 2/3 of jurisdictions incorporated fintech in a national financial inclusion strategy
- More than 2/3 modified the regulatory approach in response to a perception of rising risks

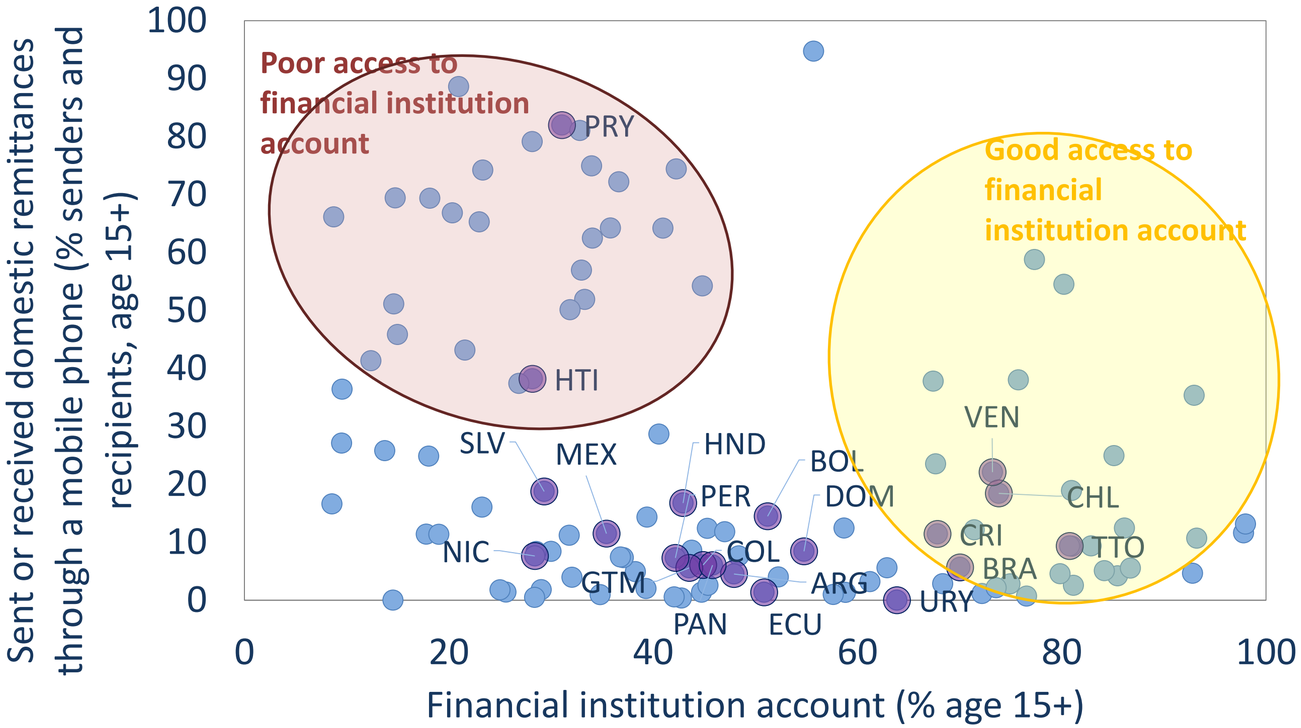
Technology is available, but underutilized

Evidence of Leapfrogging, 1980-2017



Sources: International Telecommunication Union (ITU) and IMF staff calculations.

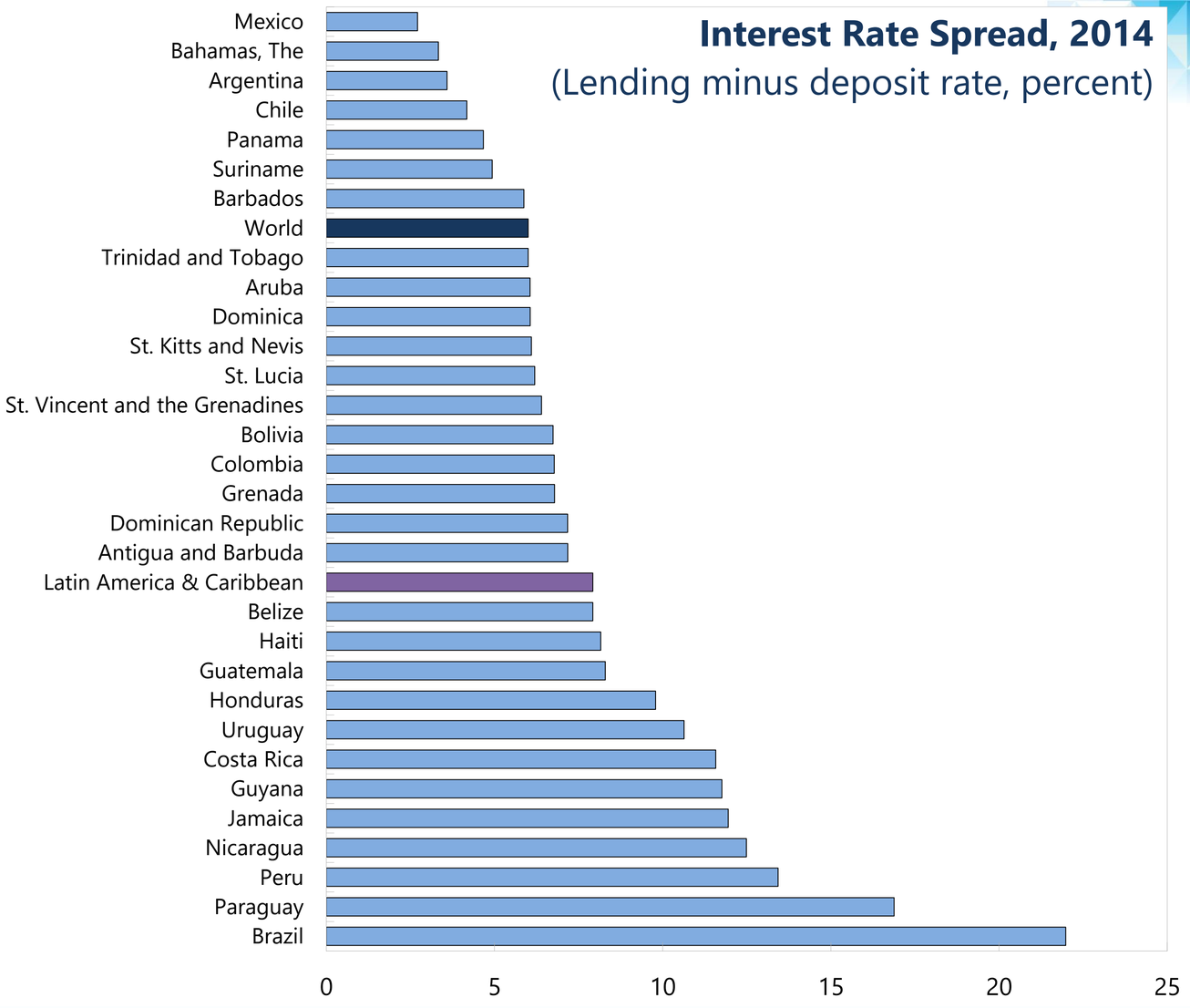
Financial Inclusion and Use of Mobile Phone Payments



Source: World Bank Global Findex Index.

Bank intermediation is low

- Due to high reliance on non-traditional sources
- High bank lending rates
- Informational requirements

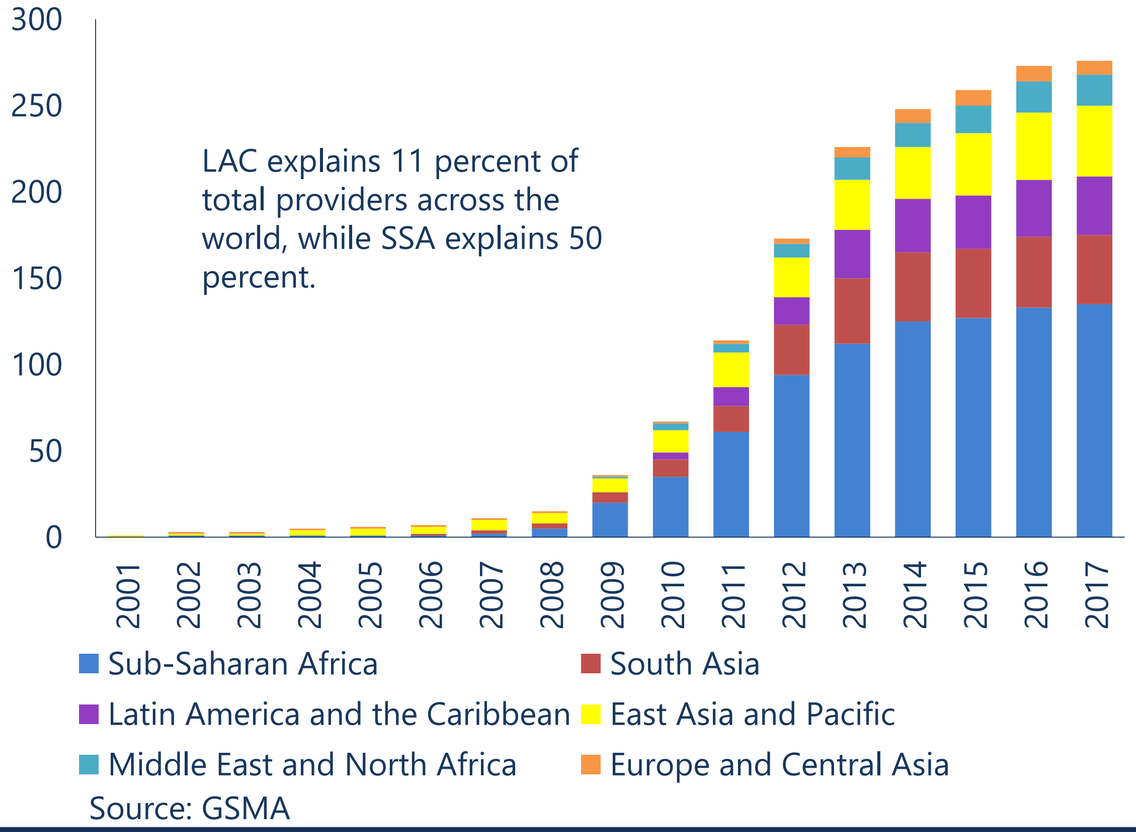


Source: IMF, International Financial Statistics.

After a slow start, mobile money is picking up

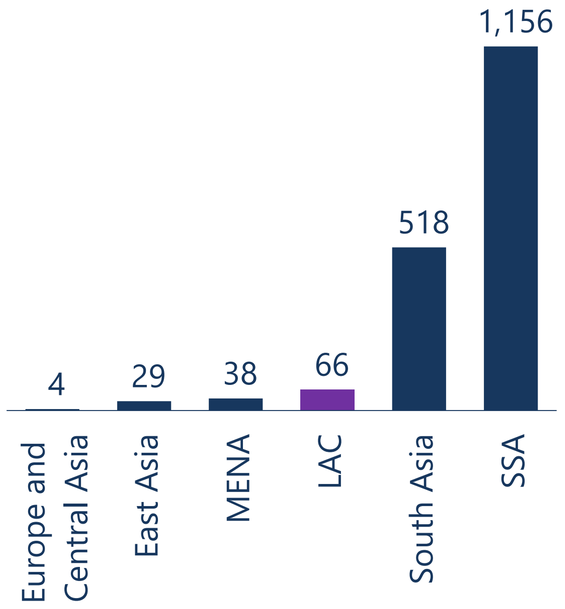
Mobile Money Services: LAC started late but is picking up. The transaction values & volumes are at par with East Asia and Europe

Number of Mobile Money Providers

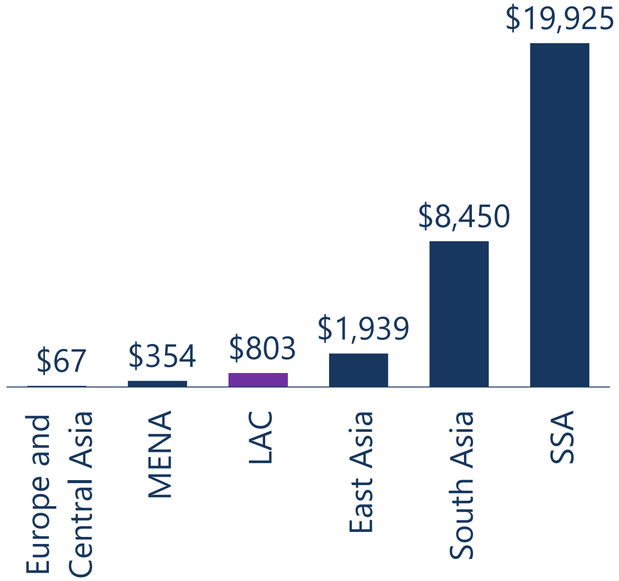


Source: GSMA

Mobile Money: Number of transactions *(million)*



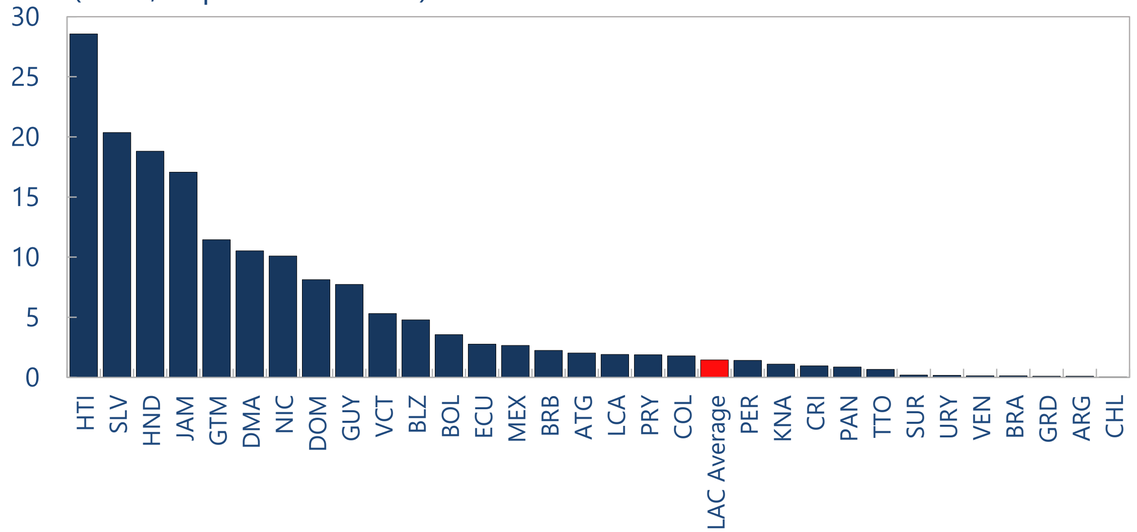
Mobile Money: Transactions value *(mn)*



Cross-border transfers, especially remittances, are an important source of income for many LAC countries…

Remittances to the region reached 1.5 percent of regional output in 2017 – but, remittances received by Central American and Caribbean countries dwarf those received by their South American neighbors.

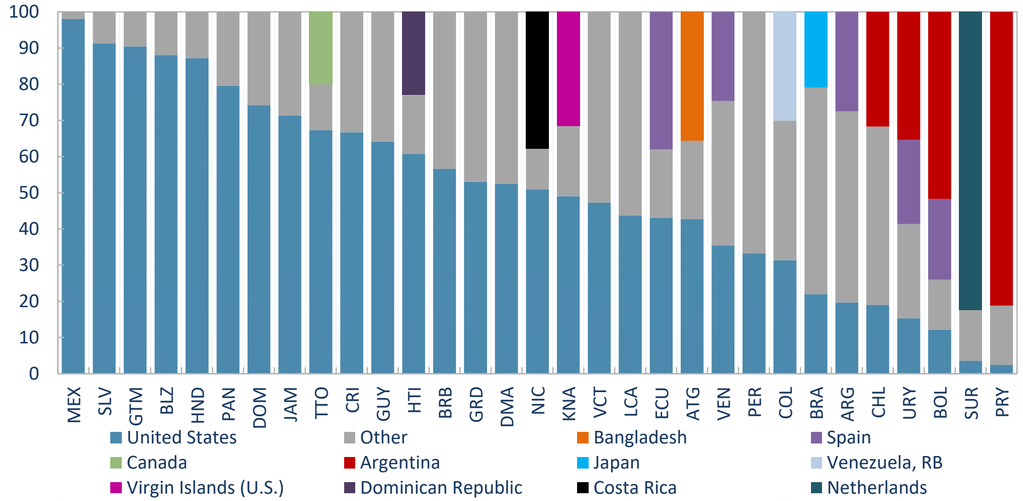
Remittance Inflows
(2017, in percent of GDP)



Sources: World Bank, WEO and IMF staff calculations

Remittances to the region overwhelmingly originate from the United States, with Spain and Argentina also sending sizeable remittances to some countries in the region.

Top Remittance Origin Countries
(in percent remittances received)

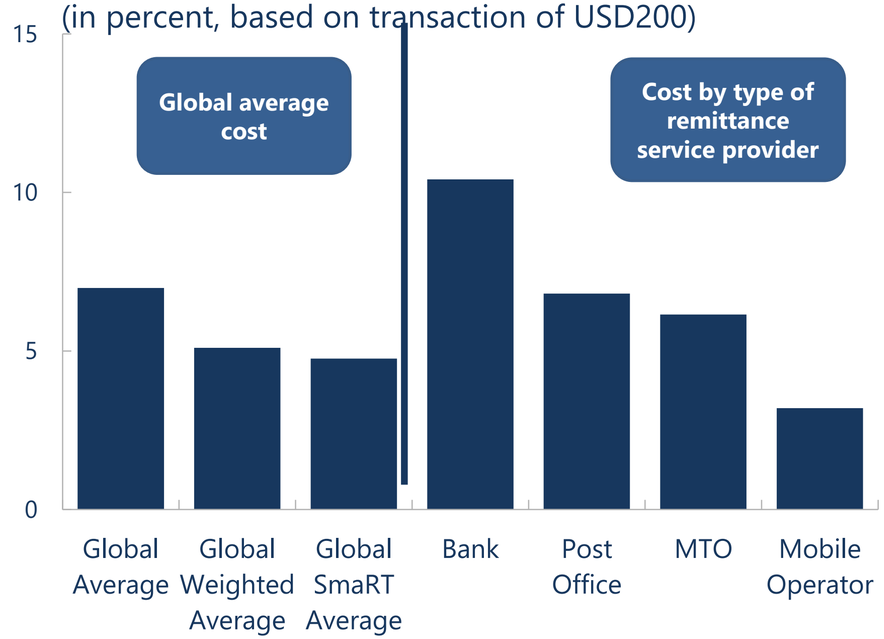


Sources: World Bank and IMF staff calculations. Source country shares in excess of 20 percent of total remittances are depicted, with the exception of the United States (LAC's top remittance sender) for which all shares are included.

yet remittances are costly to send and only a few startups focus on them

Banks are the most expensive channel, while mobile operators are the lowest-cost option.

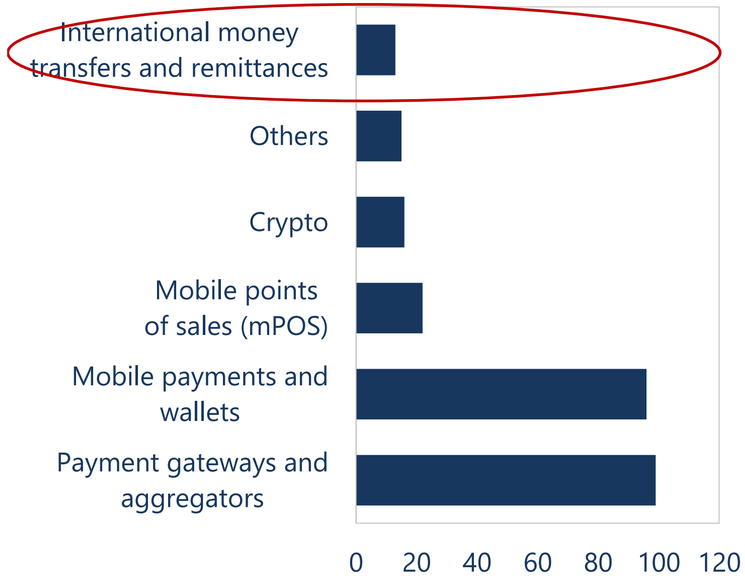
Cost of Sending Remittances
(in percent, based on transaction of USD200)



Sources: World Bank, Remittances Prices Worldwide. Global weighted average accounts for the relative size of remittances sent between countries. Global SmaRT average is calculated with the three most cost effective services in each corridor.MTO = Money transfer operator. MTOs include both traditional service providers and innovative/fintech players.

Out of 1161 startups in (2018), 285 are providing payments (including remittances).

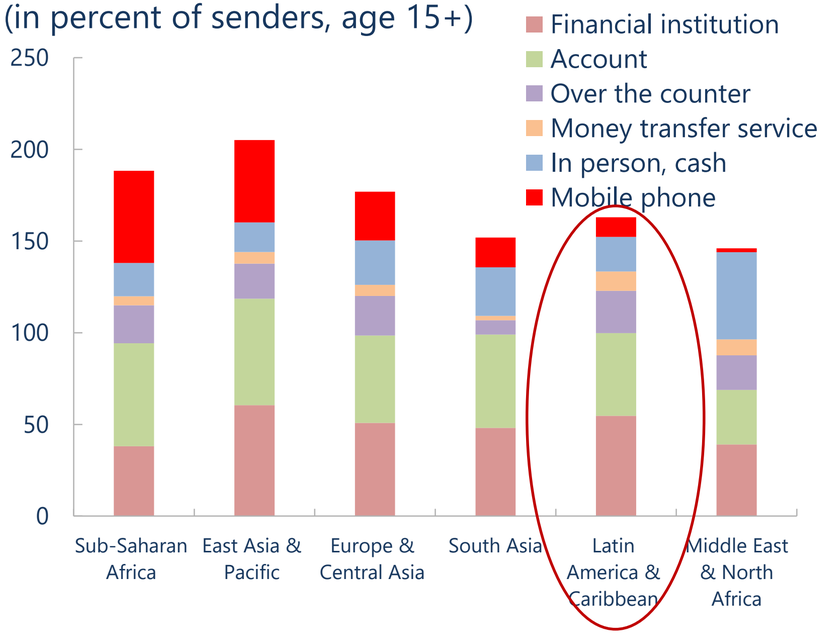
Number of Startups in LAC: Payments and Remittances (2018)



Source: IDB Finnovista 2018

Financial institutions remain the dominant method used to send and receive remittances

Services Used to Send Remittances
(in percent of senders, age 15+)



Sources: 2017 Global Findex Database World Bank. Based on domestic remittances, the Global Findex survey does not specifically cover international remittances. Over the counter transactions include all transactions conducted at any financial service provider in cash. Account transactions include both those conducted at a financial institution and those through mobile money when mobile money accounts are available.

How to support the development of Fintech for cross-border payments?

Changes to US regulation are likely to be key for development of mobile money in LAC. Money transmitters are licensed at a state-level in the US – increasing the regulatory burden and cost for development of innovative mobile money services, including for remittances.

For the recipient countries:

1. Remove regulatory burdens:
   - Unify licenses for mobile money and international remittances
   - License providers to both send/receive cross-border payments
2. Support partnerships between traditional MTOs with established networks and mobile money providers (e.g. Western Union partnerships with Tigo Money in LAC) with global remittance hubs to connect with other remittance service providers.

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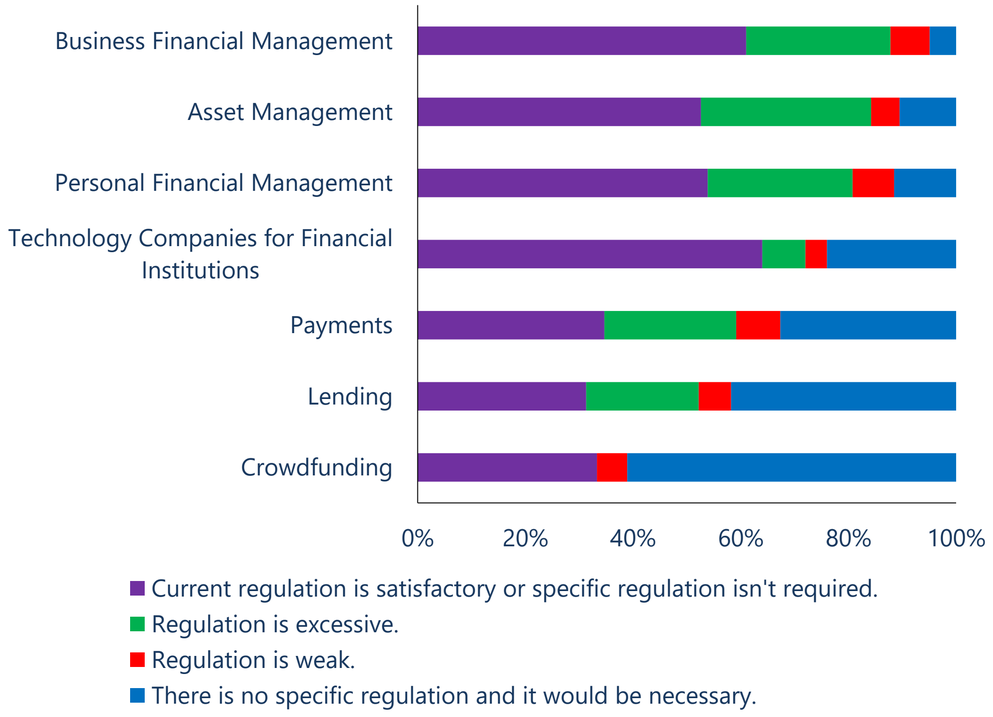
Fintech—risks

- Financial stability – due to underdeveloped risk management systems and practices
- Financial integrity – fintech complexity may limit the authorities' ability to implement AML/CFT measures
- Cybersecurity

- Fintech businesses (in particular those engaged in alternative financing) gave called for a regulatory review
- Many authorities have begun the to review their regulatory frameworks

Industry Opinion on Regulations by Sector
(Percent share; total sample, 272 companies in the region)



Source: IDB Finnovista, 2017, "Fintech Innovations You May Not Know Were from Latin American and Caribbean."

Regulation and Supervision

Safeguard financial stability and integrity

Foster financial innovation and competition to promote financial development and inclusion

Objectives and Principles of Financial Regulation

Flexible Perimeters

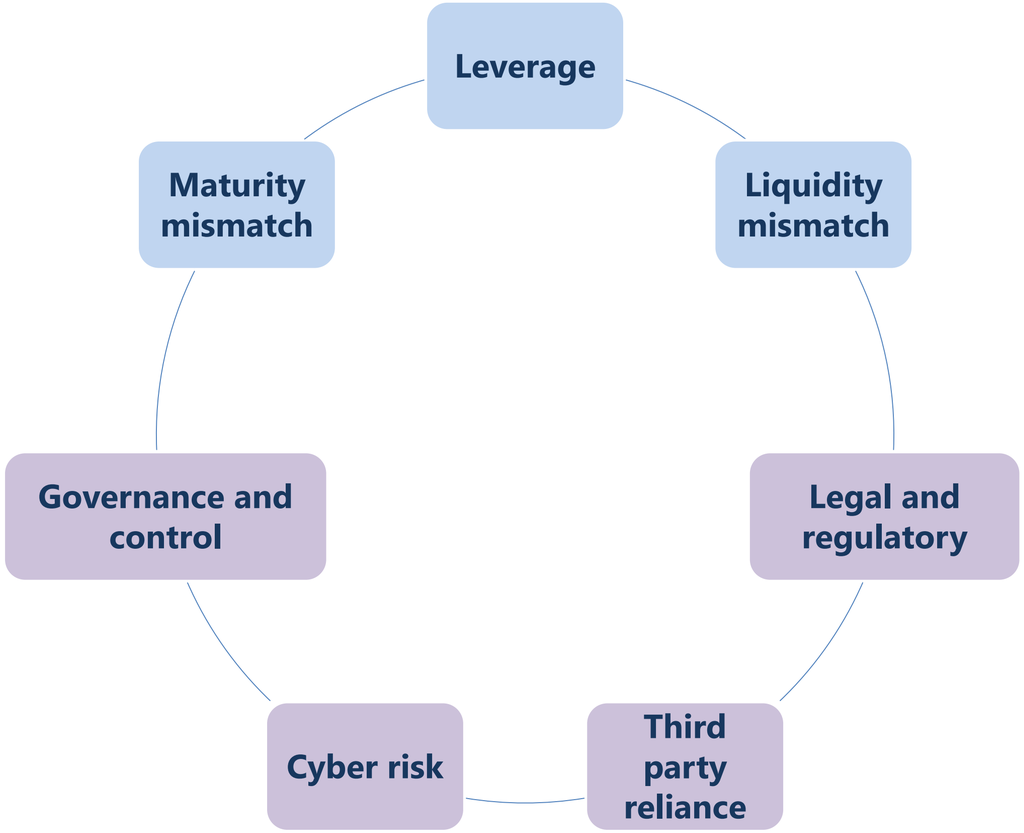
Proportional to risk

What Risks?

Relatively, less on financial risks but more on operational risks.

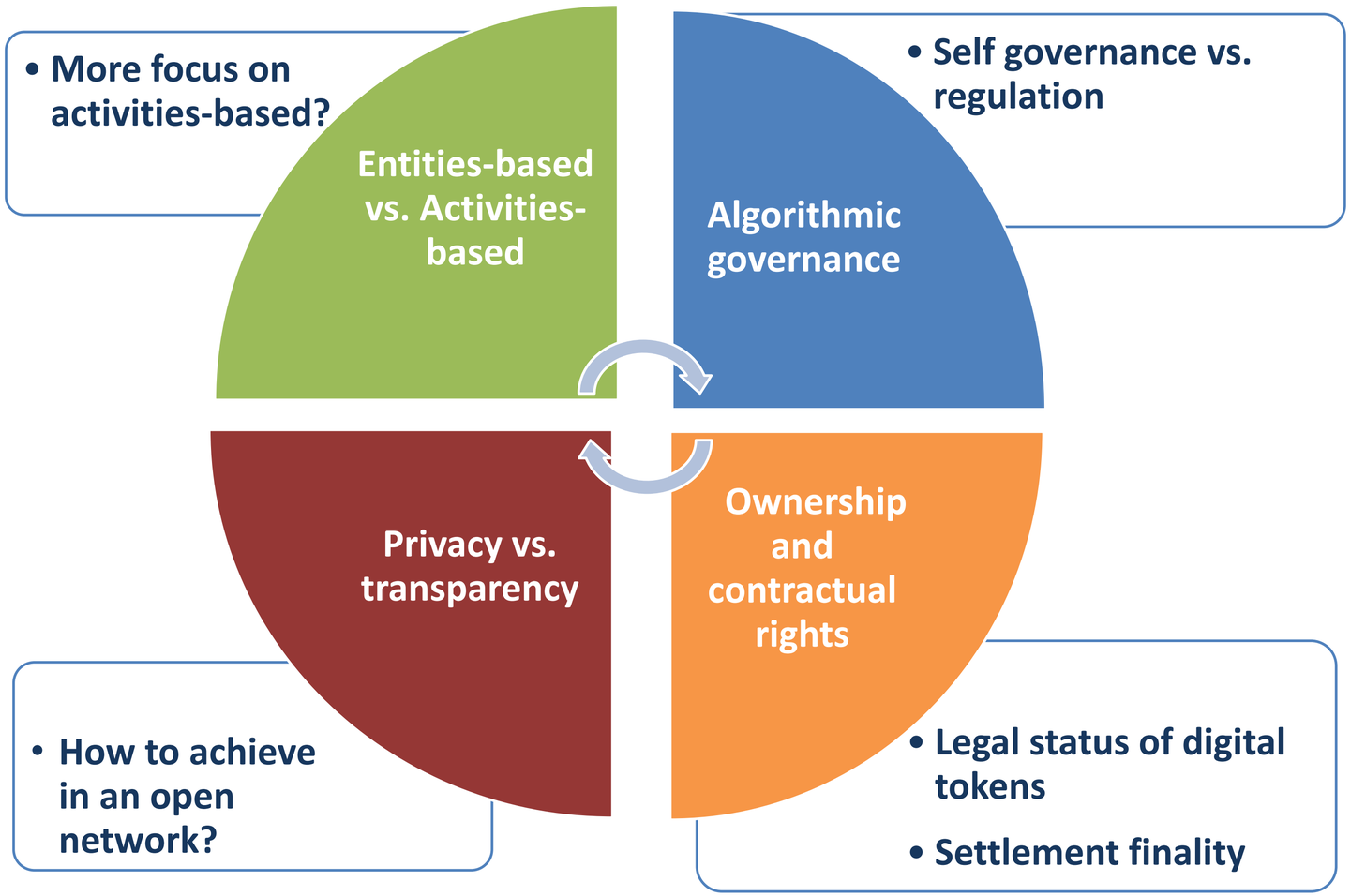
Financial risks

Operational risks



Source: FSB, 2017, "Financial Stability Implications from FinTech"

Regulatory challenges



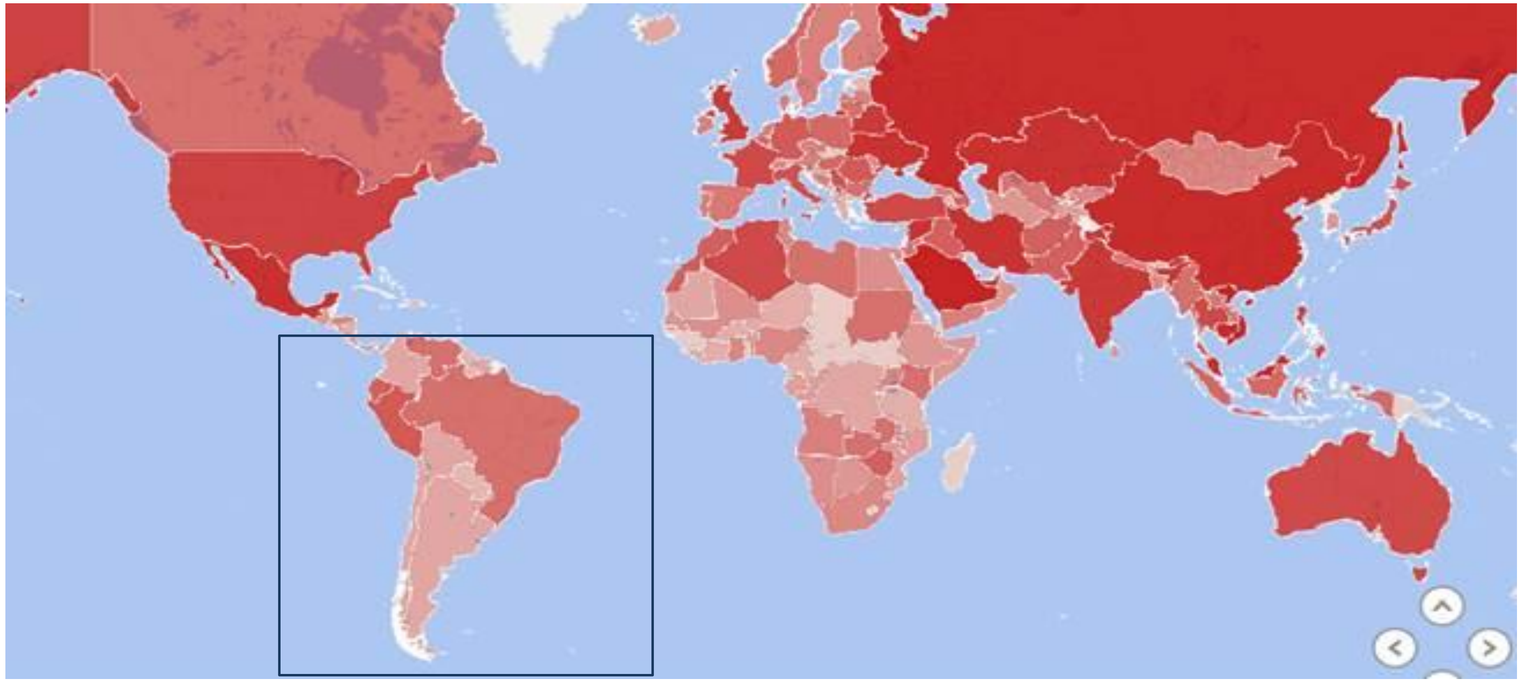
Three Common Approaches to Balancing Innovation and Risk

Regulatory sandbox	***New products or services can be tested in a controlled environment*** • Australia, Canada, Hong Kong, Netherlands, **Mexico**, Singapore, and the U.K.
Innovation hubs	***Public sector authorities provide support to firms to navigate the regulatory requirements*** **Brazil,** France, Japan (Fintech Support Desk), and Korea (Fintech Center)
Accelerator	***Partnership arrangements between innovators, incumber firms, and/or public sector authorities (who may provide financial incentives)*** • Singapore and the U.K.

Latin America is less exposed to cyberthreats than other regions

But several recent large scale attacks

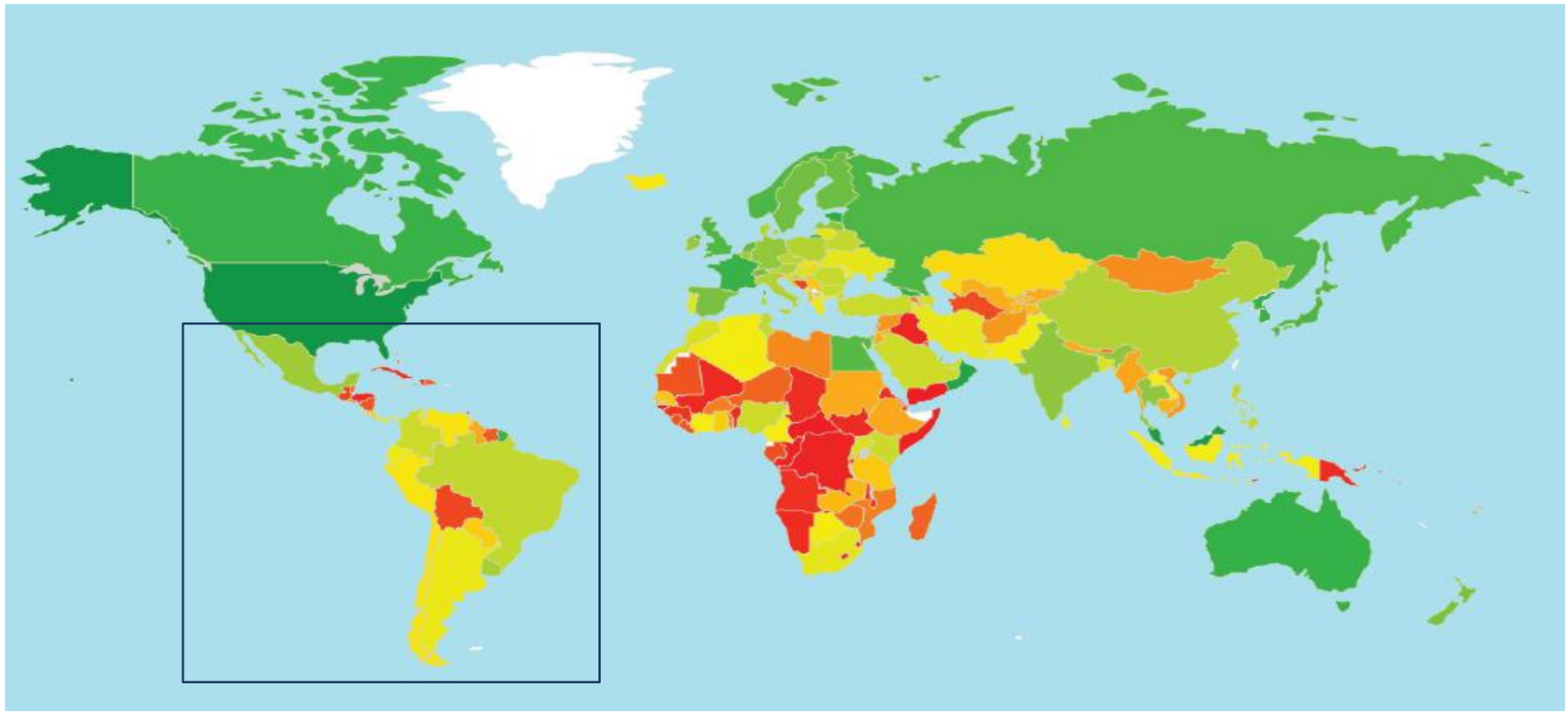
Country Cyberthreat Ratings, 2018



Source: IMF.
Notes: Deep-red color-coding means high cyberthreat, light-red signals low threat level. For countries without a rating, the color code is white.

LAC's commitment to cybersecurity lags behind other regions, but there is an increasing awareness

ITU Global Cybersecurity Index (GCI), 2017



Source: ITU (2015, 2017).

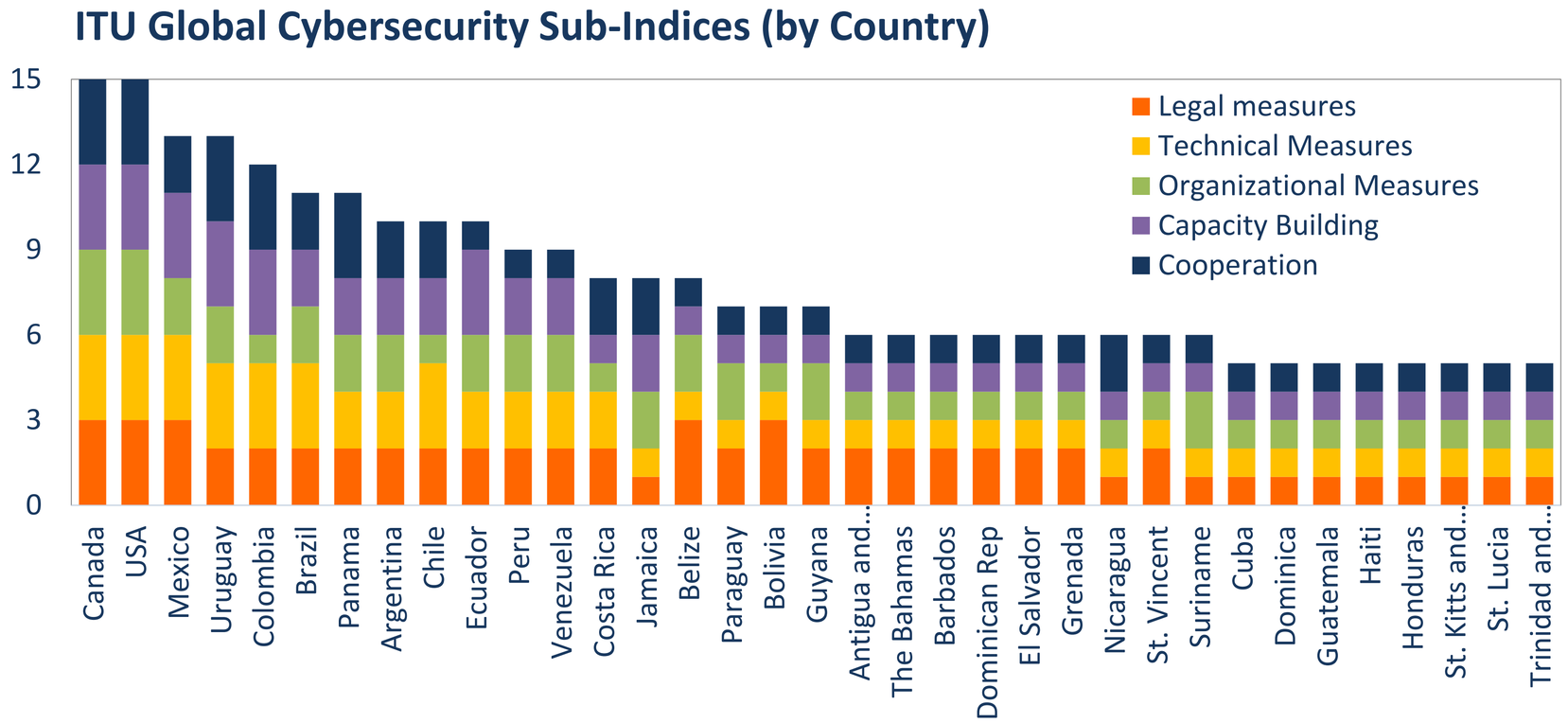
The deficiencies are broad-based

ITU Global Cybersecurity Sub-Indices (Average)

Region	Legal	Technical	Organizational	Capacity Building	Cooperation
Africa	0.29	0.18	0.16	0.17	0.25
Americas	0.40	0.30	0.24	0.28	0.26
Arabia	0.44	0.33	0.27	0.34	0.29
Asia Pacific	0.43	0.38	0.31	0.34	0.39
CIS /1	0.58	0.42	0.37	0.38	0.40
Europe	0.62	0.61	0.45	0.50	0.47

Source: ITU (2015).
Notes: The table gives z-scores [0;1] for each sub-index of the GCI, averaged over all countries in a region.
Low numbers signal weaknesses, high numbers strengths. /1 Commonwealth of Independent States.

Wide Dispersion across the Region



Source: ITU (2015).
Notes: The table shows for each country the sub-indices of the GCI. The larger a bar, the higher the sub-index value.

Notable Weaknesses in LAC

Legislation and Regulation	In many LAC countries, national cybercrime legislation is either weak or still inexistent.
Capacity and Standards	Skill levels with respect to cybersecurity are below average and also cyber literacy is relatively low. Availability of new technologies in LAC also lags behind many peer countries.
Strategy and Institutions	Most countries have or are in the process of formulating a cybersecurity strategy. Cyberspace needs to be organized institutionally, and agencies perform audits of networks and systems.

Sources: IADB (2016), ITU (2015, 2017), Kopp and others (2017).

Policy Measures

Legislation	Comprehensive legislation covering both substantive law and procedural law. Legislation needs to be formulated in a technology-neutral way. National legislation needs to be compatible and, ideally, harmonized with international law.
Organization	Most countries are formulating a cybersecurity strategy, which often includes the national security dimension. Institutional approach: Agency approves plans, programs, reports, procedures, principles and standards, ensures application, and fosters coordination.

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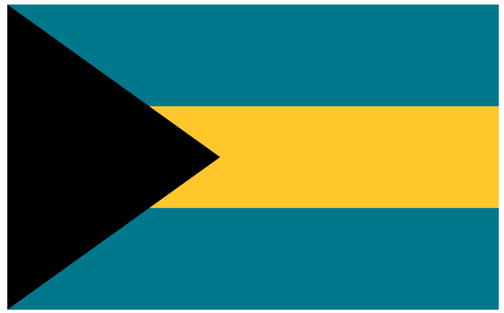
Central banks are exploring CBDC




- Disappearance of cash
- ★ **Financial inclusion**
- ★ **Cost of cash**
- Monopolies in payments

Today Not Many LACs Are Actively Considering CB Digital Currencies but Many are Studying the Issue

Jurisdictions Where the Introduction of CB DC is Actively Considered

WHD	APD	MCD/AFR	EUR
• Canada (R&W)	• Australia (R&W)	• Bahrain (R)	• Denmark (R)
• Ecuador (R)	• New Zealand (R)	• Iran	• Israel (R)
• **Uruguay (R)**	• Cambodia (W)	• Senegal (R)	• Netherlands (W)
• Venezuela	• China (R&W)	• Tunisia (R)	• Norway (R)
• **Bahamas**	• Hong Kong (R)	• South Africa (W)	• Russia (R)
• **ECCU**	• India (R)		• Sweden (R&W)
	• Indonesia (R)		• Switzerland (R)
	• Korea (R)		• U.K. (R)
	• Singapore (W)		
	• Thailand (W)		
	• Marshall Islands		

Note: (R) indicates retail CBDC; and (W) indicates wholesale DLT-based CBDC

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- "Fintech in Latin America and the Caribbean: Stocktaking." *IMF Working Paper 19/71*
- "Bali Fintech Agenda." *IMF policy paper 2018*
- "Fintech: the Experience So Far." *IMF Policy paper 2019*
- "Casting Light on Central Bank Digital Currency." *IMF Staff Discussion Note 18/08*
- "Financial Inclusion : Zooming in on Latin America." *IMF Working Paper 15/206*
- New Financial Inclusion Index (incorporating the role played by fintech) - forthcoming

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