Basel Committee on Banking Supervision

Consultative Document
Sound Practices: Implications of fintech developments for banks and bank supervisors

Simone di Castri, PhD, Ariadne Plaitakis and Jeremiah Grossman

31 October 2017

Introduction

The Basel Committee on Banking Supervision issued a Consultative Document entitled "*Sound Practices: Implications of fintech developments for banks and bank supervisors*" in August 2017, requesting comments on all aspects of this Consultative Document. Founded in 2006, BFA is a global consulting firm specializing in financial services for low-income people. We partner with cutting-edge organizations that touch the lives of low-income consumers including financial institutions, fintech companies and information providers. Based on our expertise in customer insights, business strategy, new technology, and growth-enabling policy and regulation, we have reviewed the Consultative Document and set out below our comments and observations.

Our comments on Recommendation 7

Recommendation 7 notes that fintech education and training is a key area of focus for most agencies and that two agencies have formal fintech training and/or lecture programmes currently in place. In January 2018, BFA will begin training financial regulators and supervisors on tech and fintech topics. BFA's first Tech Boot Camp and Design Sprint will take place in Washington, DC on January 24, 2018. We expect 20 to 30 financial authorities from emerging markets to participate. In the future, this training module will be replicated and will also be available online.

Our comments on Recommendation 8

Recommendation 8 focuses on supervisors investigating and exploring fintech in order to improve their methods and process, such technology being labelled as “suptech”. It raises a few examples of suptech, including the use of artificial intelligence (AI) by a supervisor to analyse visit reports from pension funds and banks’ annual reports, as well as the usage of “accelerator” or “hackathon” models to collaborate with fintech companies to address supervisory challenges.

We would like to inform you of two projects we are undertaking on behalf of international donors that support suptech solutions for supervisors in emerging markets:

1. The RegTech for Regulators Accelerator (R^2A)

R^2A partners with leading financial sector authorities in emerging markets to pioneer the next generation of tools and techniques for market supervision and policy analysis. R^2A accelerates financial authorities’ capability to better monitor and understand financial marketplaces by helping them re-imagine how they operate and prototype new solutions to strengthen their capacities.

Launched in October 2016, R^2A is partnering with the Bangko Sentral ng Pilipinas (“BSP”), Bank of Ghana (“BoG”), and the Mexican Comisión Nacional Bancaria y de Valores (“CNBV”) to develop and test next-generation RegTech prototypes that could serve as examples for other supervisors and regulators to follow. R^2A also engages closely with technology innovators, creating structured opportunities for them to propose solutions and collaborate with financial authorities in the design and testing of promising ideas.

R^2A’s twenty-month program consists of three phases:

- Months 1 to 6 – Defining the opportunity: Assessing with partner financial authorities their needs, selecting a specific area of opportunity, and defining the requirements of potential solutions.
- Months 7 to 12 – Selecting the solution developer: Engaging vendors through competitions to crowdsource innovative ideas that meet regulatory and supervisory needs.
- Months 13 to 20 – Testing prototypes: Co-design, development, and testing of ideas between financial authorities and innovators.

We are currently in the second phase of this project, and have launched two competitions to develop:

(i) an Application Programming Interface (API) and back office reporting and visualization application for regulatory reporting for the BSP in the Philippines; and

(ii) (ii) a data request/storage platform and related tools for data-driven metrics for anti-money laundering (AML) supervision for the CNBV in Mexico.

We will be launching a competition to develop chatbots and customer management systems tool for customer complaints for the BoG in Ghana in the coming weeks.

In addition to developing a prototype suptech solution for each participating financial authority, R^2A aims to promote the development of a global suptech marketplace, building a network of firms to draw on in the future. In December 2017, R^2A will launch a curated "suptech vendor database" populated with information on (i) the technologies that are required to address the needs of financial authorities and (ii) the tech firms capable of developing and implementing suptech solutions.

R^2A is also establishing a Learning Network to involve more regulatory and supervisory authorities in the initiative. The network, which will be launched at the Second R^2A Working Group meeting in Washington, DC on January 24-25, 2018, will help to (i) identify demand for suptech solutions from other emerging-market financial authorities, (ii) understand technical readiness for the most advanced solutions that would deploy AI for deep learning, (iii) contribute to advancing the suptech research agenda, (iv) facilitate peer learning, and (v) provide a platform for regulators and supervisors to engage with vendors.

Moreover, R^2A has recently engaged with international standard setters. We recently attended two FATF Fintech and Regtech Forums in San Jose, USA (25-26 May 2017) and Berlin, Germany (9-10 October 2017) and have been invited to join a panel at the Bank for International Settlements' Financial Stability Institute and the International Association of Deposit Insurers (BIS/FSI-IADI) conference in Basel from January 31 – February 2, 2018 to discuss Financial Innovation, RegTech, and SupTech in Bank Resolution and Deposit Insurance.

This initiative is funded by the Bill & Melinda Gates Foundation, Omidyar Network, and the U.S. Agency for International Development. The Bank of England and the Financial Conduct Authority are our project advisors. For more information about this program, please visit www.R2Accelerator.org or contact us at R2A@bfaglobal.com.

2. Supply Side Data Stack Project (Data Stack)

This project will develop a portable supervisory "data stack" prototype for Nigeria, with the resulting lessons learned creating a blueprint for data management and sharing within and between supervisory authorities globally. A "data stack" is a new form of data architecture whose object is to increase and improve the volume, variety, velocity, and veracity of data available to financial authorities and other stakeholders. This architecture contains trusted, timely, comprehensive sets of transactional data and other data generated by financial institutions and their agents (e.g., banking correspondents or other non-bank agents) to meet the needs of market oversight and policy evaluation, analysis, and development. The data stack is based on advanced techniques in data science such as machine learning and predictive analytics, and it will be accessible to financial supervisory authorities as well as other public-sector and private-sector stakeholders.

This project will kick off in November 2017 with support from the Bill & Melinda Gates Foundation, the Central Bank of Nigeria, and the Nigeria Inter-Bank Settlement System. Further details can be provided by Project Director Simone di Castri at sdicastri@bfaglobal.com.

Our comments on Recommendation 9

In this section, you mention that current regulatory frameworks and supervisory processes may present unintended barriers to fintech innovations, which could inadvertently result in the development of innovations outside the regulated financial industry, creating an unlevel playing field for competitors and potentially exposing financial consumers to unwarranted risk.

When evaluating this issue, we believe it is also important to consider the perspective of fintech companies and investors in the fintech sector. From our experience working in emerging markets, fintech companies, accelerators, and investors often have many questions regarding the application of existing legal frameworks to their products and services. As they confront traditional incumbents, fintech firms, and in particular digital-first start-ups, are often challenged by a non-conducive regulatory environment. Some firms seek clarity over how far they can go without becoming subject to onerous compliance requirements or violating banking, payments, telecommunications, competition, or data protection regulations. Others, however end up restricting their activities as a result. This is a common issue in the absence of clear regulations governing certain fintech-related activities.

Ambiguities and regulatory arbitrage can, of course, be taken advantage of to launch products that are not clearly prohibited or limited to a particular licensed institution, as you have highlighted. In many cases, however, the outcome of such ambiguities is to discourage early-stage investment and decrease the risk appetite of investors to test new products and business models, both in emerging and developed markets.

Our comments on Recommendation 10

In this section, you recommend that supervisors (i) learn from each other's approaches and practices for facilitating fintech innovation, and (ii) consider the applicability of similar approaches and practices in their respective markets. You then highlight several approaches, including innovation hubs, accelerators, and regulatory sandboxes. We have recently issued a Working Paper titled Going Beyond Regulatory Sandboxes to Enable FinTech Innovation in Emerging Markets that discusses these and related topics.

The case for facilitating interaction and dialogue between financial authorities and fintech companies through innovation hubs, accelerators, and regulatory sandboxes is strong, particularly where regulatory barriers or uncertainty limit the ability for innovative business models and products to be tested and brought to market. Regulatory sandboxes, in particular, can be viewed as an extension of the "test and learn" approach that several emerging-market authorities have already taken in response to such innovations (e.g., mobile money in East Africa) and may encourage risk-averse financial authorities to create space for innovation. Further, such spaces for dialogue and testing can (i) serve as a harbinger of a new, collaborative, evidence-based approach to digital financial regulation and (ii) send a clear signal to the market that the regulator is promoting innovation.

While it is a positive development that several financial sector regulators have introduced regulatory sandboxes or other spaces for dialogue, in many countries this may be insufficient to stimulate innovation and attract technologists and investors. Furthermore, such approaches may not always be the best strategy for resource-strapped authorities.

To create a true enabling environment for fintech innovation, we believe that governments should also address the many additional challenges that affect fintech development beyond establishment of a regulatory sandbox or other regulatory reform. These include (i) government support measures for start-ups (such as favourable fiscal policies and early adoption by governments of fintech solutions); (ii) policies that support the growth of digital and financial infrastructure, such as interoperability and open

APIs; and (ii) an overall enabling legal framework, including streamlining the process for starting a business, flexible labour laws, and protection of domestic and foreign investment.

In addition, financial authorities – particularly those with significant resource constraints with respect to funding, staff, expertise, and/or tools – should ensure that creating space for fintech dialogue and/or experimentation does not serve as a distraction from other fundamental regulatory and supervisory challenges.