

Analyzing the Impact of Fintech Innovation on Company Valuation

Shi Qiu^{1,a,*}

¹Rosedale Global High School, Kunming, Yunnan, China

a. loren@ldy.edu.rs

*corresponding author

Abstract: In today's rapidly digitalizing world, FinTech innovation has emerged as a critical driver of the payment sector. This article looks at the influence of FinTech innovation on a company's value, using PayPal as a case study to see how its novel financial products and services, released during the COVID-19 epidemic, affected the company's stock price. Qualitative research and data comparison approaches are used to investigate PayPal's efforts to facilitate cryptocurrency transactions, improve the security and usability of its e-wallet, and provide corporate loans. The data indicate that these developments not only meet market demand for digital payments but also considerably raise PayPal's share price. This conclusion demonstrates the importance of FinTech innovations in increasing the company's revenue variety and market competitiveness. Based on the data presented above, the paper suggests that PayPal expand its market demand, enhance the user experience, and raise its investment in fintech in order to continue driving the share price upward. This involves introducing additional financial products that suit market demands, as well as attracting and maintaining more consumers, resulting in increased market share and income streams.

Keywords: Fintech innovation, PayPal, COVID-19.

1. Introduction

The digital economy has been evolving, and the pandemic's emergence has accelerated the need for further enhancement. Advances in artificial intelligence and IoT technology opened a new era of intelligence and automation in the 2010s, with tech giants such as Apple and Xiaomi launching smart wearable products like watches and headphones. COVID-19, at this historic turning point between 2020 and 2021, is forcing everyone to reduce their social interactions and public place visits. This series of phenomena shows that the digital economy has become a key force in driving economic growth, innovating business models, and improving the quality of life. The Global Digital Economy White Paper in 2024 released by the China Communications Research Institute shows that in 2023, the digital economies of five countries, including the United States, China, Germany, Japan, and South Korea, will total more than \$33 trillion, accounting for 60% of the whole GDP [1].

Against the background that COVID-19 is forcing everyone to work, shop, and entertain online, PayPal, as a global leader in payment services, has experienced slow growth, has keenly captured this market dynamic, and has acted quickly in response to the urgency of rapid growth in performance. PayPal, announced in October 2020, supports transactions such as buying and selling cryptocurrency holdings. What's more, PayPal was supporting small and medium-sized businesses ("SMBs") to

overcome the financial difficulties caused by COVID-19 with business financing solutions like PayPal Working Capital. After these three fintech innovations, PayPal has seen phenomenal growth. According to PayPal's 2020 annual report, its net profit after tax was \$5.065 billion in 2020, a 69% increase year-over-year [2]. In that case, PayPal's stock price soared to \$234.20 by the end of 2020, an increase of 111.47% year-over-year [2].

Six major financial fields, including payment and clearing, lending and financing, wealth management, retail banking, insurance, and transaction settlement, comprehensively apply financial technology ("Fintech"), which is based on a series of technological innovations such as big data, cloud computing, artificial intelligence, and blockchain. Past studies have extensively explored multiple dimensions of fintech, including the scope and development of fintech, the attitudes of society, and its impact on the development of the traditional financial industry and the financing of SMEs. Arner et al. explored the evolution of fintech and its impact on the post-financial crisis era by analyzing the evolution of fintech over the past 150 years [3]. Leong and Sung used a literature review approach to research fintech applications and, through an analysis of the results of interviews with more than 200 youths, analyzed the social phenomenon of weak public understanding of fintech [4]. Lu talked about how fintech can bridge the financing gap for SMEs through a case study approach in the UK [5]. Gomber et al. presented a new fintech innovation mapping approach to evaluate the changes and transformations in four areas of financial services [6].

Previous research has investigated the direct linkage between fintech innovations and the development of e-payment companies. No previous research has investigated the direct linkage between fintech innovations and the development of e-payment companies. In that case, what's the impact of fintech innovations on the stock prices of e-payment companies? Therefore, an in-depth exploration of this area will help to better understand the mechanism of the impact of fintech innovation on the development of e-payment companies, which is of enormous significance to the strategic planning and policy formulation of the e-payment industry in the future.

This work, through an in-depth analysis of the PayPal case, aims to reveal how fintech innovations can directly affect a company's financial performance and market positioning while intensifying market competition and optimizing the efficiency and security of the digital payment ecosystem. This exploration provides new perspectives for theoretical research in the field of fintech and offers practical guidance and insights for related companies, regulators, and investors to formulate strategies in the face of future uncertainties.

2. Case Description

Founded in 1998, PayPal is a leading global fintech company that makes moving money, selling, and shopping simple, personalized, and secure. PayPal empowers consumers and businesses in approximately 200 markets to join and thrive in the global economy. Its main product matrix includes PayPal, PayPal Credit, Braintree, Venmo, Xoom, and iZettle, making it a prominent player in the digital payments industry.

The pandemic has accelerated the development of the digital payment industry. PayPal, a leading financial technology company, has seized the opportunity to carry out financial innovation initiatives like supporting cryptocurrency trading, enhancing digital wallet functionality, and supporting small business lending through fintech innovations.

As announced in 2020, PayPal supports transactions such as buying and selling holdings of Bitcoin, Ether, and other cryptocurrencies by allowing the exchange of cryptocurrencies with its stable coins. According to the 2020 annual report, PayPal's active accounts reached 377 million by 2020, a 24% increase year-over-year [2]. The Figure 1 below shows the active accounts (in millions) of PayPal for the years ended December 31, 2020, 2019, and 2018 [2].

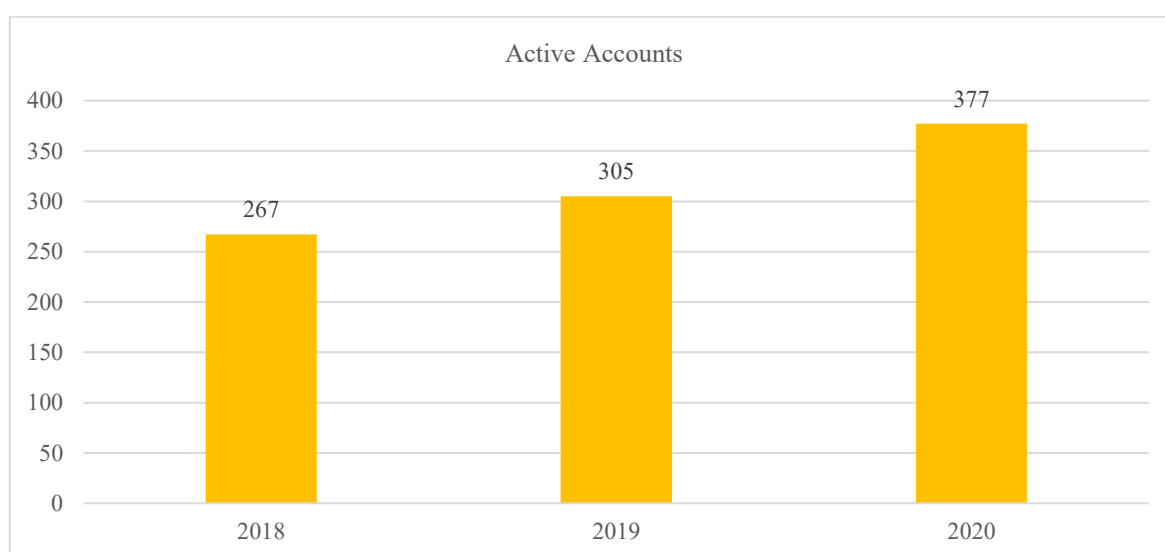


Figure 1: The active accounts (in millions) of PayPal for the years ended December 31, 2020, 2019, and 2018 [2].
(Data source: <https://s201.q4cdn.com>)

Secondly, PayPal has further enriched and optimized the functionality of its digital wallet, including the introduction of new payment methods, interface improvements, and security enhancements. By the year 2020, PayPal's number of payment transactions and total value of payments reached 15,423 million and \$936,062 million, respectively [2]. In 2019, the two items were \$12,361 million and \$711,925 million, respectively [2]. The Figure 2 and Figure 3 below shows the key metrics (in millions) of PayPal for the years ended December 31, 2020, 2019, and 2018 [2].

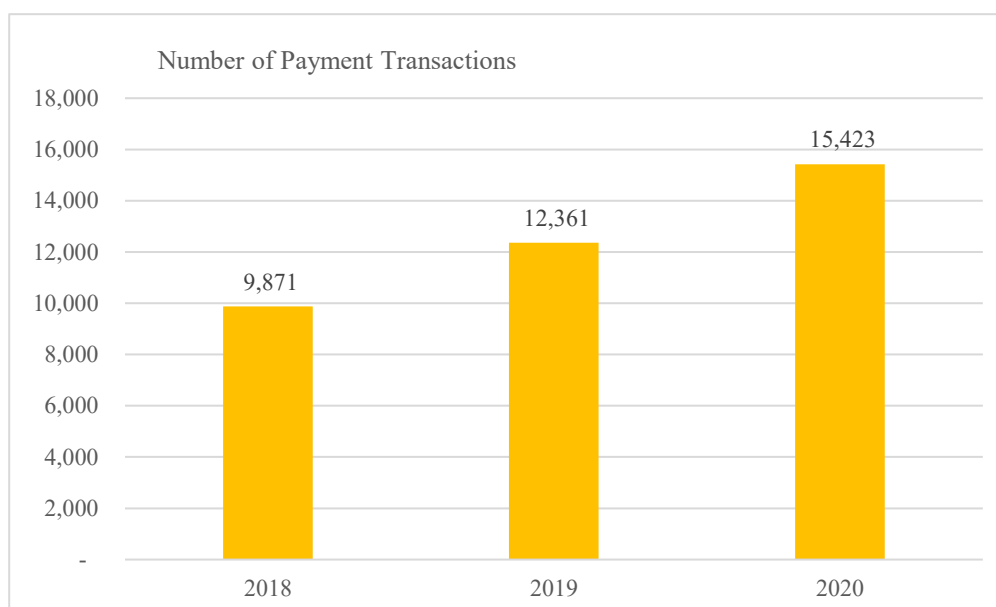


Figure 2: The Number of Payment Transactions (in millions) of PayPal for the years ended December 31, 2020, 2019, and 2018 [2].
(Data source: <https://s201.q4cdn.com>)

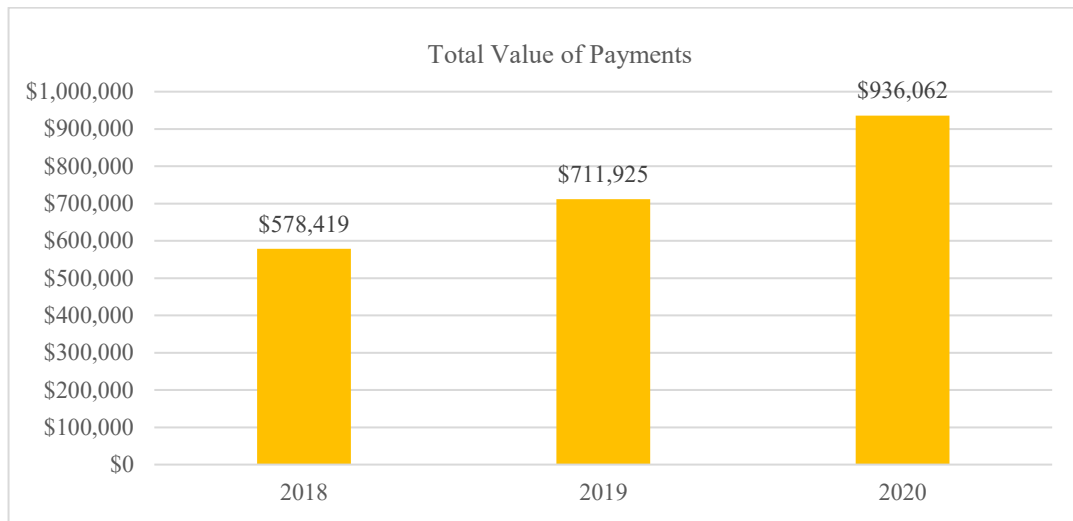


Figure 3: The Total Value of Payment (in millions) of PayPal for the years ended December 31, 2020, 2019, and 2018 [2].

(Data source: <https://s201.q4cdn.com>)

Thirdly, PayPal introduced its financial support programs, such as PayPal Working Capital and PayPal Business Loans, to provide immediate financial assistance to struggling small businesses, including low-interest loans and capital advances. In 2020, PayPal provided \$4.6B in capital to SMBs through PayPal Working Capital and PayPal Business Loans products, as well as access to loans through the U.S. Small Business Administration Paycheck Protection Program (PPP), providing a lifeline as many struggled under the economic pressures of COVID-19 [7].

After these three fintech innovations, PayPal's net profit after tax was \$5.065 billion in 2020, a 69% increase year-over-year [2]. Specifically, since PayPal carried out its fintech innovations in 2020, its stock price has been on a strong upward trend. Starting from approximately \$110.75 per share at the beginning of 2020, PayPal's stock price soared to \$234.20 by the end of 2020, an increase of 111.47%, demonstrating amazing capital appreciation [8]. The Figure 4 below shows the close price of PayPal between the year 2019 and 2021 [8].

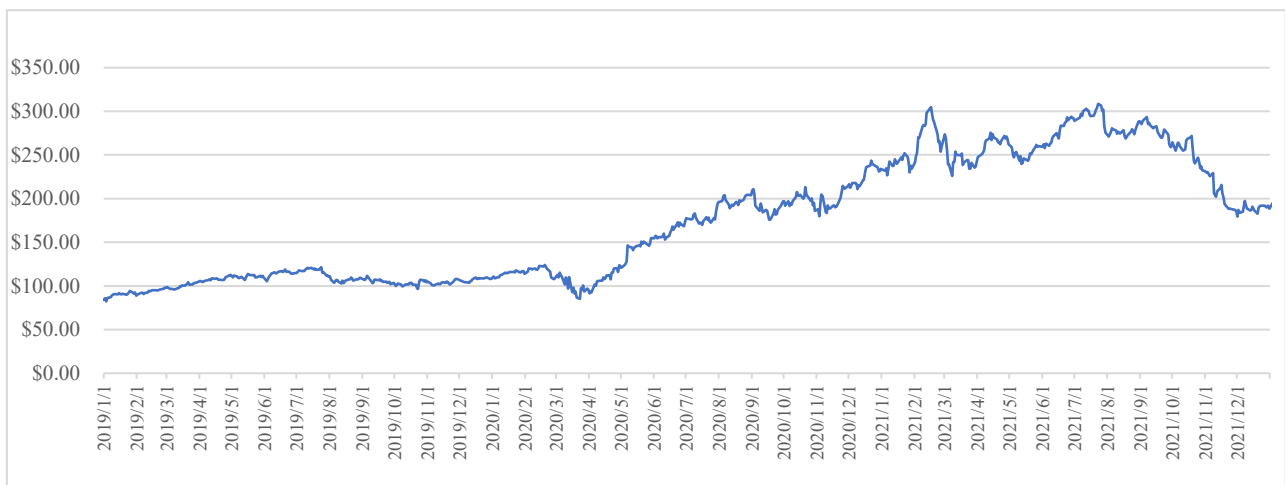


Figure 4: The close price of PayPal between the year 2019 and 2021 [8].

(Data source: <https://www.nasdaq.com>)

3. Analysis on Problems

3.1. Reasons on Supporting Cryptocurrency Trading

During the pandemic, PayPal made an important technological innovation by introducing cryptocurrency trading on its platform. This move not only enhanced its market competitiveness but also boosted the company's valuation.

The introduction of cryptocurrency trading has led to significant growth in PayPal's market activity and valuation. According to its 2020 annual report, PayPal's active account count reached 377 million, a 24% increase year-over-year [2]. The surge in the platform's user base and transactional activity has fueled a continued rise in market valuation and reinforced investor confidence in the company's long-term growth prospects. Specifically, PayPal's stock price rose 25% from \$18.76 to \$234.20 in the fourth quarter of 2020.

In addition, the literature supports the view that cryptocurrencies as fintech have a positive impact on firm valuation. Sharma and others' case research findings show that enterprise asset size and R&D investment are important drivers of blockchain technology adoption, as well as that large U.S. enterprises adopt blockchain technology [9]. Corporate innovation investment and adoption of blockchain technology help to improve business performance [9]. According to Gorkhali & Chowdhury's literature review, blockchain technology can help the financial industry automatically and accurately identify customers' credit status, reconfigure the financial market's credit system, and improve cross-border payment efficiency [10].

In summary, PayPal's fintech initiative to integrate cryptocurrencies during the pandemic not only enhanced the user experience but also significantly increased the company's valuation and market competitiveness. Academics widely recognize this innovative strategy as a key factor driving the development of modern financial services.

3.2. Reasons on Digital Wallets

Another major reason PayPal's worth soared during the COVID-19 epidemic was that it introduced a new financial innovation: digital wallets.

PayPal's digital wallet allows customers to make payments from a variety of savings and credit accounts. The digital account's security, ease of use, and worldwide transactions attract cryptocurrency investors. These enhancements have increased consumers' willingness to utilize PayPal's e-wallet to execute transactions. The risks of fraud, skimming, malware infections from offline transactions, and the inconvenience of frequently transferring cash and paying fees were not present for users.

PayPal's initiatives have strengthened consumers' reliance on its platform while also diversifying its income streams. The digital wallet offers clients a safe and simple method to pay while also providing PayPal with a new income stream. This has prompted PayPal to increase transaction frequency, resulting in an overall increase in the total number of transactions. As a result, PayPal's payment volume and total value reached \$15,423 million and \$936,062 million in 2020, respectively [2]. In 2019, the two things cost \$12,361 million and \$711,925 million, respectively [2].

Increasing revenue diversification enhances the financial stability and resilience of the enterprise by creating multiple sources of revenue. Lee et al. confirm the hypothesis that revenue diversification can improve bank performance using a panel dataset of 2372 banks [11]. Chiorazzo et al. analyzed the link between non-interest revenues and profitability using annual data from Italian banks and found that income diversification increases risk-adjusted returns [12]. Overall, financial innovation initiatives that help firms increase their revenue diversity can reduce their dependence on a single source of revenue, increase their risk resilience, and contribute to their performance growth.

3.3. Reasons on Microloans

PayPal's financial innovations during the epidemic included microfinance for small and medium-sized businesses, which not only improved the company's social image and commercial competitiveness but also increased its worth.

PayPal helped small and medium-sized businesses (SMBs) cope with financial constraints during the epidemic by providing lending projects such as the PayPal Working Capital program. PayPal's microloans do not often demand any collateral or pledges, reducing the lending threshold and widening the clientele.

This socially acceptable move helped many small enterprises withstand the COVID-19 epidemic. It also strengthened PayPal's excellent reputation and brand loyalty in the marketplace. PayPal has committed more than \$2.42 billion in small company finance, proving its leadership in fostering equal financial opportunity [13]. There is no doubt that PayPal's microloans assist a huge number of merchant clients in stabilizing their cash flow, hence increasing the number of transactions in its worldwide payment network. PayPal's microloans also generate extra interest income from low-interest microloans, giving PayPal a fresh push for profit growth. As a result, PayPal's stock price will rise to \$234.20 by the end of 2020, up 111.47% year over year [13].

PayPal's financial support for SMBs enhances the company's social image and market competitiveness. Haddad & Hornuf used datasets including CrunchBase, analyzed the development trend of the financial technology industry, and found that the introduction of innovative products and services by financial enterprises is the key to improving market competitiveness and can effectively improve performance levels [13]. Apăvăloaie discussed the application of Internet technology in the financial industry, pointing out that financial enterprises can improve market competitiveness and business performance through digital transformation and the development of intelligent new products [14]. Overall, improving market competitiveness by offering new products and services, enhancing social image, etc. can help fintech companies like PayPal improve their business performance.

4. Suggestion

4.1. Improving User Experience

PayPal must continue to place enormous importance on the user experience. It could ensure that users have a fast, smooth, and convenient experience by improving the interface design, functional layout, and operation process optimization. At the same time, it must pay close attention to users' needs and provide tailored solutions to meet their various needs.

PayPal can adopt a variety of incentive strategies, such as point rewards, discount offers, membership systems, etc. These could encourage users to use the payment system more frequently and then enhance user stickiness. Additionally, it could establish a flawless customer service system, swiftly resolve any issues or difficulties users encounter during use, and enhance user satisfaction and loyalty. In terms of safeguarding the safety of users' funds, PayPal should adopt advanced security technology, such as blockchain technology, multi-factor authentication, encryption technology, etc.

Enhancing the user experience is one of the key strategies for fintech firms to improve market competitiveness and business performance. Martinet al. collected data from Portugal (249 valid bank cases) and found that enhancing the user experience is key to improving the performance of fintech firms [15]. Specifically, when users perceive improvements in the ease of use, usefulness, trustworthiness, and privacy protection of Internet banking services, they are more inclined to continue to use them, which is conducive to increasing the number of customers, revenue levels, and market share of fintech enterprises [15].

4.2. Implementing Precise Market Expansion Strategies

PayPal should continue to understand market demand, closely monitor market dynamics, and develop precise strategies for market expansion. First of all, PayPal needs a full study of the target market, consumer habits, payment needs, and other factors. In this scenario, PayPal can ensure that their product positioning and target market enable them to develop new products and services. Secondly, PayPal should pay attention to the changes in the global financial market, including the development of emerging technologies, industry policy adjustments, etc., so that it can timely adjust market strategies to seize market opportunities.

When implementing market expansion strategies, it is urgent for PayPal to make full use of the convenience of the Internet and mobile payments. This is helpful in establishing cross-border business and expanding market share. Simultaneously, this paper suggests focusing on establishing linkages with partners and fostering close cooperation with both upstream and downstream enterprises in the fintech industry to jointly promote innovation and development. In addition, this research recommends providing differentiated products and services that focus on the development of emerging markets, such as cryptocurrency trading, cross-border payments, and other areas, to meet the diverse needs of users.

One successful example is Alipay. Alipay realized in 2013 that merchants and customers were storing a significant amount of loose money on the platform for liquidity purposes, which they could invest in a money fund to generate additional income for users. Alipay, in collaboration with a fund company, created the Balance Treasure. According to reports, as of May 1, 2023, the Balance Treasure's cumulative income for users over the past ten years had surpassed 386.7 billion yuan, a daily income equivalent to 100 million dollars for Chinese people [16].

4.3. Increasing Investment in Fintech

To improve the efficiency and security of their products, it is important for PayPal to increase investment in fintech and continue to innovate products and services. Firstly, PayPal should focus on technology research and development (R&D) and introduce excellent talents and advanced technology to promote the innovation and development of financial technology. Secondly, it should pay attention to the development trend of emerging technologies, such as artificial intelligence, big data, cloud computing, etc., and apply them in R&D and payment system optimization. These are useful for improving the payment system's intelligence and automation.

Increasing investment in Fintech allows PayPal to improve their products and introduce novel features, resulting in increased user stickiness, user base expansion, and performance growth. In this way, PayPal can learn from Ant Group's experiences. Ant Group had conducted research and development on biometric technologies such as facial recognition before successfully launching face swipe payment in 2017. Ant Group recently invented face swipe payment, a new sort of payment system that utilizes artificial intelligence, biometrics, 3D sensing, and big data risk control technologies. Users might finish their transactions by swiping their faces rather than opening their phones. This significantly streamlines the process of identity verification when consumers pay, while also boosting payment security. Ant Group's revenue for 2017, 2018, and 2019 was 65.34 billion, 85.7 billion, and 120.6 billion, respectively. Continuous investment in R&D is required for effective product innovation. Ant Group's R&D costs were 4,789 million yuan in 2017, climbed by 44.14% year on year to 6,903 million yuan in 2018, and then increased by 53.63% year on year to 10,605 million yuan in 2019.

5. Conclusion

This paper investigates the relationship between fintech innovation and a company's value by analyzing PayPal's case and documenting important contributions to the field. In the early days of the COVID-19 pandemic, when the demand for digital payments surged, PayPal introduced a series of innovative financial products and services, including support for cryptocurrency transactions, enhanced security and convenience of e-wallets, and low-interest microfinance loans for corporations. As a result, PayPal's stock price increased by 111.47%. Both this success story and relevant research prove that PayPal's fintech innovation initiatives are useful in introducing new products to meet market needs, enhancing PayPal's revenue diversity and market competitiveness, which in turn led to an increase in PayPal's share price.

This paper recommends that PayPal should deepen its market needs, improve the user experience, and increase its investment in fintech. This will help to launch new products, attract new customers, enhance the user stickiness of old users, expand market share and revenue streams, save operating costs, and achieve sustained growth and long-term development, which will further enhance the stock price performance.

This study fills a research gap by investigating how fintech innovation influences the growth of electronic payment businesses like PayPal. However, this report has certain limitations because it solely employs PayPal as a case study and does not take into account other organizations or industries. To ensure the generalizability and efficacy of these tactics, a future study could expand to include a broader range of firms and market settings. Meanwhile, the paper should conduct a more thorough analysis of the link between fintech inputs and outputs in order to offer more informed recommendations to investors and regulators. Furthermore, this article did not take into account all of the elements influencing stock prices, and future research should analyze the impact of FinTech developments on company stock prices in a more comprehensive manner, considering the macroeconomic climate and other potential influences.

References

- [1] China Communications Research Institute. (2024). *The global digital economy white paper* Retrieved from: <http://www.caict.ac.cn>
- [2] PayPal Holdings, Inc. (2021). *2020 Annual Report*. Retrieved from: <https://s201.q4cdn.com>
- [3] Arner, D. W., Barberis, J., & Buckley, R. P. (2015). *The evolution of Fintech: A new post-crisis paradigm*. *Geo. J. Int'l L.*, 47, 1271.
- [4] Leong, K., & Sung, A. (2018). *FinTech (Financial Technology): what is it and how to use technologies to create business value in fintech way?* *International Journal of Innovation, Management and Technology*, 9(2), 74-78.
- [5] Lu, L. (2018). *Promoting SME finance in the context of the fintech revolution: A case study of the UK's practice and regulation*. *Banking and Finance Law Review*, 317-343.
- [6] Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). *On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services*. *Journal of management information systems*, 35(1), 220-265.
- [7] PayPal Holdings, Inc. (2021). *PayPal Releases 2020 Global Impact Report*. Retrieved from: <https://newsroom.paypal-corp.com>
- [8] NASDAQ. (2023). *PayPal Holdings, Inc. (PYPL) Historical Data*. Retrieved from <https://www.nasdaq.com>
- [9] Sharma, P., Shukla, D. M., & Raj, A. (2023). *Blockchain adoption and firm performance: the contingent roles of intangible capital and environmental dynamism*. *International Journal of Production Economics*, 256, 108727.
- [10] Gorkhali, A., & Chowdhury, R. (2022). *Blockchain and the evolving financial market: A literature review*. *Journal of Industrial Integration and Management*, 7(01), 47-81.
- [11] Lee, C. C., Hsieh, M. F., & Yang, S. J. (2014). *The relationship between revenue diversification and bank performance: Do financial structures and financial reforms matter? Japan and the World Economy*, 29, 18-35.
- [12] Chiorazzo, V., Milani, C., & Salvini, F. (2008). *Income diversification and bank performance: Evidence from Italian banks*. *Journal of financial services research*, 33(3), 181-203.

- [13] Haddad, C., & Hornuf, L. (2019). *The emergence of the global fintech market: Economic and technological determinants*. *Small business economics*, 53(1), 81-105.
- [14] Apăvăloaie, E. I. (2014). *The impact of the internet on the business environment*. *Procedia Economics and finance*, 15, 951-958.
- [15] Ant Group. (2023, June 13). *In the tenth year of its launch, The Balance Treasure has earned 386.7 billion yuan for users*. Retrieved from: <https://www.antgroup.com>
- [16] Martins, C., Oliveira, T., & Popovič, A. (2014). *Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application*. *International journal of information management*, 34(1), 1-13.