

David L. Shrier, Alex Pentland, eds. *Global Fintech: Financial Innovation in the Connected World*. Cambridge: MIT Press, 2022. viii + 323 pp. \$35.00, paper, ISBN 978-0-262-54366-8.



Reviewed by Santiago Mandirola (The New School for Social Research)

Published on H-Sci-Med-Tech (January, 2023)

Commissioned by Penelope K. Hardy (University of Wisconsin-La Crosse)

The book *Global Fintech: Financial Innovation in the Connected World* seeks to engage with the global nature of what editors David L. Shrier and Alex Pentland term the “fintech revolution,” that is, the rise of digital financial services that has attracted hundreds of millions of users around the world and the attention of investors, philanthropists, and international organizations (p. 2). To do so, they set out to describe the current state of the fintech market, to highlight innovations occurring both in the global South and the global North, and to address the societal risks and ethical concerns that emerge from these innovations. The lineup of authors includes not only academics but also policymakers and practitioners, who many times rely on their professional experience to support the arguments they are making (like the authors of chapters 2, 5, and 12). This can be useful for scholars who research matters related to fintech, financial innovation, and the regulation of financial markets and who need to approach how innovations and their subsequent regulation occur *within* the industry. The book also delivers on the

promise of a global perspective, compiling case studies or examples from the United Kingdom, India, China, and Nigeria, among others (see chapters 4, 7, or 9). A common argument throughout is one that connects “leapfrogging” with innovation: multiple contributors state that the development of fully digital financial services encounters more obstacles in markets where big, incumbent institutions are already established. Conversely, financial innovation thrives in global South contexts where most of the population is underbanked or unbanked, with users, for example, transitioning from cash to mobile payments without passing through a traditional bank.

Although the volume deals with dense, complex, and technical issues such as blockchain, big data analytics, and financial governance, the chapters are written in a tone that makes them manageable to a general academic readership. Boris Khentov is explicitly conscious of this, when he states in chapter 2 that the lack of consistency in how key information is expressed on paper checks “could fill its own (even more boring)

chapter” (p. 42). Khentov then proceeds to explain how these issues were fixed at Betterment, the fintech company he works for, in a manner that both is pleasant to read and sheds light on the mundane, everyday practices that feed innovation. John D’Agostino (with Sharmila Kassam) pushes for simplicity even further when he states in chapter 11 that clarity and transparency are key to successful regulation and corporate governance. In D’Agostino’s words, there is a “culture of complexity that led to an element of hero worship ... [that] can prevent directors from acting as necessary checks and balances of misguided CEOs” (p. 275).

The greatest example of this book’s accessibility is chapter 1, “Fintech Foundations: Convergence, Blockchain, Big Data, and AI,” written by editors Shrier and Pentland. By itself, this chapter makes up “Foundations,” part 1 of the volume. As the title indicates, the chapter is focused on the convergences that enable the so-called fintech revolution. This means that there is no single technology that explains the recent growth of fintech but rather a convergence of four technologies. These are mobile communications, artificial intelligence, big data analytics, and distributed ledgers. The convergence of these technologies can fill the financial inclusion gap for Shrier and Pentland, according to whom 3.5 billion people in the world are unbanked or underbanked. Through the combination of these technologies, the provision of financial services can now come from big tech, fintech, or telecoms, and they are especially prolific in regions where incumbent banks are unwilling or unable to cater to these excluded customers. The chapter closes with a series of ethical and regulatory concerns regarding opacity, discrimination, and identity. However, it does not refer to potential financial risks to newly included users (as other chapters do). That said, it is thorough, clear, and successful at laying out the foundations upon which the remainder of the volume is built. In addition, it strikes the right balance between specialization and accessibility. I teach a course on

fintech and related matters in a liberal arts college and would recommend it for that purpose.

Part 2, “Transitioning to the Digital Era,” contains six chapters. Chapter 2, “Edge Effects: Bridging from Old to New,” by Khentov, refers to the practical problems that emerge in the digitization of paper-based operations. Chapter 3, “Open Banking: How Platforms and the API economy Change Competition in Financial Services,” by Markos Zachariadis and Pinar Ozcan, describes how legacy banks are forced to adapt to an environment with new competitors, like digital platforms and big tech, and new regulations regarding customer data like open banking. This chapter puts forth the interesting premise that financial services is an information business, and that, therefore, changes to what and how information is communicated will reshape the financial services landscape itself. Chapter 4, “Digital Financial Services,” by Shrier, elaborates more on how digital services can deepen financial inclusion, while also raising issues like systemic risk or financial literacy that should be considered during the process. Chapters 5 and 6 respectively present frameworks and use cases of policy and fintech. Authored by Oliver Goodenough and others, these chapters offer a set of recommendations for regulating incipient developments like fintech and blockchain. Chapter 7, “Digital Banking Manifesto,” authored by Alex Lipton and the editors, remarkably sums up part 2, alluding to how digital banks should work for customers, investors, and banks themselves. Its conclusion seems to reproduce a phrase that keeps coming up in my interactions with fintech industry members: “nobody needs banks, but we all need banking.”

Lastly, part 3 of the volume, “Fintech Possibilities,” contains chapters 8 to 12. Chapter 8 is titled “Regulatory Sandboxes,” by Goodenough and Shrier. It summarizes the rationale and goals of sandboxes as flexible regulatory frameworks that permit startups to conduct live experiments in controlled environments and under regulatory su-

pervision. At the same time, the authors remind us that families' livelihoods are part of what is at stake in the proper regulation of fintech services. In chapter 9, "Leapfrogging with Nextgen Fintechs and Emerging Tech for the Growth of Africa," Michelle Chivunga offers an overview of how digital data and financial technology could drive financial inclusion and sustainable growth in Africa in the upcoming years. Chivunga also explains how blockchain and crypto assets become particularly attractive to investors who do not trust their local currencies. Chapter 10, "The Rise of Regtech and the Divergence of Compliance and Risk," by Amias Moore Gerety and Lev Menand, introduces the notion of "programmable compliance" (the extension of rules and policies into real-time feedback and constraints) and lays out recommendations for both firms and regulators (p. 257). Chapter 11, "On Governance and (Technical) Complexity," by D'Agostino, underscores the need for transparency that I discussed earlier. Lastly, chapter 12, "Responsible Technology: Advancing Trust and Securing the Ecosystem," by Ajay Bhalla, lays out the principles for responsible innovation. It is no longer acceptable to "move fast and break things" for Bhalla (p. 285). Instead, responsible innovation should be centered around security, privacy, consumer experience, and ethics. A short conclusion written by the editors after chapter 12 highlights the role of the COVID pandemic in advancing the technologies studied in the book.

I would like to raise two issues in what is otherwise an all-around solid volume. First, some contributors seem to take for granted the benefits of financial inclusion in terms of poverty alleviation and economic growth. While they provide references to support these claims, these conclusions have been recently contested. The effectiveness of financial inclusion to promote growth and reduce poverty has been questioned not only by critical academics from a theoretical (and ideological) perspective, but also by economists like Johnathan Morduch and Esther Duflo, who show that expanded access to financial services helps

the poor better navigate their poverty, but it does not necessarily deliver on the promises of poverty alleviation and economic growth.[1] Second, the chapters that deal specifically with blockchain and cryptocurrencies do a great job explaining how the technology works, but do not consider the foundational tenets of the communities around them. For instance, when referring to the Ethereum (ETH) hack of 2016, chapter 6 asks for an "undo" function to easily revert this kind of attack (p. 139). In doing so, however, it seems to ignore some of the founding principles of Bitcoin and ETH, which intend to mimic the circulation of cash among peers, free from third-party intervention. While cash can only return if the recipient agrees to give it back, an "undo button" would mean that a third party can block and redirect the flow of funds (like a bank with a card payment!), effectively contradicting the person-to-person and disintermediation objectives originally behind cryptocurrencies and blockchain.[2] Discussions on blockchain and financial inclusion are thorough and extensive, but I wonder if the arguments would need to be modified were these nuances incorporated. Apart from these details, this is an accessible and amicable book for readers in higher education, policymaking, and the informed public who wish to learn more about fintech and financial innovation from the perspective of practitioners, regulators, and academics.

Notes

[1]. See, for example, Johnathan Morduch, "Rethinking Poverty, Household Finance, and Microfinance," in *Handbook of Microfinance, Financial Inclusion and Development*, ed. Valentina Hartzarska and Robert Cull (Cheltenham, UK: Edward Elgar, forthcoming in 2023). Online at <https://wp.nyu.edu/jmorduch/papers/>; and Abhijit Banerjee, Esther Duflo, Rachel Glennerster, and Cynthia Kinnan, "The Miracle of Microfinance? Evidence from a Randomized Evaluation," *American Eco-*

Journal: Applied Economics 7, no. 1 (2015): 22-53.

[2]. See Lana Swartz, “What Was Bitcoin, What Will It Be? The Techno-Economic Imaginaries of a New Money Technology,” *Cultural Studies* 32, no. 4 (2018): 623–50.

If there is additional discussion of this review, you may access it through the network, at <https://networks.h-net.org/h-sci-med-tech>

Citation: Santiago Mandirola. Review of Shrier, David L.; Pentland, Alex, eds, *Global Fintech: Financial Innovation in the Connected World*. H-Sci-Med-Tech, H-Net Reviews. January, 2023.

URL: <https://www.h-net.org/reviews/showrev.php?id=57837>



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.