Impact of Financial Technology (FinTech) on Islamic Finance and Financial Stability

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technique. The data were analysed using SPSS and SmartPLS. The chapter found that perceived ease of use had significant influences on SMEs intention to use the IAP while perceived ease of use significantly affected perceived usefulness and the relationship between perceived ease of use and intention was mediated by perceived usefulness of the IAP. The results of this chapter suggested strategies to promote the platform as a fund seeking platform for SMEs.

The disruption of innovations in the banking sector continues to indicate a positive trend among bankers and customers. The innovations of technology that stand with speediness and fast track transaction effectively support the spread in using banking system without barriers. Recently, the financial services industry continues to be surprised by the latest technology's innovation that is known as artificial intelligence. By looking into the ecosystem for the future sustainability of Islamic banking and finance in Southeast Asia, Islamic financial services may learn and adopt several best practices of A.I. from global banking practices. With a focus on the Islamic financial services industry in Southeast Asia, an exploration on the readiness of such industry and advantages of artificial intelligence are made. This research depends on the qualitative investigation from documentary materials. The leadership of Islamic banks shows their readiness in accepting artificial intelligence.

Financing small and medium enterprises (SMEs) is one of the most important mechanisms to boost economic growth in both developed and developing nations. The contributions of SMEs in many countries' gross domestic product (GDP) have been overwhelming. SMEs improve job creation in all sectors of the economy and contribute to the people's economic wellbeing. However, many SMEs are not getting financing from their respective counties due to strict regulations and interest rate hike. With this kind of regulations and high interest, many brains are wasted, and many ideas are vanishing with the job opportunities attached them. Government agencies are therefore in need to innovate different ways to facilitate SME financing and support new businesses for achieving and maintaining sustainable economic growth. This chapter proposes an Islamic FinTech and its mechanisms to achieving this vital initiative using the Islamic benevolent loan "Alqard al-hasan."

The concept of FinTech, which is the combination of finance and technology, aims to facilitate many services offered by financial institutions. This chapter examines the development of FinTech practices in terms of Islamic finance in Turkey. The chapter assesses the viewpoints of the sector participants, including participation banks, corporate customers, and FinTech companies operating in Turkey, about Islamic finance and FinTech. In this regard, the ultimate goal of the study is to present a projection to the market actors and decision makers in order to be able to enhance the share of Islamic finance in the sector. The interview findings of the study indicate that (1) new technological products and services will dominate the banking sector and these will change the way of doing business in the near future; (2) perception, knowledge, infrastructure, service network, and campaign factors affect the Islamic banking preferences of the customers; and (3) the challenges of legal acts, confidence, competition, and human resources primarily influence the development of the financial ecosystem.

The 2007-2009 global financial crisis emphasized the need for rigorous integration of asset liquidity trading risk into value at risk (VaR) modeling algorithms. In this chapter, the author examines measures of certain kinds of liquidity risk that is useful for completing the definition of market risk and for forecasting liquidity-adjusted VaR (L-VaR) under illiquid and intricate market outlooks. This chapter proposes robust modeling algorithms for the quantification of liquidity risk for portfolios that consist of multiple-assets. The empirical testing is performed using data of emerging and Islamic Gulf Cooperation Council stock markets. To that end, the author simulates diverse portfolios and determines the risk-capital and risk-budgeting constraints. The optimization algorithms are interesting in terms of theory as well as practical applications, particularly in light of the 2007-2009 global financial meltdown. The optimization algorithms can have important uses and applications in expert systems, machine learning, and financial technology (FinTech) in big data environments.

This chapter intends to document the various ways that the nascent technology, blockchain, and other forms of distributed ledger technology (DLT) can provide both increased and decreased risk as well as offer FinTech industries a fertile environment to pursue key technological advancements that can help shape almost every facet of the financial world. Issues of trust, transparency, and privacy will be explored as it pertains to the execution of blockchain technology within financial sectors. Strengths and weakness will be explored within regulations, legal environments, risk management, and the environment. Based on the findings of a comprehensive literature review, possible solutions and recommendations will be provided for governmental agencies, regulators, and users of financial services with a special focus on Islamic FinTech. Future research directions will also be shared that can assist Islamic FinTech.

The Malaysian finance industry is governed by Bank Negara Malaysia (BNM) and Securities Commission Malaysia (SC). BNM governs the banking and insurance industries and the SC regulates and develops its capital market. Both authorities have issued regulations to cater for the proliferation of fintech businesses. For example, BNM issued regulations on digital currency exchanges, electronic-know your customer requirements for fintech companies facilitating remittances, and a regulatory sandbox framework for fintech businesses. Similarly, the SC issued a digital investment management framework, another to facilitate equity crowdfunding, peer-to-peer lending, and digital asset exchanges, and the instrumental digital currency and digital token order. All were issued to encourage innovation in the industry, manage disruption, mitigate risks, and ensure consumer protection. This chapter will explain the steps taken by Malaysia's financial regulatory authorities in dealing with fintech-based companies, critically review the regulations, and recommend some ways forward.

Undoubtedly, the emergence of cryptocurrencies has imposed the challenge of addressing their Shariah issues. These issues include the very permissibility of their issuance in view of the fact that they are not backed by real valuable assets or supervised by financial authorities, which makes their holders vulnerable to possible fraud and manipulative fluctuations in their values. Other issues include trading in them and whether or not they are considered as commodities subject to the injunctions pertaining to Riba as they apply to conventional currencies. In addition, they have potentially negative implications for the market, such as their use in money laundering, drugs trafficking, and other illegal dealings. This paper treats these Shariah aspects of cryptocurrencies.

Notwithstanding the increase of using and adopting FinTech all over the world by users who prefer managing their lives through digital channels, including financial and banking services, a large number of customers are still using the classic financial services, or even ignore the existence of such financial technologies. The aim of this chapter is to underline the concept of FinTech, a technological innovation in the financial field. Indeed, several theories and models has tried to explained the factors of adopting an innovation. Besides the theoretical framework of innovation, FinTech has to pass through different business models to attain the maturity as a successful pure player actor. Accordingly, the overall purpose of this paper is to provide an overview of the financial technologies use evolution, as a business model, and to highlight how FinTech contribute to enhance the financial and social inclusion, by providing convenient and accurate digital financial services (DFS) to the excluded population.

The chapter attempts to test the hypothesis that cryptocurrencies are real independent financial instruments that pose no danger to global financial system stability. For the empirical analysis, the authors use data related to bitcoin and widely traded asset classes. They also utilize the copula approach as well as the CoVaR model. The results show a significant role of crypto-asset market in the stability of global markets. Precisely, they find a dependence between bitcoin and oil prices defined by a normal copula model. The empirical results regarding the systemic risk show that extreme changes in bitcoin prices may have an adverse effect on equity and gold markets. There are positive and significant effects of EUR, JPY, and WTI markets when bitcoin goes down. The authors have also shown that after 2016 the virtual market sudden changes are more likely to raise the whole regular financial system losses, except the energy market. These results are important for policymakers and investors.

The digitization of payment and the development of private digital currencies have constrained central banks to examine the issuance of their own central bank digital currency (CBDC) in order to face the competition of the new peer-to-peer payment system and the decline of cash use. This chapter addresses the topic of CBDC and places the discussion within the context of dual banking intermediation and financial stability. The design of CBDC in term of accessibility, anonymity, interest rate, and payment mechanism depends on the cryptocurrency use and money characteristics regarding the use of cash and deposit. The CBDC Sharia compliant, free of interest or PLS-based, fulfilling money value stability might be a solution. The effects of CBDC on banking intermediation and financial stability depend importantly on the CBDC design and switch significance of banks deposit to CBDC but remain an open question given the pros and cons arguments. In a dual banking system, Islamic banks could limit the disintermediation effect and maintain financial stability under Sharia compliance.

This chapter deliberates on the effects of FinTech on economic performance in the context of political instability in MENA zone countries. Using a multiple regression model to estimate time series data based on a sample of 10 MENA zone countries for 2011, 2014, and 2017, the study contends that FinTech's lending activities increase inflation and that this effect could be interestingly moderated by sound policies and regulations. In addition, the authors find empirical support for the FinTech's role as a driver of economic growth and a breeding ground for innovative projects in a context of freedom of expression, association, and media. In terms of practical implications, decision makers are asked to formulate and implement sound policies and regulations that permit and promote the positive role of FinTech in terms of economic performance.