

The Policy Implications and Economic Trade-Offs Involved with Contemporary Financial Technology- European Aspect

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Abstract

The recent acceptance of financial technology solutions has brought about noteworthy changes and improvements to financial process. The beginning of innovative solutions and advancements in technology has resulted in the rise of FinTech companies that provide financial services continuously across the globe. This has empowered businesses to reconnoiter new opportunities and has improved the overall quality of the customer know-how. However, the progression of the industry also pretenses weighty regulatory challenges that need to be addressed.

Regulatory experts need to establish clear and precise standards to safeguard the interests and safety of customers and to keep up with the developments in the field of FinTech. Failure to do so could lead to potential security breaches and frauds, causing severe financial losses to individuals and businesses. Furthermore, ensuring that regulatory frameworks keep up with the rapid pace of innovation and development can be a test and challenge.

This study aims to discover the FinTech landscape with a specific emphasis on the European framework. The study further analyzes the regulatory challenges posed by the rise of FinTech and suggests measures to address these issues. The research also seeks to assess the sustainability and safety of FinTech progress and sketch future directions that can empower the financial services industry to fully benefits from the application of FinTech in a safe and secure milieu.

Keywords

Economic Trade-offs, FinTech, Innovative Solution, Financial Process, FinTech Development.

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1. Introduction

1.1 Contextual Framework of FinTech

The recent field of FinTech has gained huge popularity as it relates to the convergence of finance and technology. The development of FinTech solutions has transformed the financial services industry by offering innovative technologies that abridge and enhance financial processes (Aker, D'Ambra, Ray, & Management, 2013). Technological advancements have got a transformative upshot, prominent to changes in consumers ascribed to multiple factors, including advancements in technology, developing customer expectations, and regulatory vagaries (Yoshino, Morgan, & Long, 2020). In another study with the widespread availability of mobile devices and internet services, FinTech companies have been able to offer customers an access to financial services at any time and from anywhere, creating new opportunities for businesses to develop more convenient and accessible solutions (Bollen, 2016).

In addition to pragmatism, FinTech disruptors have engrossed on refining the overall customer experience by arranging customer gratification and offering faster, more well-organized services. By leveraging big data and analytics, FinTech formations have been able to personalize their services and offer targeted facilities more aligned with customers' needs (Arner, Barberis, & Buckley, 2017). Also FinTech has introduced novel business models that have challenged traditional financial institutions and forced them to develop and compete in a changing market in current scenario.

(Chang, Wong, Lee, & Jeong, 2016) confer that FinTech has benefitted the financial services industry; it has also brought about certain defies. Supervisory and controllig frameworks have struggled to keep up with the rapid pace of technological evolution, resulting in a regulatory gap potentially leading to consumer harm (Hu, Ding, Li, Chen, & Yang, 2019). Moreover, FinTech companies need to navigate complex regulatory environments subject to change and address issues such as cyber security and data privacy.

Governments worldwide have recognized FinTech as a catalyst for economic growth and financial inclusion and invested in FinTech creativities. Though regulatory challenges persist, FinTech's growth is expected to endure as the demand for innovative and convenient financial services (Kapsis, 2020). The expansion of FinTech is predicted to shape the future of finance significantly and pave the way for emerging technologies and business models.

Modern financial technology (FinTech) in Europe has been evolving speedily over the past few years, with the region being home to some of the most innovative FinTech companies in the world. Here are some of the key drifts and developments:

Open Banking: With the implementation of the Payment Services Directive 2 (PSD2) has led to the emergence of open banking. This has empowered FinTech companies to access financial data from banks, and create new financial products and services (Khan, Olanrewaju, Baba, Langoo, & Assad, 2017). Open banking has the likely to transfigure the banking industry by making it easier for consumers to accomplish their finances and for FinTech companies to offer personalized solutions.

Mobile Payments: Mobile payments have become progressively popular in Europe, with smartphone payments rising at an annual rate of 27.6%. This trend has been enabled by advances in payment technology, and the adoption of mobile payment systems prevailing such as Apple Pay and Google Pay (Boot, 2017).

Digital Banking: Traditional banks are being dared by digital bank also, which are offering services such as online account opening, instant money transfers and budgeting tools. Banks are retorting to this challenge by investing in digital banking technology, and launching their individual digital banking platforms (Bollen, 2016).

Crypto currency: The acceptance of crypto currency has grown rapidly in Europe, with many entrepreneurs and investors betting on the potential of blockchain technology. Some countries, such as Switzerland, have become pivots for FinTech companies specializing in crypto currency (Boustani, 2020).

Artificial Intelligence: FinTech companies are using artificial intelligence (AI) to rally progress their services. AI is being used to provide personalized investment advice, to identify fraud and to rationalize customer service. The potential of AI in FinTech is massive, and it is expected to drive an innovation in the industry for years to come (Dwivedi, Alabdooli, & Dwivedi, 2021).

Generally, the FinTech industry in Europe is growing speedily, driven by advances in technology and changes in consumer behavior. As the industry evolves, regulators will need to keep speed ensuring that consumers are protected, and that innovation is not muffled. The study covers the literature review, research gap, methodology, developments, challenges, and trends in FinTech, market players in Europe and analysis providing a widespread understanding of the field.

2. Literature Review

2.1 FinTech Progress during a decade

Over the previous decade it has been noticed that financial technology, or FinTech, has become one of the most energetic and stirring industries in the world. FinTech startups have developed in every nook and corner of the world which offer innovative products and services that are transforming the way managing money (Boustani, 2020; Carlin, Olafsson, & Pagel, 2017). While still in the early stages of FinTech's impact on the financial sector, the development and progress that has been made in the last decade has been nothing short of notable.

When it is looked back to 2010 era the FinTech was still a comparatively new concept. Though online banking and ATMs had been around for quite some time, technologies like mobile banking, AI algorithms, and blockchain were just beginning to appear. Over the years, however, these technologies have become gradually common, and they've changed the way thought about financial services (Frost, 2020).

One of the most notable areas of FinTech progress over the last decade has been in the area of mobile banking. Today, virtually all major banks offer some form of mobile banking app, allowing customers to check their balances, transfer funds, and even pay bills from their smartphones or tablets. Mobile banking has made it easier than ever to access financial services, even for those who live in remote or underserved areas (Fu & Mishra, 2022).

Another area of FinTech that has progressed significantly in the last decade is AI-powered FinTech platforms. These platforms use complex algorithms to analyze large volumes of financial data, providing users with personalized investment advice and portfolio management recommendations (W. Yang, 2017). These implements have helped to investing, making it more accessible to those who may not have the traditional financial resources necessary to make knowledgeable decisions.

FinTech has also made weighty advances in the area of peer-to-peer lending. Over the last decade, companies like "Lending Club" and "Prosper" have disturbed the traditional lending models by connecting lenders directly with borrowers (Singh, Sahni, & Kovid, 2020). These platforms use sophisticated algorithms to evaluate borrowers' creditworthiness and determine interest rates, which can often be lower than those offered by traditional lenders.

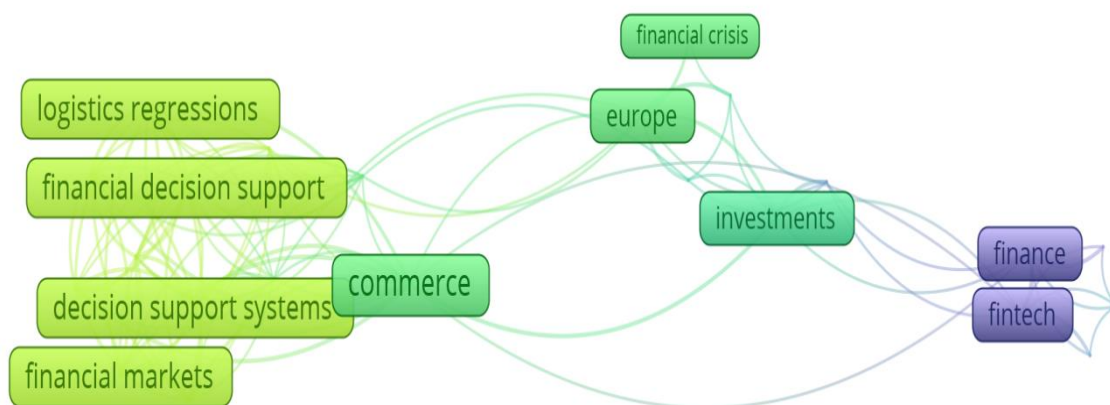
FinTech's accomplishment with blockchain technology over the last decade is undoubtedly exciting - its innovative applications have seen significant growth. Originally used to underpin Bitcoin it is now being utilized in diverse financial domains making it a versatile and

indispensable tool (Stulz, 2019). Today, blockchain-based systems are cast-off for everything from international remittances to supply chain management, and the potential for this technology is almost boundless.

As the FinTech sector has flourished and matured it has also had to overcome several challenges. One of its most significant obstacles is regulatory compliance and legal barriers. FinTech newcomers function within a highly controlled field making it challenging to navigate through the complex landscape of financial regulations (Tseng & Guo, 2022). Therefore, a significant amount of FinTech startups have experienced obstacles in attaining success within the marketplace. This has resulted in some entities merging or ceasing operations completely. For FinTech startups competing against established financial institutions is a daunting challenge. These more traditional lenders boast significant resources and long-standing reputations that are hard for newcomers to match. As a result breaking into this already crowded market can be a real uphill battle (Mention, 2019). Breaking through in the competitive financial services arena has always been an uphill battle for most startups. Yet a few options remain open: some entrepreneurs seek partnerships with established banks or other large scale lending companies; alternatively others focus on cornering unique market niches or developing their own innovative products. The reality is that despite these hurdles and uncertainties within such a complicated realm, FinTech growth over these last ten years has been astounding as it continues to advance unparalleled product innovations into its multibillion dollar industry today.

As more investors see the latent potential for FinTech to transform finance, it seems likely that will continue to see rapid development and progress in this exciting sector for years to come (Naz, Karim, Houcine, & Naeem, 2022; Polasik, Huterska, Iftikhar, & Mikula, 2020).

Figure 1. FinTech specific fields in Europe during decade



Source: Created by researcher

2.2 FinTech Revolutions in Financial Services in Europe as well as world

FinTech has fundamentally altered the way people perceive and engage with financial services by leveraging technological innovations. By offering customers faster and easier ways of accessing such services compared to traditional finance houses FinTech firms have disrupted the industry profoundly (Mention, 2019). Innovation within fintech has shaken up the conventional banking model dominated by brick and mortar establishments for so long. Startups and well-established financial outfits are now leading the charge with their disruptive digital solutions that have transformed how business is done in finance. Remarkably, such progress is perhaps most evident within Europe, where this field continues to flourish unabatedly over time.

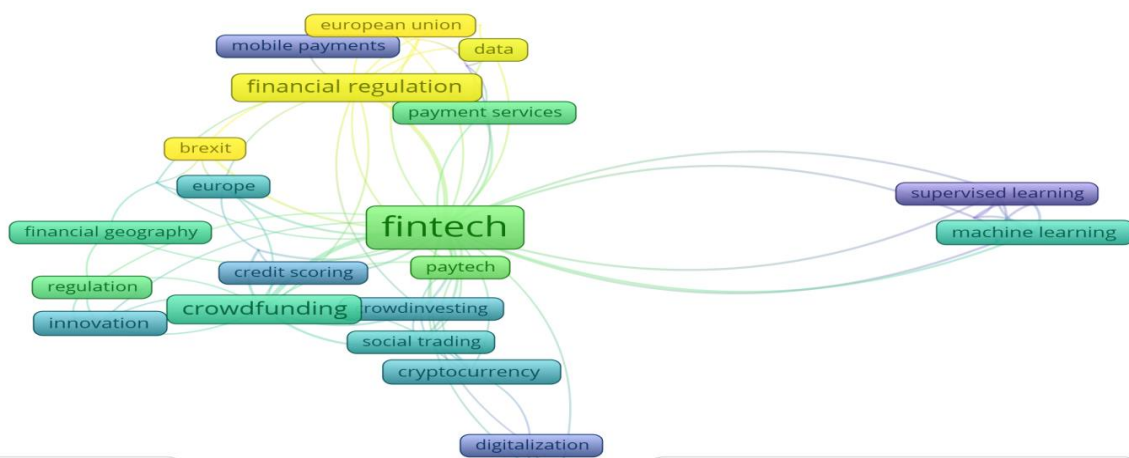
FinTech has developed the financial industry by empowering new payment methods and financial products, such as peer-to-peer lending and digital currencies. Financial technology services have enhanced and expanded financial services to people who were previously unserved and unattended by the traditional banking system (Polasik et al., 2020). Innovation is happening in every aspect of finance, from retail banking to wealth management, financial intermediation, capital markets, and insurance. FinTech companies are giving financial institutions a run for their money by offering more competitive fees, superior user experience, and faster response time (Románova & Kudinska, 2016). The augmented rivalry is driving innovation and pushing traditional financial institutions to assume new technologies and integrate them into their business models.

In Europe, the FinTech sector has been boosted by the European Union's push for greater financial integration and a unified digital market. Countries such as the UK, Germany, and France are leading the pack of FinTech innovation, with the UK alone accounting for approximately 50% of all FinTech investment in Europe (Setiawan, Nugraha, Irawan, Nathan, & Zoltan, 2021). The UK's FinTech industry has grown significantly, owing to its readily available capital, strong policy support, and a highly-skilled workforce.

The disruptive power of FinTech is also giving rise to new business models such as neobanks or challenger banks, which offer a range of banking services similar to traditional banks but with a digital-first approach (Jinasena, Spanaki, Papadopoulos, & Balta, 2020). Neobanks are entirely mobile-focused, and they provide customers with easy access to their accounts and services through digital channels. Such banks are gaining popularity due to their low fees, fast response times, and user-friendly interfaces.

In conclusion, FinTech has transformed the financial services sector, enabling new products and services, and offering customers greater convenience and accessibility. The growth of FinTech has turned traditional financial markets upside down, and the industry's future looks bright with endless possibilities to offer a favorable consumer experience. Despite the disruptive effects, the emergence of FinTech has created new opportunities and a more integrated financial ecosystem, where traditional financial institutions collaborate with FinTech startups to create innovative solutions to benefit their customers.

Figure 2. FinTech revolution in various fields



Source: Created by researcher

2.3 FinTech Business Models and their impact on the Financial Sector in Europe

FinTech - abbreviated for Financial Technology - has been among the fastest growing industries globally since its emergence in early 2000s. The potential that this technology backed sector possesses is remarkable; it aims to revolutionize traditional banking practices through novel products and services while optimizing internal processes and reducing costs alongside (Hu et al., 2019).

In Europe particularly FinTech business models have had a profound impact on finance at large. The digital transformation that they bring forth enhances accessibility by improving user experience while keeping efficiency at its peak - factors vital for keeping up with the times. To remain relevant traditional financial institutions must adjust their ways or risk being outdone by agile disruptors (Khan et al., 2017).

In Europe several advantageous FinTech business models are making waves such as P2P lending platforms crowd funding initiatives, mobile payments systems and robo advisory solutions within the challenger banking space. Each of these models has exclusive

physiognomies and has brought about fluctuating changes concerning access to finance, increasing financial literacy, and affordability of financial services (Iman, 2019).

P2P lending connects borrowers directly with investors, enabling more people to access affordable credit. Peer-to-peer lending platforms are booming in Europe, with market size in the region reaching €11 billion in 2019, and they have become a credible alternative to traditional bank loans (Románova & Kudinska, 2016).

Crowd funding platforms have also been leading in the democratization of finance, enabling small businesses and startups to access funds more easily from a broader range of investors. This innovation has helped businesses that were previously overlooked by traditional lenders access the capital they need to grow (Polasik et al., 2020).

Mobile payments, likewise, have revolutionized the way people exchange money. Mobile payment apps are offering more convenient, secure, and instant transactions than traditional payment methods. Challenger banks, on the other hand, are taking on the established financial players. They offer user-friendly mobile apps, more personalized services at a lower cost than traditional banks (Xie, Ye, Huang, Ye, & Research, 2021; W. Yang, 2017).

As per (Frost, 2020), Robo-advisory is making investing more up-front and accessible to more people, helping to bridge the financial advice gap. Many FinTech companies use machine learning algorithms to offer financial assistance and guidance based on investment goals, risk tolerance, and similar factors. In conclusion, FinTech is positively impacting the financial sector in Europe. It is catalyzing noteworthy digital transformation, bringing new business model innovations and increasing competition (H. Yang, 2017). FinTech is providing an unprecedented opportunity to advance access to financial services, reduce costs, and increase financial literacy. However, traditional banks need to embrace technology to remain appropriate, and the European Union's regulatory framework should familiarize to accommodate and help encourage innovation in the financial sector.

3. Research Gap

As interest in financial technology continues to grow around the world, it's becoming increasingly clear that there are still many unanswered questions when it comes to its real world impact. While plenty of literature exists exploring possible benefits or opportunities for disruption within traditional models of finance very little attention has been paid thus far towards investigating how these innovations may ultimately affect broader economic policies or pose certain tradeoffs at scale.

This study aims to explore these often overlooked aspects of contemporary financial technology in closer detail - providing insight into existing research trends while also highlighting key gaps that will require further attention from researchers moving forward.

4. Methodology

The descriptive research methodology is appropriate for this study because it allows for an in-depth analysis of the policy implications and economic trade-offs involved with contemporary financial technology. This methodology involves describing and explaining phenomena and events, which is necessary for this study. The methodology involves collecting and analyzing various reports, which helps to provide a comprehensive understanding of the topic. Moreover, the methodology involves the use of multiple sources of data cited in the last, which is suitable for this study, which includes discovering a composite and multi-faceted issue.

The hypothesis of this paper is that the European FinTech industry faces regulatory dares and needs measures to be put in place to guarantee sustainable growth and protection for customers. The research aims to analyze the current landscape and propose solutions for a safe and secure environment for the financial services industry to fully benefit from the application of FinTech.

4.1 Restrictions in methodology

While it is certainly possible to use both primary and secondary data in this study, the decision to use a descriptive research methodology that emphasizes secondary data sources has several advantages.

First, financial technology is a somewhat new and rapidly evolving field, where policies and regulations are constantly changing. Gathering up to date primary data on the present state of financial technology and its implications would be challenging and expensive.

Second, the use of secondary data sources provides a wealth of information that has already been gathered and verified by experts in the field. This allows for a more inclusive and accurate analysis of the topic that covers a wide range of perspectives. Third, the use of multiple sources of data as required by the evocative research methodology that means that the study explores a complex and multi-faceted issue from different angles which can provide greater insights into the phenomenon being studied.

Descriptive research methodology has been found particularly useful in revealing patterns and trends within primary data that are not immediately apparent upon inspection. By enabling researchers to concentrate on big picture findings rather than getting bogged down with details this approach can provide valuable insight into complex topics. Furthermore unlike other

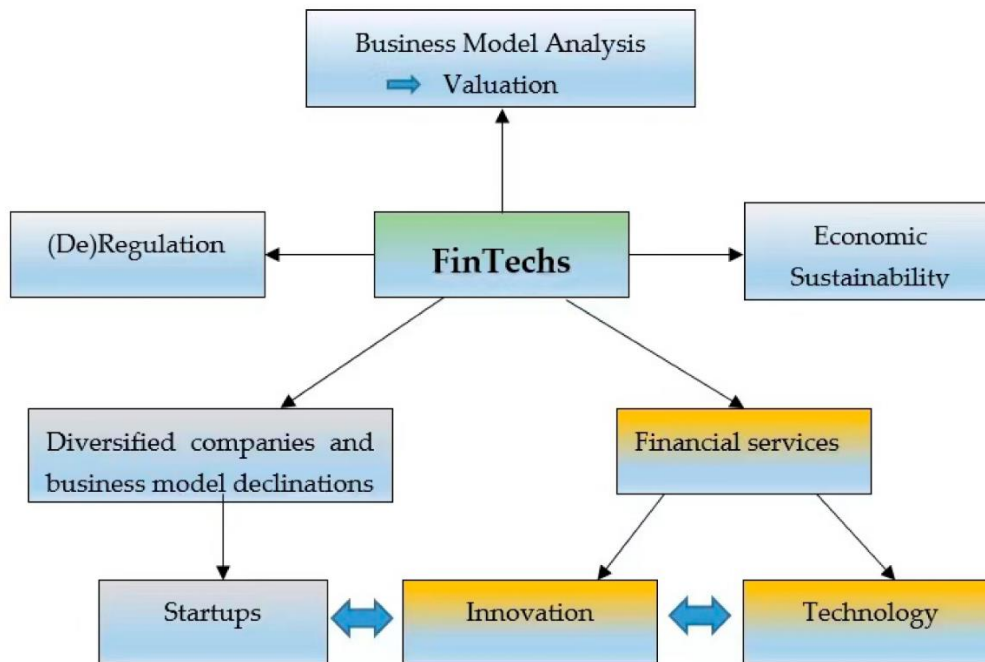
methods like quantitative or qualitative research which may involve biases descriptive methods rely on multiple data sources gathered through rigorous evaluation for a more accurate depiction of reality.

Hence it is noticed that while primary data can definitely be useful in studies such as this one the decision to use a descriptive research methodology emphasizing secondary data sources has many doles. It consents for a more comprehensive analysis of the topic from various angles, provides up to date and accurate data, and reduces the potential for bias.

5. Compliance, Evolving Trends, and Recent Advances in the European FinTech Sector

The regulatory environment in Europe presents a significant challenge to the development of the financial technology (FinTech) sector. To promote a safe, sound, and consumer-friendly financial system, European Union (EU) has implemented the revised Payment Services Directive (PSD2), providing regulatory oversight to the operation of European financial markets in regards to FinTech (Anifa, Ramakrishnan, Joghee, Kabiraj, & Bishnoi, 2022). This regulation enforces compliance with strong customer authentication, privacy and data protection, anti-money laundering and counter-terrorism financing measures for firms operating payments business. Furthermore, FinTech companies providing complex banking services must meet specific requirements for obtaining banking license or authorizing as an Electronic Money Institution (EMI) (Ali, 2020). In addressing risks related to Initial Coin Offerings (ICOs), crypto currency exchanges, and other blockchain-based FinTech developments, the European Securities and Markets Authority (ESMA) has published guidelines. Additionally, the General Data Protection Regulation (GDPR) requires all businesses handling personal data to comply with strict data protection principles (Aparicio, Audretsch, & Urbano, 2021). Such regulations strive to maintain a balance between supporting innovation and protecting consumers. The EU Payment Services Directive has also enabled open banking, allowing third-party providers to access financial information and provide novel services to customers (Ascarya & Sakti, 2022). Increased digital literacy and penetration of smartphones among Europeans have contributed to the rise of FinTech. COVID-19 has expedited FinTech adoption as traditional banking services were disrupted and digital solutions such as contactless payments and online lending gained prominence. Additionally, strong start-up culture and financial backing from investors have supported the emergence and scaling up of FinTech companies in the region as per (Bassan, 2021; Bessen, 2022; Bodley & Brice, 2022).

Figure 3. FinTech in Europe: New Developments, Challenges and Emerging Trends



Source: <https://www.mdpi.com/2071-1050/12/24/10316>

6. Strategic Market Participants in Europe's FinTech Industry

In one study by (Cai, Marrone, & Linnenluecke, 2022) state that revolutionizing banking services through their unique blend of finance and technology - otherwise known as FinTech - Europe is leading this charge according to a study conducted. Within this region lies one company making a significant impact: Revolute. As an industry leader for digital banking services since its inception only six years ago; they provide their clients with features such as mobile payments; currency exchange rates alongside international money transfer options. Currently serving over 15 million customers in Europe alone; the firm has raised more than \$900 million in investments; gaining a valuation of \$33 billion in 2021. With exclusive features including multi-currency accounts and immediate spending notifications; its no wonder Revolut is continuing to grow in popularity. Another major player in the European FinTech market is TransferWise, which was founded in 2011 and provides a low-cost international money transfer service. The company has disrupted the traditional banking sector by offering transparent pricing and fast transfer times, and it has over 10 million customers worldwide (Bassan, 2021; Borselli, 2020). TransferWise has also prolonged its range of services to include a borderless account that offers multiple-currency management competences.

Adyen is additional projecting FinTech company that offers payment solutions for enterprises of all sizes. With a establishing year of 2006, Adyen has grown rapidly and now processes

payments for major corporations, including eBay, Spotify, and Uber. The firm's innovative payment technology permits businesses to accept payments in all payment methods and currencies. In 2018, Adyen went public, and as of 2021, it had a market capitalization of over \$70 billion (Chaudhry, Arshad, Abbas, & Zeerak, 2022).

In brief the European FinTech sector is undergoing immense expansion led by prominent entities like Revolut, TransferWise and Adyen who are reshaping financial services' landscape with pioneering ideas. Through their distinct offerings coupled with innovative business models that have garnered huge investments; it's quite evident that they hold tremendous potential in delivering simplified yet effective financial solutions for both individual clients and corporate partners alike. Consequently proving yet again why they remain key players at the forefront of this disruptive industry transformation movement.

Figure 4. Key FinTech Market Players in Europe



Source: <https://FinTechnews.am/open-banking/43462/global-mapping-open-banking-key-players-in-2021/>

7. SWOT Analysis

Strengths:

Improvement and progression in financial technology have led to increased convenience, speed, and efficiency in financial transactions (Rontu, 2021; Vučinić, Luburić, & Practice, 2022). Increased competition in the financial sector due to technological progressions has led

to improved products and services for consumers (Arner et al., 2017) . The growth of financial technology industry has created employment opportunities and contributed to economic growth.

Weaknesses:

The extensive adoption of financial technology has led to increased risks of cyber-security threats and fraud. The traditional banking industry may be threatened by the growth of financial technology. The familiarity and skills required to operate and comprehend financial technology may be limited among certain populations, principal to exclusion from the welfares of financial technology (Rontu, 2021).

Opportunities:

The development of financial technology offers policymakers with opportunities to promote innovation, competition, and financial inclusion (Rontu, 2021). The integration of financial technology in government services may principal to improved competence and cost-effectiveness. The development of international standards for financial technology may lead to increased access to global markets and investment (Bielski, 2005).

Threats:

The rapid and uncontrolled growth of financial technology may lead to systemic risks in the financial system (Bielski, 2005). The growth of financial technology may lead to increased concentration of market power, leading to reduced competition and consumer choice (Vučinić et al., 2022). The regulatory environment may not be sufficiently equipped to deal with the complexities and rapid changes in financial technology.

8. Discussion and Analysis

Present-day financial technology (FinTech) has revolutionized the financial services industry in Europe. With the advent of digital platforms, mobile banking, and e-payments, consumers can access financial services in more convenient and efficient ways (Cai et al., 2022). However, the rapid growth of FinTech has raised policy implications and economic trade-offs that policymakers must address (Chen, 2022). This study confers the policy suggestions and economic trade-offs involved with contemporary FinTech in Europe. The need to strike a balance between the benefits and hazards posed by the business while simultaneously fostering innovation, competition, and financial inclusion is one of the most important policy implications that FinTech has in Europe. The regulatory framework must be applicably

prepared to manage with the dangers involved with the widespread adoption of fintech, and policymakers have a accountability to guarantee that this is the case (Anifa et al., 2022).

The following policy implications highlight the key challenges facing policymakers in Europe. Policymakers should ensure that the regulatory environment is prepared to handle the explosive rise of the FinTech industry. (Diehl, 2015) argue that regulations should foster innovation and competition while protecting consumers and the financial system. New risks including cyber-risk, data privacy, and money laundering should be manageable within the regulatory framework. The regulatory framework must be adaptable enough to permit innovation and competition while also protecting consumers.

Policymakers should watch out for any potential systemic risks that FinTech may introduce to the financial system. Financial contagion is a real risk due to the linked nature of the financial ecosystem. To ensure financial stability, policymakers should check that FinTech firms have sufficient capital and effective risk management systems in place (Diehl, 2015; Y. K. Dwivedi et al., 2021).

Consumers should feel safe utilizing FinTech services, and lawmakers should make that a priority. This involves making sure that consumers' personal information is safe, that they aren't being taken advantage of, and that they can resolve any disputes that may arise. Governments should mandate that FinTech companies disclose all costs to customers in advance (Canepa, 2022) and (Bielski, 2005).

Policymakers should watch out that FinTech doesn't make it harder for underserved groups to get their hands on banking services. For financial inclusion to occur, FinTech must make financial services available to underserved communities at reasonable prices and in convenient locations (Schueffel, 2016). Policymakers should make sure that FinTech firms are not charging people with lower incomes more in fees or interest rates because of their lower credit scores.

The rapid growth of FinTech in Europe has raised several economic trade-offs that policymakers need to address. Policymakers need to balance the benefits of increased efficiency and competition with the risks of systemic risk and reduced consumer choice due to market concentration (Chang et al., 2016). In addition, policymakers need to balance the benefits of convenience and speed of financial transactions with the risks of cyber-security threats and fraud. Finally, policymakers need to balance the need to promote innovation and competition with the need to ensure that FinTech does not lead to exclusion of certain

populations due to lack of knowledge and skills required to operate and understand the technology.

The benefits of FinTech in Europe include increased efficiency, convenience, and accessibility of financial services, reduced costs, increased financial literacy, and increased competition (Bollen, 2016). FinTech has enabled consumers to access financial services in more efficient and convenient ways. The use of mobile banking and e-payments has reduced the need to physically visit bank branches, saving time and costs. (Schueffel, 2016) The increased competition from FinTech companies has led to lower fees and interest rates, enabling consumers to save money. Finally, FinTech has increased financial literacy, enabling consumers to better understand their finances.

However, rapid growth of FinTech has raised several economic trade-offs that policymakers need to address. The first trade-off is between the benefits of increased efficiency and competition and the risks of systemic risk and reduced consumer choice due to market concentration. The widespread adoption of FinTech could lead to market concentration, reducing competition and consumer choices. Consumers could be left with fewer options, leading to higher fees and interest rates (Gomber, Koch, & Siering, 2017). In addition of that interconnections of the financial environment could lead to have an evil affects that could destabilize the financial system. The second trade-off is between the benefits of convenience and speed of financial transactions and the risks of cyber insecurity and fraud. The widespread adoption of FinTech introduces new risks to the financial system, such as cyber-attacks, hacking, and other fraudulent activities. The process of mobile banking and e-payments could upsurge the risk of identity theft and fraud, leading to potential losses for consumers and financial institutions.

The supplementary vital trade-off is between the need to promote innovation and competition and the need to ensure that FinTech does not lead to exclusion of certain populations. FinTech requires basic technological literacy, which could exclude certain populations, such as the elderly and low-income individuals (Fadhul & Hamdan, 2020). Representatives and policy makers need to safeguard that the expansion of FinTech does not leave behind certain populations due to a lack of knowledge and technology skills required to use FinTech.

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