CENTRAL BANK OF THE FUTURE

Summary of the
Central Bank of the Future Conference
-
October 2-3, 2019
The University of Michigan

For the last year, the University of Michigan's Center on Finance, Law & Policy, under the leadership of Primary Investigators Michael S. Barr and Adrienne A. Harris, has been researching how Central Banks around the world can implement new policies and technologies to promote greater financial inclusion. As technology rapidly transforms financial services, our team strives to reimagine how Central Banks can capitalize on these advancements to more effectively serve our world's unbanked, underbanked, and underserved populations. The project is supported by the Bill & Melinda Gates Foundation.

As part of this endeavor, the Center on Finance, Law & Policy organized a conference, held October 2-3, 2019 at the University of Michigan called The Central Bank of the Future. The conference brought together distinguished Central Bank Governors, policymakers, fintech executives, and experts from a wide range of disciplines to explore the future of Central Banks and their role in expanding access to financial services and address the following questions:

- Do the three policy functions of the modern Central Bank contribute to financial inclusion, poverty alleviation, and a more inclusive economy? What could be improved?
- How would the design and function of Central Banks change if the remit included development of inclusive financial systems, inclusive growth, and/or poverty alleviation?
- Do we need a new approach for regulating digital products or a cashless economy?
- How might technology strengthen a Central Bank's ability to promote inclusion?
- Does the Central Bank have a role to play in promoting innovation?
- What would be different if women designed the Central Bank of the future?
- What would be different if we were to design a Central Bank with an aim for advancing women and girls?

This paper provides a summary of the conference, including links to videos of the sessions.

Opening Keynote Address: Mary Ellen Iskenderian

Description: Mary Ellen Iskenderian, President and CEO of Women's World Banking, presented an opening keynote address for the Central Bank of the Future Conference. See full video here.

Summary:

Mary Ellen Iskendarian starts off with high level observations on the current state of the world. She acknowledges that we're living in interesting times. Global, political and climate changes are "literally reshaping the world around us," in ways no one could have anticipated. Given these changes, she continues, "it is important for everyone to consider their role in shaping the future." She calls out the important roles among the members of the audience as regulators, standard-setters, and policy makers and reminds them of their duty to promote and create progressive, sustainable, and inclusive growth of economies "that work for all." She admits that we have seen great progress in terms of financial inclusion as a result of the work done by the people in the room: Between 2014 and 2017, "the number of adults who have an account with a financial institution rose globally from 62% to 69%."

But despite these advances, there are still many gaps in providing access to basic financial services to those who need them the most, according to the Findex, "1.7 billion people around the world are still unbanked" – nearly one billion are women. She urges us to consider how our discussions will impact women and notice that our policies are "not gender blind." She continues to discuss the three issues that disproportionately impact women. The first is numbers and data – it is imperative that regulators and banks gather and analyze gender disaggregated data. Second, the links between financial stability and financial inclusion, and the third issue is highlighting what those in positions to enact change can do "to ensure women are able to participate in the formal financial system," including the products and services that will be most beneficial.

Keynote Address: Jennifer Tescher

Description: Jennifer Tescher, President and CEO of Financial Health Network delivers the keynote address for the Central Bank of the Future Conference. See full video here

Summary:

Jennifer Tescher opens her keynote by describing her two wishes for Central Banks of the future. "One is that the financial health of the citizens is as important a goal as the health of the economy", and two, "that data assets are understood to be at least as important as financial assets and are regulated and managed as such." With these two wishes, Tescher sets up the stage to introduce a myriad of innovations that could make these wishes come true. When addressing her first wish of financial health of the citizenry and economy, she starts by answering the question, "why financial health and not financial inclusion?" noting that financial inclusion will be addressed by the remarkable people sitting in the room before the next fifty years, but financial health won't be as easy, especially in developing countries. She then poses the question, "what comes after inclusion?" and suggests a solution focusing on financial health. She presents some statistics on the financial well-being of the average American citizen, most notably, "39% wouldn't be able to pay an emergency $400 expense with cash or a cash equivalent," and "each year we are paying between 10 and 20 billion in overdraft fees." These are some of the problems that Tescher highlights which need to be addressed in order for individuals to become financially healthy.

With her second wish on treating data assets and financial assets equally, Tescher begins by observing that Central Banks are guided by data and that "data is powerful." She explains that, "consumers don't have very much power because they generally don't own and control their own data." She poses the question, "what could [consumers] do if they did [have access to their data]?" They could shop for financial services in a more strategic way, "having banks bid for their business," or, "they could trade it for preferential pricing," or a myriad of other things. She continues by highlighting the stake Central Banks have in both "managing risk and creating the conditions for economic growth." She concludes her remarks hopeful that through collaboration "we can both dream big then make those dreams a reality."

Panel 1: Central Bank Approaches to Financial Inclusion

Speakers:

- **Greta Bull**, CEO, Consultative Group to Assist the Poor (CGAP) (Moderator)
- Lobna Helal, Deputy Governor, Central Bank of Egypt
- Sofie Maddens, Head of the Regulatory and Market Environment Division, International Telecommunications Union (ITU)
- Ajay Shah, Professor, National Institute of Public Finance and Policy
- Michael Wiegand, Director of the Financial Services for the Poor, Bill & Melinda Gates Foundation

Summary:

All of the panelists agree that Central Banks should be at the forefront of leading financial inclusion efforts within their countries. Lobna Helal, the Deputy Governor of the Central Bank of Egypt, for example notes that Central Banks are working to promote monetary and financial stability already, so it makes sense that they lead this initiative. Michael Wiegand, the Director of the Financial Services for the Poor at the Bill & Melinda Gates Foundation agrees that across the developing world, financial inclusion is an explicit priority that some Central Banks are leading. Both Lobna Helal and Michael Wiegand acknowledge that formalizing financial inclusion initiatives within Central Banks would lead to legitimacy and would expedite transmission of monetary policy.

When asked if Central Banks should provide the physical infrastructure to develop financial resources, Ajay Shah, Professor of the National Institute of Public Finance and Policy from India, begins with a discussion on Aadhaar, a unique identity number based on biometric technology that the Indian government provided to its citizens. Professor Shah cautions against an exclusively state-led approach, noting that a great deal of innovation and competition is required to create the best solutions, and that might not be possible when there is too much control by a government. Michael Wiegand pushes back on this, questioning whether in the absence of the state, the private sector would have created something like Aadhaar. He argues that at a minimum, the private sector would need to be regulated – "you want to drive innovation, but also protect peoples' rights and privacy," he says. All panelists agree that the key for Central Banking success in fostering financial inclusion is through the use of specific metrics. Additionally, in order for regulators to understand each other, and to understand the risks and benefits of financial inclusion, collaboration between Central Banks is vital.

Sofie Maddens, head of the Regulatory and Market Environment Division of the International Telecommunications Union states that collaboration is already happening, and we need to continue it: "We have to sit together, learn and create legal mandates to formalize our work." There was some disagreement on whether Central Bank mandates should be narrow or broad, with Ajay Shah referencing India and the need for its Central Bank to narrow its mandate. Lobna Helal argues Egypt needs a broader approach, observing that having a narrow approach will lead to things falling between the cracks. All agree, however, that accountability is a necessary element for Central Banks in increasing financial inclusion.

In closing, most panelists are hopeful that Central Banks will improve financial access in both developed and developing nations. Watch the full video for Panel 1 here.

Panel 2: Innovation & Central Banking

Speakers:

- **Chris Calabia**, Senior Advisor, Supervisory & Regulatory Policy Financial Services for the Poor, Bill & Melinda Gates Foundation (Moderator)
- Aishah Ahmad, Deputy Governor, Central Bank of Nigeria
- Leonardo Gambacorta, Head of Innovation & Digital Economy Unit, Bank for International Settlements

Summary:

Big technology companies have grown rapidly in the last decade, observes Leonardo Gambacorta, Head of the Innovation & Digital Economy Unit of the Bank of International Settlements (BIS). Mr. Gambacorta attributes this growth to the combination of financial services and technical data tech companies provide creating a loop of synergies of goods used for growth. He illustrates that payments were the first financial service big technology companies offered. As a result, the fraction of the population with bank accounts, mobile phones, and credit cards has increased exponentially. This growth is evident in the countries that have less infrastructural support but are leveraging mobile phones and telecommunication as the foundation to build upon, producing a positive effect in terms of financial inclusion. Mr. Gambacorta also mentions a few potential costs associated with this growth -- first, the potential consequences of big tech's market power, and second, the potential misuse of data.

Aishah Ahmad, the Deputy Governor of the Central Bank of Nigeria starts by discussing the technology developments that are disrupting traditional banking services. She notes that artificial intelligence (AI) is used to determine credit scores, to troubleshoot using chatbots, and innovate product design within the banking sector. "FinTechs are partnering with banks to provide more value and bring down the costs of financial services", she says. "We are seeing disruptions in savings . . . there is disruptions in micro lending, but the largest disruptions are in payments." Regarding the impact of these disruptions, she adds, "two hundred million people are now using this payment technology and are becoming entrepreneurs that provide solutions." She observes that technology brings the cost of providing financial services down, which is the goal, and the data helps provide better insights and fill the gaps. She concludes by talking about the payments services as Nigeria's way of bringing in new participants – "the retail of big retailers".

Both panelists agreed that good technology is technology that produces a public good for consumers. In the case of increasing financial inclusion, there are many innovations that provide public access to financial services, but we have a long way to go. Watch the full video for Panel 2 here.

Panel 3: Digital Currencies, Distributed Ledgers, & Cross-Border Payments

Speakers:

- **Adrienne Harris**, Towsley Foundation Policymaker in Residence and Professor of Practice, Gerald R. Ford School of Public Policy, University of Michigan (Moderator)
- Abdel Banda, Co-founder and CEO, Banyan Infrastructure
- Stefan Ingves, Governor, Sveriges Riksbank
- Njuguna Ndung'u, Executive Director, African Economic Research Consortium (AERC)

Summary:

Njuguna Ndung'u, Executive Director of the African Economic Research Consortium kicks off the panel with a discussion of the Kenyan experience with digital currency, detailing the electronic payments ecosystem after the M-Pesa revolution. This platform ignited financial inclusion in Kenya, brought branch networks to remote locations, and provided agent banking. He notes that financial inclusion is no longer just having a bank account, but also involves the ability to make a transaction. For places like Africa, a product has to work across segments and remove market failures like high transaction costs and asymmetric information. He concludes with a discussion on the four stages of M-Pesa – transactions, savings, credit, and remittances.

Stefan Ingves, Governor of Sveriges Riksbank begins by explaining two essential considerations for Central Banks. The first is to create a settlement system for cross border payments, an area where he thinks Central Banks have not been ambitious enough. The second is to satisfy the need to have secure online identification and thereby a national ID. He closes with a discussion on the importance of cooperation and collaboration between Central Banks.

Abdel Banda, the Co-founder and CEO of Banyan Infrastructure begins by discussing his vision of technology bridging the gap in financial inclusion for all communities. He discusses the work of Banyan Infrastructure to understand some of the environment-related challenges while also researching the legal structures around infrastructure projects. As a result of these challenges, there is evidence that such projects have become smaller over time. He notes that his company started to harness the power of distributed ledger to overcome some of the challenges around infrastructure development by turning loan agreements to smart contracts.

In response to questions around how Central Banks should respond to innovative technology, there was consensus among the panelists that Central Banks need to open more lines of communication with each other in order to establish trust. Collaboration is an important theme that resonated throughout the discussion in that it is the key for both regulators and innovators to do their work and remove the friction between the two groups. When it comes to Central Bank jurisdiction there was agreement among the group that financial education and literacy would remove many of the barriers in this area.

Finally, the panelists agree that the transition to e-currency will lack certain securities that cash inherently provides. The goal must be to create something digital that is cash-like and applies the same sorts of rules and provides the same securities. Watch the full video for Panel 3 here.

Panel 4: Anti-Money Laundering & Financial Inclusion

Speakers:

- **Jo Ann Barefoot**, CEO, Barefoot Innovation Group and Hummingbird (Moderator)
- Aaron Klein, Economic Studies Fellow; policy director of Center on Regulation and Markets, Brookings Institution
- Jennifer Shasky Calvery, Global Head of Financial Crime Threat Mitigation and Group General Manager, HSBC

Summary:

Jennifer Calvery, the Global Head of Financial Crime Threat Mitigation and Group General Manager at HSBC (and former Director of FinCEN), starts the conversation discussing the financial crime agenda in the context of financial inclusion. She notes that efforts at preventing financial crime do not have to hinder the progress of financial inclusion. She talks about the importance of monitoring transactions and understanding the individuals who transact.

Aaron Klein of the Brookings Institute begins by giving an example of a transaction that could go unnoticed – like college tuition payments. He then describes how the banking system is designed to identify other types of crimes, drug or terrorist-related, concluding that "when looking at financial criminals who have gone to jail, one begins to see a pattern of what violations that led them there." He goes on to explain a "thesis" on AML, which is as follows: "Criminals are operating in the bottom of the ocean which is super dark and hard to find. Criminals generate financial profits, the heinous crimes they commit, that profit (like money) bubbles to the surface and when you find the bubbles, you could trace it down and catch the bad guy." Instead, law enforcement finds the bad guys on their own and looks up their "bubbles". He concludes that Central Banks can be more effective serving some of the lower cost consumers that actually need these services instead of trying to track those that may be taking advantage of the system. He continues by explaining that multinational organizations have a big role to play in opening the financial systems to include more people by setting standards for countries allowing them to "harmonize and prioritize crimes in criminal activity."

All panelists agree that data could be a solution to many of the problems in the AML regulatory regime. When asked what policies could be changed to make AML better, both speakers indicated that the low-hanging fruit would be the most efficient starting place -- figuring out how to better share information and collaborate. Another, as Aaron Klein notes, would be to solve the identity issue and find a way to globally identify people, which would simultaneously increase financial inclusion and decrease the cost of AML compliance. Watch the full video for Panel 4 here.