Introduction

This book collects the voices of leading scholars, entrepreneurs, policy makers and consultants who, through their expertise and keen analytical skills, are best positioned to picture from various angles the unfolding technological revolution in banking and finance.

We stand on the brink of a fourth industrial revolution, which will fundamentally alter the way we live, work, and relate to one another. New technologies are dramatically transforming our economic systems, and our society in general, into something very different from what we were used to think about over the last few decades. The possibilities unlocked by billions of people collectively connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are vast. The introduction of distributed ledges technologies makes possible to initiate a new economy that is blurring the lines between consumers and producers, this technology shift is enabling a rapid transition towards what is known as the economy of collaborative commons: a digital space where providers and users share goods and services at a marginal cost rapidly approaching nil (Rifkin J., 2014). These innovations will be further multiplied by emerging technological breakthroughs in fields such as machine learning, robotics, the Internet of Things, nanotechnology, biotechnology, materials science, energy storage and quantum computing.

In this context, traditional financial instruments, institutions and markets are rapidly becoming obsolete and inadequate to serve an increasingly globally interconnected online marketplace with an accelerating number of high-frequency transactions.

As technology progressed, the advent of the Internet era at the end of the last century opened the road to new financial services and markets. In 2002, the word e-finance was coined by Allen et al. to include mobile and digital financial services such as online banking, Internet transactions and online trading. If, during that phase, the traditional brick-and-mortar banking model was somehow still able to keep its dominant role within the financial systems, now this position is challenged by new technology advances. The evolution, and combined use of, information communication technologies, cryptography, open source computing methods, time-stamped ledgers, and peer-to-peer distributed networks now afford end users direct, anonymous, disintermediated and secure access to assets, payments and financial services without the need to rely upon banks.
In recent years, we have started to move from e-finance to peer-to-peer (P2P) finance, defined by Tasca (2015) as: “the provision of financial services and markets directly by end users to end users using technology-enabled platforms supported by computer-based and network-based information and communication technologies”. The term P2P finance encompasses cryptocurrencies and blockchain-based financial applications, decentralised markets for lending, crowdfunding and other financial services, digital assets and wallets.

These technologies are fragmenting and dismantling some of the major banking services. Lending, deposits, security, advisory services, investments, payments and currencies. These financial services, that were traditionally procured under one roof with a single point of control, can now be offered by decentralised platforms with limited or absent human interaction – one of the prerequisites and founding pillars of the brick-and-mortar banking model.

P2P finance is a new form of banking beyond banks and money, emerging as a consequence of the ongoing FinTech revolution characterized by a finance-focused trend of technology start-ups and corporations primarily focused on peripheral industries but increasingly interested in finance. A legion of technology companies in San Francisco, New York City, London, and elsewhere seized the opportunity offered by the dissatisfaction of banking customers and are now creating financial products and services that are beyond the capacity of banks to replicate. This new contingent of FinTech companies are not only capturing revenues that were traditionally banking profits (e.g., in payments or lending), but also experimenting with new data-led revenue streams for banking.

At the same time, although banks find it difficult to innovate mostly due of the burden of their legacy infrastructures, the traditional banking industry benefits from many years of experience with a large number of detailed regulations and operational procedures, providing the means to operate safely. No such framework currently exists for P2P finance which is a bottom-up phenomenon, based on fast-evolving technological advances. P2P finance is shifting the power from the traditional stakeholders to the end users, and the citizens in general, and creating new opportunities for entrepreneurs; in doing so it also introduces new risks and challenges for legal systems and risk management practices.

In the twenty-first century we need pretty much the same banking services as in the twentieth century, but the way we expect them to be delivered to us has dramatically changed, as we now leave in the digital age of global communication and information sharing. In the first decade of the twenty-first century only, the people connected to the Internet worldwide increased from 350 million to over 2.5 billion. The use of mobile phones increased from 750 million to over 6 billion. By 2025, if the current pace of technological innovation is maintained, most of the projected 8 billion people on Earth will be online (Schmidt and Cohen, 2013). As the connectivity will continue to increase and become more affordable, extending the online experience to places where people today don't even have landline phones, we envision a landscape where P2P finance will continue to invade and disrupt the financial mainstream. New forms of financial (dis)intermediations, new ubiquitous accesses to services and decentralised markets will emerge, which will fill gaps, create value and progressively substitute the traditional banking system.

This book constitutes a unique perspective on this technological and social revolution, as it is written by the people who are driving it. By presenting an overview of the new banking and money transfer models and, at the same time, addressing their challenges and threats, it aims to offer a guideline for the providers and the consumers of banking services in the twenty-first century.

References

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