

Research Assessment Exercise 2020
Impact Case Study

University: The University of Hong Kong (HKU)

Unit of Assessment (UoA): 19 Law

Title of case study: FinTech for Financial Inclusion (FT4FI): A Strategy for Digital Financial Transformation

(1) Summary of the impact

Douglas Arner (HKU), Ross Buckley (University of New South Wales), and Dirk Zetsche (University of Luxembourg) developed a strategy to use financial technology (FinTech) to support digital financial transformation in developing countries to increase financial inclusion and support sustainable development. Across the world, as of 2018, over 1.7 billion people lacked access to a bank account or mobile money account, severely constraining their ability to access finance to support their families, build better lives and businesses, and engage in economic activities as part of wider personal and societal development. The strategy, based on the team's extensive research, has been adopted by the Alliance for Financial Inclusion (AFI) the Intergovernmental Group of 24 (G-24), and their full membership. AFI is an international organisation made up of central banks and financial regulatory authorities from more than 90 countries, with the G24 includes the central banks and/or ministries of finance of 29 countries, some of which are also AFI members. The FinTech for Financial Inclusion (FinTech4FI) strategy is designed to maximise financial inclusion and transform financial systems to bring hundreds of millions of people into the financial system for the first time. It also influenced the content of the *Sochi Accord: FinTech for Financial Inclusion*, adopted by AFI's full membership in September 2018. The *Accord* provides the formal basis for continuing review and development of the strategies, implementation and impact of FinTech4FI across AFI and its membership. Arner and his team are now working with AFI and its members to support implementation of the strategy and assess its impact on financial inclusion and sustainable development from both quantitative and qualitative perspectives.

(2) Underpinning research

From 2012 to 2018, Arner led a Research Grants Council Theme-based Research Scheme project focusing on Hong Kong's role as an international financial centre. One of the most significant results was to identify the rapid technological changes transforming finance around the world at a very rapid rate, particularly since 2008. ([3.1] - Arner, Barberis & Buckley 2016) The research examined the long-term evolution of these developments, particularly in the context of digitisation and datafication of global financial markets, the emergence of a major wave of new FinTech startups, transformations taking place in China and other countries ([3.5] - Zhou, Arner & Buckley 2015), and the emerging role of large technology companies in finance ([3.4]- Zetsche, Buckley, Arner & Barberis 2018). Their research identified regulatory challenges arising from these new trends ([3.3] - Zetsche, Buckley, Arner & Barberis 2017) and analysed the use of technology not only for financial regulatory compliance but also to build better regulatory and financial systems (regulatory technology or RegTech). ([3.2] - Arner, Barberis & Buckley 2017).

As a result of their influential research, Arner, Buckley and Zetsche were invited by AFI in 2017 to analyse the role of FinTech in supporting financial inclusion around the world. The resulting report ([3.6] - Arner, Buckley & Zetsche 2018) focused on how over 1.2 billion people from 2010 to 2018 had come into the formal financial system for the first time, through acquiring a bank or mobile money account. The majority of these people had come from four countries: Kenya, China, Russia and India. From an extensive analysis of these and other cases from around the world, the team devised a strategy based on four "pillars": digital identification and simplified account opening, open interoperable electronic payment systems, digital delivery of government payments and services, and digital financial infrastructure. These four pillars underpin a process of digital financial transformation, with the potential to support very rapid improvements not only in financial inclusion but also other financial sector policy and regulatory objectives, including financial stability, market integrity and market development.

(3) References to the research

- 3.1) Douglas W. Arner, Janos Barberis & Ross P. Buckley, The Evolution of FinTech: A New Post-Crisis Paradigm?, 47(4) 1271-1319 *Georg. J. Int. Law* 1345 (2016a). SSRN: 19,540 downloads (26 Sep. 2019).
- 3.2) Douglas W. Arner, Janos Barberis & Ross P. Buckley, FinTech, RegTech, and the Reconceptualization of Financial Regulation. 37(3) *Nw. J. Int'l L. & Bus.* 37 (2017): 371-413. SSRN: 10,391 downloads (26 Sep. 2019).
- 3.3) Dirk A. Zetsche, Ross P. Buckley, Janos N. Barberis & Douglas W. Arner, Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation, 23(1) 31-103 *Fordham J. Corp. Financ. Law* (2017). SSRN: 3,285 downloads (26 Sep. 2019).
- 3.4) Dirk A. Zetsche, Ross P. Buckley, Douglas W. Arner & Janos N. Barberis, From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance, *NYU J. Law Bus.* 14(2) 393-446 (2018). SSRN: 5,472 downloads (26 Sep. 2019).
- 3.5) Zhou W.H., Arner D.W. & Buckley R.P. Regulation of Digital Financial Services in China: Last Mover Advantage. 8(1) *Tsinghua China Law Review* 25-61 (2015). SSRN: 2,739 downloads (26 Sep. 2019).
- 3.6) Douglas W. Arner, Ross P. Buckley & Dirk A. Zetsche, *FinTech for Financial Inclusion: A Framework for Digital Financial Transformation*. AFI Special Report (Alliance for Financial Inclusion 2018).

(4) Details of the impact

Arner and his colleagues have produced research resulting in a strategy for digital financial transformation that has been adopted by AFI, the world's largest international organisation focusing on improving financial inclusion, whose membership includes central banks and financial regulatory authorities from more than 90 countries.

In 2017, AFI invited Arner, Buckley and Zetsche in 2017 ([5.6] - Arner, Buckley & Zetsche 2018) to consider how FinTech could be applied in places where people lack access to finance, while maintaining wider financial stability through better regulation, infrastructure and risk management. The team produced the report, *FinTech for Financial Inclusion: A Framework for Digital Financial Transformation* ([5.6] in Underpinning Research: "FinTech4FI"), which was adopted by AFI and its full membership at its 6 September 2018 meeting in Sochi, Russia [5.1]. The report shaped and influenced the content of the *Sochi Accord: FinTech for Financial Inclusion* [5.2]. The key messages of the report were incorporated into AFI's *Sochi Accord*, agreed by the full membership of AFI at their Sochi meeting as well as by the membership of the G24 at its meetings in tandem with the International Monetary Fund-World Bank Annual Meetings in Bali, Indonesia in October 2018.

According to AFI, following the October 2018 meeting [5.3]:

'Law Professor Dr. Douglas Arner from the University of Hong Kong presented G-24/AFI joint special report FinTech for Financial Inclusion: A Framework for Digital Financial Transformation, that draws from experiences in developing, emerging and developed countries and recommends a staged and progressive approach to policy making, focused on four main pillars that enable financial services to have a wider reach: digital identity and electronic Know Your Customer (eKYC), open electronic payment systems, account opening and digitisation of payments. The framework on [FinTech4FI] is the basis for AFI's intervention, as the Alliance begins to "develop policy models on various aspects of FinTech for financial inclusion through member-driven, bottom-up approach," AFI Executive Director, Dr. Alfred Hannig said. "We are a practical organization and our recently adopted Sochi Accord on FinTech for Financial Inclusion complements specific initiatives that take implementation forward," Dr. Hannig explained adding that "the Accord also proposes developed-developing country dialogue to learn from each other." The Sochi Accord and AFI's special report on Fintech for Financial Inclusion will inform various activities under the fintech workstream. The activities as outlined by Dr. Hannig include – capacity building, global advocacy and in-country implementation. For

example, AFI has lined up series on trainings on innovative regulatory approaches, retail payments, cybersecurity etc., both at global and regional level.'

An AFI press release [5.3] issued after a meeting the following week in Jordan affirmed the importance of the framework to AFI's goals:

'The high-level roundtable, organized by the Arab Monetary Fund (AMF) and the International Monetary Fund (IMF), gathered central bank governors and heads of institutions from the Arab Region.... "We all agree that addressing access issues is solving just one part of the puzzle. With increased access there is imminent need to focus on increasing usage and quality of financial services", AFI's Executive Director highlighted in his presentation, while sharing AFI's framework on FinTech for Financial Inclusion based on four major pillars: Digital ID and eKYC; Open Electronic Payment Systems; Account Opening & Digitisation of Payments; and Design of Digital Financial Market Infrastructure and Systems. The four pillars give a foundation for an evolving digital financial ecosystem and help economies maximize the financial inclusion benefits from FinTech while also balancing financial stability, consumer protection and financial integrity. "The framework provides a guiding force to foster technological innovations that hold a promise to include the unbanked, close the gender gap in financial inclusion, help us manage climate change risks, mitigate the challenges of de-risking, and bring down the costs of cross-border remittances," Dr. Hannig explained, emphasizing that in alignment with AFI's guidance issuing workstream, the AFI network is developing policy models on various aspects of FinTech for financial inclusion through a member-driven, bottom-up approach.... The Sochi Accord on Fintech for Financial Inclusion, endorsed by the AFI membership at the Annual General Meeting in Sochi, Russia on 5 September 2018 provides a framework for AFI members to leverage innovative new technology-based financial services, or FinTech, to advance financial inclusion for the world's 1.7 billion unbanked.'

The G24 also adopted the strategy at its meeting in tandem with the IMF-World Bank Annual Meetings in Bali, Indonesia on 10 October 2018 [5.4], where Arner presented the report.

Following the adoption of the strategy developed by Arner, Buckley and Zetzsche by both AFI and the G24 as well as AFI's adoption of the Sochi Accord as the basis of an ongoing framework for implementation of FinTech4FI across its membership, AFI has repeatedly reinforced the role of the strategy in a series of regional meetings where it underscored the importance of the FinTech4FI framework. These included, but were not limited to, a presentation at the Association of Southeast Asian Nations (ASEAN) e-Financial Inclusion forum on 24-26 September 2018, attended by more than 150 financial inclusion policymakers from the region [5.5]; a presentation to the Financial Stability Board Regional Consultative Group of Asia by AFI's Deputy Executive Director Norbert Mumba, on 5 November 2018 in Sydney Australia [5.6] (where Arner discussed the framework); and a panel discussion at the 7th Leaders Roundtable of African Financial Policy Initiative held in Cote D'Ivoire 27-28 February 2019 and co-hosted by the Ministry of Economy and Finance of Cote D'Ivoire, the Central Bank of West African States and AFI.[5.7] Speaking at the Sydney event, Dr Mumba stated:

'The four pillars give a foundation for an evolving digital financial ecosystem and help economies maximize the financial inclusion benefits from FinTech while also balancing financial stability, consumer protection and financial integrity.'

AFI and the Banco Central de Timor-Leste also held a regional training session on FinTech4FI for AFI members from the Pacific region, small island states in Africa, and Latin America and the Caribbean at a gathering in Dili, Timor-Leste on 10-13 December 2018[5.8]:

'In a recent survey, the AFI network comprising of 107 members from 92 countries agreed that FinTech and RegTech are relevant to achieving their financial inclusion objectives," revealed Eliko Boletawa as he explained the [FinTech4FI] framework — a tool to help fulfill the aspiration of an inclusive digital financial economy. Drawing from the experiences of developing, emerging

and developed countries, the framework suggests that the best approach is staged, and progressive — focused on four main pillars: Digital ID and eKYC; Open Electronic Payment Systems; Account Opening & Digitization of Payments; and Design of Digital Financial Market Infrastructure and Systems. The four pillars give a foundation for an evolving digital financial ecosystem and help economies maximize the financial inclusion benefits from FinTech while also balancing financial stability, consumer protection and financial integrity. The framework provides a guiding force to foster technological innovations that hold a promise to include the unbanked, close the gender gap in financial inclusion, manage climate change risks, mitigate the challenges of de-risking, and bring down the costs of cross-border remittances. The AFI network is developing policy models on various aspects of FinTech for financial inclusion through a member-driven, bottom-up approach.’

Research developed by Arner and his colleagues has thus not only been adopted by the full membership of AFI but also underlies both a formal Accord of more than 90 central banks and regulatory authorities involved in AFI and the G24 from around the world and also is being implemented as part of AFI’s focus on implementation of member agreements, including regional and individual country implementation. The research has had clear impact as a result of its explicit adoption as official strategy by two international organisations of developing country central banks and financial regulatory authorities, AFI and the G24. This adoption is now being followed by a process of implementation and monitoring of FinTech4FI strategies by AFI, a process that Arner’s team continues to support. In addition, the strategy has furthered discussion and exploration on the use of FinTech for financial inclusion at the international, regional and local levels. Going forward, the long-term impact on individual countries, on financial inclusion and on sustainable development is the subject of on-going research.

(5) Sources to corroborate the impact

- 5.1) Annual General Meeting sets the course for AFI as Policy Leadership Alliance <https://www.afi-global.org/news/2018/09/annual-general-meeting-sets-course-afi-policy-leadership-alliance>
- 5.2) Sochi Accord: FinTech for Financial Inclusion (Sep. 2018): <https://www.afi-global.org/publications/2851/Sochi-Accord-FinTech-for-Financial-Inclusion>
- 5.3) Market conduct & financial capability: Key drivers of FinTech for Financial Inclusion, says Dr. Hannig during a high-level roundtable in Amman, Jordan <https://www.afi-global.org/news/2018/09/market-conduct-financial-capability-key-drivers-fintech-financial-inclusion-dr-hannig>
- 5.4) G-24/AFI Policymakers’ Roundtable on Financial Inclusion at the Annual Meetings in Bali, Indonesia <https://www.afi-global.org/events/g-24afi-policymakers-roundtable-financial-inclusion-annual-meetings-bali-indonesia>
- 5.5) Strong call for regulators to be at the cutting edge of embracing FinTech for financial inclusion at the ASEAN e-Financial Inclusion Forum <https://www.afi-global.org/news/2018/09/strong-call-regulators-be-cutting-edge-embracing-fintech-financial-inclusion>
- 5.6) FinTech for financial inclusion among key focus areas at FSB RCG Asia in Sydney <https://www.afi-global.org/news/2018/11/fintech-financial-inclusion-among-key-focus-areas-fsb-rcg-asia-sydney>
- 5.7) 7th AfPI Leaders’ Roundtable meets to discuss how best to harness technologies to advance financial inclusion <https://www.afi-global.org/news/2019/02/7th-afpi-leaders-roundtable-meets-discuss-how-best-harness-technologies-advance>
- 5.8) BCTL-AFI regional training on FinTech for Financial Inclusion to strengthen sustainable and inclusive financial growth <https://www.afi-global.org/news/2018/12/bctl-afi-regional-training-fintech-financial-inclusion-strengthen-sustainable-inclusive-financial-growth>