Credit and Capital Markets, Volume 56, Issue 1, pp. 1 – 3
Guest Editorial

FinTech and the Digital Transformation in the Financial Industry

Gregor Dorfleitner* and Lars Hornuf**

For a long time, the financial industry was not at the frontier of digitization. This has changed since the 2010s with the emergence of start-up companies that seek to revolutionize the financial industry: Crowdfunding, robo advice, social trading, the proliferation of cryptocurrencies, and mobile payments services that are tailored to serve a specific purpose are important examples of new technological solutions mainly brought forward by specialized start-up companies, which are often referred to as FinTechs. Companies from the traditional financial sector, international technology companies, and classic industrial companies have now integrated FinTech services into their product portfolio. Nevertheless, many pioneering FinTechs do still exist as independent companies and cover a large market share.

At the moment, the digital transformation of the financial industry is still in full swing. We therefore dedicate this special issue of the journal "Credit and Capital Markets" to the timely and relevant topic of FinTech. The first three articles study various aspects of marketplace and peer-to-peer lending. Marketplace and peer-to-peer lending are of particular importance to the FinTech market, as they have experienced tremendous growth catering many underserved customers, but have also been related to systemic risk with severe consequences for the regular stock market especially in China (*Chorzempa* 2022, 116 ff.). The final contribution in this issue presents a comprehensive overview of the German FinTech market.

Christopher Priberny (Hochschule der Deutschen Bundesbank) empirically addresses the loan demand over time on the US peer-to-peer lending platform Kiva. This lending platform is very special as it brokers interest-free loans that serve prosocial purposes. Deploying a sophisticated empirical setup including GARCH and GJR approaches, the author shows that during the Covid-19 pandemic the platform was experiencing additional demand for prosocial loans. The main finding is a significant relation of several Covid-19-related variables

* Prof. Dr. Gregor Dorfleitner, University of Regensburg, Department of Finance, gregor.dorfleitner@ur.de.

** Prof. Dr. Lars Hornuf, Technische Universität Dresden, lars.hornuf@tu-dresden.de.

such as the government response stringency index with the demand and the excess demand for loans after controlling for the prevalent interest rate level. Altogether, the article supports the view that the platform was able to provide credit to help disadvantaged individuals during the Covid-19 pandemic.

Sana Hassan, Sebastian Huhn, Rolf Drechsler (University of Bremen) and Lars Hornuf (TU Dresden) study marketplace lending in the United States. Considering that internet-based investors may be inexperienced when investing in these new financial products, it appears particularly important to forecast default rates and to evaluate default features of marketplace loans. Given that many borrowers on marketplace lending platforms may already have been rejected by banks or did not even try to obtain a bank loan because they had to expect a rejection, the problem of asymmetric information becomes increasingly relevant. Their paper proposes a holistic data processing flow for the loan status classification of marketplace-lending multivariate time series data by using the Bidirectional Long Short-Term Memory model (BiLSTM) to predict defaulting and distressed loans. Their machine learning framework outperforms many conventional techniques. In particular, they adopt the SHapely Additive exPlanations and a four-step ahead model, which allows them to extract the most significant features for default risk assessment. Their approach appears useful for lenders and regulators to identify the most relevant features to enhance their default risk assessment over time.

Sabine Pur (Universität Regensburg), Stefan Hüsig (TU Chemnitz) and Christoph Schmidhammer (Hochschule der Deutschen Bundesbank) analyze the business models of three crowdlending platforms, namely auxmoney, Lendico, and smava, using a mixed method approach. They combine a qualitative case-study perspective with a quantitative test of annual growth rates. Their analysis reveals that, while the companies initially started with a similar type of business model, they have developed over time into entirely different lending platforms. From this article one can draw conclusions about the development of FinTech startups and their business models over time and under different regulatory environments.

Gregor Dorfleitner, Julia Kreppmeier and Ralf Laschinger (Universität Regensburg) end the special issue with a report, in which they present a novel data set on nearly 1000 German FinTech companies. The authors make use of the data set to estimate market volumes for the German FinTech Market until the end of 2021. They also document the immense growth that this market has shown in recent years. The dataset is freely available and can be used for future research.

We are very grateful that we were given the opportunity to handle this special issue as guest editors.[1] We would like to thank all the authors and reviewers for their excellent work. After the FinTech market has grown strongly in recent years, changes in the business models and consolidation can now be expected in the medium term. Ultimately, digitization, like the sustainability of financial services, will no longer be the exception in the medium future, but much more the rule, and may no longer be mentioned under the specific term FinTech. The academic investigation of FinTech business models will, however, continue. With this special issue we hope to have made a small contribution to this literature.

References

Chorzempa, M (2022): The Cashless Revolution: China's Reinvention of Money and the End of America's Domination of Finance and Technology, Public Affairs: New York.

[1] In this special issue, the guest editors also appear as authors of two contributions. We solved the potential conflicts of interest in the following way: First, Hans-Peter Burghof was involved as editor in chief for the two contributions by the special issue guest editors. Second, the rigorous review process was carried out in exactly the same way as for all other manuscripts. The special issue guest editors never handled their own manuscripts. Thus, all manuscripts went through the same quality-enhancing anonymous peer review process.