





Fintech Forum briefing

Raúl Morales Resendiz, in collaboration with Dr. Serafín Martínez Jaramillo and Yazmín Pérez

52nd Bi-Annual Meeting of CARICOM Central Bank Governors
Grenada

May 31, 2019





Outline

- The 2018-19 Fintech Forum activities
 - The Working Group on Fintech Regulatory Aspects
 - The Working Group on Central Bank Digital Currencies
- In the pipeline: Forum's work agenda 2019-20



The 2018-19 Fintech Forum activities



II Meeting of the Fintech Forum

Mexico City on March 27 to 29, 2019

- The Meeting was attended by 49 representatives of central banks, bank supervisory authorities, international organizations and industry participants.
- CBDC WG discussion: focus on policy and regulatory framework, preparedness and operational implications, and trade-offs posed by design choices of a CBDC system.
 - The Forum's members welcomed the balanced approach that the Group presents in the report, identifying the opportunities and challenges of introducing a CBDC but that may require further experimentation and understanding in the international community.
- REG WG discussion: focus on regional stocktaking and a list of key discussion points.
 - While the Forum' members endorsed the work, it was found that specific regulatory items may deserve further attention, especially in terms of data requirements and international guidance and coordination.





CBDC WG main findings

- The CBDC WG found that the following aspects may deserve the attention of the LAC Central Banks Governors:
 - Financial inclusion as a key driver for CBDC in emerging economies (especially, in the Caribbean)
 - Operational implications, including IT infrastructure and high-cyber dependence could challenge central banks when deploying CBDC
 - If CBDC could be considered, efforts to promote adoption would be required (including, appropriate engagement of the financial entities as well as digital financial literacy).
 - CBDC as a supplementary alternative to cash.
 - Further experimentation is necessary to validate its possible effects on payments, money and financial spheres.
- The CBDC WG concludes that introducing a CBDC system should thus be a gradual and cautious process. In fact, the CBDC WG recommends to carefully assess the benefits, costs, implications and impact of introducing a CBDC with ongoing experimentation as inputs for the analysis.





REG WG main findings

- The REG WG found the following items as topics deserving special attention of LAC Central Banks Governors:
 - Traditional regulatory arrangements could: limit adoption of new technologies, take longer to adapt, create an unleveled playing field, or even yield intergovernmental uneven response.
 - Data requirements for monitoring fintech activities
 - International (regional) coordination to harmonize regulatory practices
 - Role of BigTechs as financial services providers across the region
- The REG WG concludes that policymakers may find useful considering a number of basic principles when drafting or reviewing regulation to fit the new landscape.
 - Functional approach, proportionality, technological neutrality and flexibility, level playing field and competition, cybersecurity and data protection, coordination among regulators, and international cooperation.
 - Continue exploring additional support mechanisms (innovation hubs, accelerators, sandbox).



In the pipeline: Forum's work agenda 2019-20



Priority issues identified by the Forum

Issue (ordered by priority)	Proposed activity
CBDC experimentation	Research: motivations and implicationsMonitoring Working Group
Regional repository	Website project
Data requirements for fintech	Stocktaking: best practices and gapsLiaison with IFC WG Fintech Data requirements
Regulatory regional approach	Stocktaking: common practicesConference or regional event
BigTechs	Research: identifying regulatory approaches
Adoption efforts for digital finance	 Stocktaking: educational practices related to digital finance Liaison with CPMI Task Force on Payments and Financial Inclusion





CEMLA Regional Innovation Hub

- Objective: to serve as a vehicle for LAC Central Banks to better understand (learning by doing) new technologies, and possibly developing tools and solutions for their specific tasks (regulation, surveillance, monitoring, operations, data analysis).
- Implementation: Central Banks to develop use cases and with that setting the grounds for a Regional Innovation Hub. The initiative will comprise:
 - Individual use cases' preparation.
 - Training activities.
 - CEMLA support & guidance from international experts (UCL, FNA, Silo AI).





Use cases

- Use cases will be proposed by LAC Central Banks and selected by the academic team.
- For each selected use case the involved teams will design the approach and methodologies beforehand.
 - Datasets must be available, and at least a part of the original dataset, or a simulated one, must be also available to academics and other Central Banks for training purposes.
 - It is expected that uses cases to be discussed and studied by external parties (other Central Banks) that could learn from the experience.





Use cases

- Call for proposals to be submitted to Governors' offices in June.
- LAC Central Banks are kindly invited to analyze potential use cases and approach CEMLA.

Topics	Methodologies	Use Cases (examples)
Complex Systems Systemic Risk	Complex Networks PCA Random matrix theory	Overlapping Portfolios Interbank lending Network filtering and validation
Big Data Analytics Machine Learning	Probabilistic Modelling	Risk Spillover
Artificial Intelligence	Neural Networks	P2P lending
Distributed systems	Blockchain technologies	Mortgage market





Course on Fintech and Central Banking

Mexico City, November 12- 14, 2019

- Hands-on course delivered by UCL, a group that has trained FCA, UK staff.
 - Financial Computing & Analytics Group led by Tomasso Aste (Director UCL Centre for Blockchain Technologies). Other Group members include Fabio Caccioli, Paolo Barucca and Giacomo Lavin.
- Objective: To promote the knowledge exchange between academics and central bankers, who are regulating/overseeing these technologies in financial markets and are themselves using these technologies for policy and regulatory purposes.
- Topics: Overlapping portfolios, interbank lending, risks spillover, retail payments, P2P lending.





2020 Course on Fintech and Central Banking

Kingston, February 2020

- Hands-on course delivered by FNA and Silo AI experts.
 - FNA has a long career in supporting financial authorities to develop monitoring tools based on financial networks and related analytical tools.
 - Silo Al has supported European central banks to develop systemic risks analytical tools based on artificial intelligence.
- Objective: To promote central bankers approaching innovative analytical and visual tools for financial stability and regulation purposes.
- Use cases: Regtech, Suptech, Al-based solutions for central banking operations tasks, among others.





2020 Course on Machine Learning

Montevideo (to be confirmed), II-2020

- Hands-on course delivered by the Deutsche Bundesbank.
 - Bundesbank staff with expertise in machine learning, artificial intelligence and big data, from the perspective of central banks
- Objective: To promote the knowledge exchange between central bankers, who are interested in developing solutions for the collection and analysis of data based on new technologies.
- Topics: Intelligent systems, collection, analysis and use of big data, governance and data management, case studies from central bankers, regulators and supervisors as well as other industries, data protection and data access issues



Thank you for your attention