

## ALTERNATIVE INVESTMENTS IN THE TECH ERA

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Technological innovations have brought significant changes to the financial sector, such as the ways we make investments and choose insurance plans. But the use of technology has given rise to new risks, and poses challenges to our existing legal framework. In certain cases, regulatory intervention is needed to protect the interests of investors, to guard against new risks. In other cases, however, either no further action is needed because the current legal framework can accommodate the innovations, or regulation might not be desirable as it could impede the development of technology. We must ensure that innovation is not stifled by regulation without compromising the interests of consumers. To understand how such a balance should be struck, the Centre for Banking & Finance Law of the Faculty of Law, National University of Singapore organized a conference on 27 and 28 September 2019 on “Alternative Investments in the Tech Era”. This issue, which arose from the conference, has lined up a series of articles that shed light on the changes and risks brought about by technology, and put forth suggestions regarding appropriate responses.

The lead article starts off our discussion on how technology has challenged our concept of money. Emiliios Avgouleas and Sir William Blair in “The Concept of Money in the 4th Industrial Revolution—a Legal and Economic Analysis” examine new forms of currency such as Libra and cryptocurrencies through the lenses of contract law and property law. The authors consider whether these new currencies can qualify as ‘money’ under the current legal regime, or whether a new definition of ‘money’ is needed to accommodate the innovations.

The article by Rainer Kulms titled “Blockchains: Private Law Matters” provides a comprehensive overview of recent judgments and the novel legal issues arising from the use of distributed ledger technologies such as cryptocurrency. Distributed ledger technologies rely on a decentralized system of bookkeeping. The multilateral relationship between participants of this system challenges the bilateral conception of contractual relationships. It remains to be seen how regulations should address these novel issues.

The rise of FinTech has provided small and medium-sized enterprises (“SMEs”) with alternative financing methods. SMEs in many countries have faced difficulties

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securing traditional debt financing such as bank loans, because of their high risk profile and lack of assets as collateral; as well as getting equity financing through venture capital or private equity markets in countries where these markets are less developed. Crowdfunding provides an efficient and less costly way of equity financing by SMEs through online platforms (see Alexander Loke's article titled "The Surprising Liberality of Securities Crowdfunding Regulation in Hong Kong: Insights from a Comparative Analysis"). In Hong Kong, the regulation of crowdfunding is marked by a surprising degree of liberality, which, however, triggers concerns about investor protection. The same is true in Singapore with regard to initial coin offerings ("ICOs").

While technology challenges the existing legal order, new innovations can address existing concerns. Financial investors in this age are conscious about the ethical and environmental impacts of their investments, and this has encouraged companies to use Environment, Social Responsibility and Corporate Governance ("ESG") criteria to disclose information. Florencio Lopez-De-Silanes, Joseph A McCahery and Paul C Pudschedl in the article "ESG Performance and Disclosure: A Cross-Country Analysis" argue that businesses can benefit from such disclosure, considering that ESG-oriented investors are willing to pay a premium for high-quality ESG investments. Hence, new innovations can produce a win-win outcome for both investors and businesses.

However, the use of new technology is not without risks. The article titled "TechRisk" by Ross P Buckley, Douglas W Arner, Dirk A Zetzsche and Eriks K Selga analyses the risks associated with FinTech, such as cyberattacks, and suggests how such risks can be addressed by regulators. How regulators should take steps to embrace technology is further elaborated on in the article by Mark Fenwick and Erik PM Vermeulen titled "Banking and Regulatory Responses to Fintech Revisited: Building the Sustainable Financial Service 'Ecosystems' of Tomorrow". The authors suggest that both traditional financial service providers and regulators can take cues from the experience of the most innovative companies. The corporate venturing strategies used by successful companies such as Amazon can provide a viable framework for current financial service providers, such as banks, to innovate. This article shows that regulators can play an active role in the new tech ecosystem.

Another layer of risks concerns consumers. No matter how sophisticated consumers appear to be, the current legal framework to protect them may not be sufficient. The issue of investor protection is examined in "When Is an Individual Investor Not In Need Of Consumer Protection? A Comparative Analysis of Singapore, Hong Kong, And Australia" by Wai Yee Wan, Andrew Godwin and Qinzhe Yao, where the authors question the traditional, categorical distinction between a retail and a non-retail investor, since both categories of investors can be vulnerable because of poorly-chosen investments. The article offers a detailed comparison of the legal regimes in Singapore, Hong Kong and Australia, and suggests ways in which regulations can be tweaked to maximize all investors' opportunities to participate in lucrative investment opportunities, while enhancing consumer protection. Machine learning algorithms are another significant innovation that could transform many aspects of life. Questions such as where robots can possibly displace human financial advisers, or whether such robots can comply with existing laws that are designed

for humans remain in doubt, and may call for regulatory responses. In “Hephaestus And Talos: The Legal Status and Obligation Theory of Robot Advisor” by Gao Simin, the author considers whether robo-advisors are capable of fulfilling current duties imposed on human advisors, such as the duty of prudence. The problem may lie in the lack of a legal personality for robo-advisors to be responsible for their actions, while the human actors such as robo-advisers may only be responsible to a certain extent, resulting in an accountability gap that jeopardises the legitimacy and sustainability of robo-advisers. A similar concern was also brought up in the field of InsurTech, where such technology can give advice on insurance options. Lin Lin and Christopher Chen in “The Promise and Perils of InsurTech” provide an in-depth analysis of the use and risks of InsurTech, and suggest ways forward for regulators to promote innovation in the InsurTech sector while lowering regulatory and compliance costs.

On the bright side, the current legal framework may be able to accommodate some novel arrangements such as the use of data trusts. As illustrated by Jeremiah Lau, James Penner and Benjamin Wong in “The Basics of Private and Public Data Trusts”, the traditional equitable principles of trust law are suitable for the management of data. The authors examine the legal framework of equity and trust, and consider whether the rights to access data can be trust assets. The use of data cannot be divorced from data protection laws to enhance protection of personal data. In light of this, the authors examine whether data trust obligations on trustees could conflict with data protection laws.

These articles offer a broad spectrum of views over a diverse range of innovations in the digital era. As shown through these articles, the adequacy of the existing legal framework, as well as the roles of regulators, are context-dependent. Whether changes are needed depends on the type of technology and risks. Artificial intelligence, for instance, has raised the most controversial issues considering its potential disruptiveness to the job market, and its incompatibility with a legal framework that remains human-centric. In Steven Pinker’s uplifting book, *Enlightenment Now*, he argued that while technology might be perceived as a threat to the existing world order, in reality, we owe our progress and enhanced quality of life to the development of technology.<sup>1</sup> To harness the full benefits of technology, what matters is how issues arising from alternative investments in the tech era are managed. What has been explored in these articles are starting points for further discussion, as more innovations will surely emerge.

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<sup>1</sup> Steven Pinker, *Enlightenment Now: The Case for Reason, Science, Humanism and Progress* (New York City: Viking, 2018).