Policy Frameworks and Citizens' Use of Fintech Solutions: The Pros and Cons in Egypt

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• Abstract

This thesis provides a comprehensive analysis of the significant influence of financial technology (FinTech) on the banking industry, consumer finance, and economic growth. It specifically concentrates on the swiftly changing FinTech environment in Egypt. The study investigates the impact of incorporating advanced technologies on worldwide financial practices, which has significantly transformed traditional banking models and facilitated the emergence of inventive financial services. The transition is clearly apparent in Egypt, where the expansion of FinTech has been driven by advances in regulations, adaptation to technology, and a population that is becoming more comfortable with digital solutions.

Using a combination of quantitative surveys and qualitative insights, this study examines customer habits, preferences, and perceptions towards FinTech in comparison to traditional banking systems during the past five years. The study reveals several significant findings. First, it highlights a notable change in consumer preferences towards FinTech solutions, which can be attributed to their improved accessibility, efficiency, and user-centric design. Additionally, the study highlights the impact of FinTech on the financial services industry. It acknowledges the positive aspects of innovative and flexible financial services, but also raises concerns about the potential rise in consumer debt-burden ratios. This emphasizes the importance of promoting financial literacy and responsible borrowing practices.

The analysis addresses the regulatory environment and examines how current policies and frameworks impact the operation and expansion of FinTech companies in Egypt. The findings underscore the importance of maintaining an equilibrium between promoting innovation and safeguarding consumer interests. This underscores the need for regulatory practices that are

flexible and forward-thinking, in order to facilitate the sustainable development of the FinTech industry.

Chapter 1: Introduction

In an age characterized by the prevalent impact of technology on all aspects of life, the financial sector is no exception. The rise of financial technology (Fintech), has fundamentally transformed the global banking sector (Karthika et al., 2022). The influence of FinTech on several elements of the economy and society is diverse and substantial Fintech has transformed the interaction of individuals, businesses, and governments with financial services.The global financial crisis of 2008, along with the swift advancement of technology and a broader change in consumer behavior, laid the groundwork for the eventual development of fintech—a hybrid of finance and technology. Fintech is commonly defined as the use of contemporary technology, like data analytics, mobile computing, and the internet, to facilitate, develop, or challenge financial services (Giglio, 2021). In Western Europe countries, such as Denmark, Estonia, the Netherlands, and Sweden, the emergence of a transformative 'competitive' ecosystem—where traditional banks and Fintech firms cooperate and compete—is a result of the rise of Fintech and represents a move towards innovative financial services (Larsson et al., 2023). Technological developments that have transformed banking in the US, increasing productivity and generating new services, are evidence of the influence of fintech (Li & Xu, 2021). Despite obstacles including competitiveness and regulatory barriers, India's Fintech industry is growing because of government initiatives and a tech-savvy populace (Giglio, 2021). The financial sector is characterized by extensive international collaboration in research, especially in the US, China, and the United Kingdom. This indicates a strong emphasis on expanding FinTech and inclusivity. This worldwide phenomenon, which is being advanced by technology innovation and international cooperation, points to a shift towards financial ecosystems that are more integrated, efficient, and inclusive.

Artificial Intelligence (AI) and Machine Learning (ML) are forecasted to transform the banking industry, as well as transform areas such as payments, investments, risk management, and other related fields. Several trends are quickly becoming popular in the fintech industry. One recent development is the rise of Embedded finance, which is defined as the integration of financial services within non-financial environments, allowing companies outside the traditional banking sector to offer financial products directly to their customers. Embedded finance was expected to become the dominant trend by 2023. Another emerging phenomenon is open banking, which has the potential to fundamentally change how individuals manage their finances and interact with financial institutions. This is attributed to its exceptional capacity to provide unmatched levels of transparency, choice, and influence (Tang, 2023). Furthermore, in the midst of these progressions, consumer financing continues to be highly popular among consumers. The appeal of this service stems from its capacity to provide adaptable financial solutions customized to individual requirements, improve accessibility to a bigger selection of financial products, and simplify financial services, thus making them accessible to a wider audience. Moreover, the incorporation of technology in consumer finance has resulted in a more tailored and optimized client experience, solidifying its position as a key player in the fintech industry.

In Egypt, the fintech sector is expanding quickly and revolutionizing the conventional banking business. The expansion is driven by a combination of factors including beneficial regulatory improvements, heightened smartphone usage, and a society that is comfortable at using technology, as further confirmed by the MCIT Minister "MCIT will continue to build Digital Egypt, a new digital society, that is decentralized, connected and data-driven to ensure every citizen has a chance to learn, work and receive services in a timely manner," (Telecom Review, 2019). From a similar perspective, Egypt was the Arab digital capital for the year 2021, advancing digital transformation while adhering to Egypt Vision 2030. (Telecom Review, 2022). HE Prime Minister Dr. Mostafa Madbouly stated, "The goal is to drive the transition to a society where technological applications are the key enablers for obtaining services." (Business Today Egypt, 2023) In addition to Egypt’s market readiness, fintech firms have created an environment that is fostering competition, encouraging established banks to adjust and progress. Adopting technology and cultivating an innovative atmosphere will be essential for Egypt's success as it proceeds with its fintech journey (Zakaria, 2023).

While it's clear that all technological advancements in the field of finance have the potential to revolutionize the banking sector as well as related fields, there are still major obstacles to overcome in terms of the public's perception and regulation. The rapid growth of technology is challenging policymakers, who are working to create regulations that can keep up with the rate of change while ensuring consumer protection and financial stability. Concurrently, there's a growing state of mind among customers about data security, privacy, and the possibility that technology could disrupt traditional financial functions and responsibilities. In light of these intricacies, this thesis employs quantitative surveys to explore Egyptian consumers' preferences and will examine the market dynamics and prospects of fintech companies from the viewpoint of financial professionals. This approach seeks to offer a thorough understanding of the fintech environment, taking into account both its advantages and disadvantages.

1.1 A Global Outlook

1.1.1 Technology's Increasing Role in Daily Life and Banking

Technology has become an integral component of daily life, significantly influencing several sectors, including banking, in today's fast changing world. The banking industry, which has traditionally relied on conventional, physical procedures, is currently undergoing a substantial shift towards a more technology-oriented framework. The emergence of revolutionary technical innovations and web-based solutions is transforming the banking sector. The implementation of digital transformation is crucial for banks and financial institutions, as it amplifies their capacity to comprehend, interact with, and fulfill the changing demands of their consumers (Osei et al., 2023). This transformation represents more than just a matter of convenience; it signifies a major paradigm shift in the conceptualization and delivery of financial services. Integrating digital technologies into banking operations is not just an optional upgrade, but rather a need to stay in line with the changing demands of consumers and the growing global financial scene (Alhosseiny, 2023).

The integration of advanced technologies with financial services has provided creative solutions that simplify and improve banking procedures. This encompasses the implementation of internet banking, mobile applications, and cutting-edge technology such as AI and blockchain. These technologies enhance efficiency and broaden the accessibility of financial services, hence reaching a wider audience (Abou Elwafa, 2023). Consequently, banking has crossed the boundaries of conventional financial institutions and has extended into the digital domain, indicating a notable transition towards a technology-centered economy. It is leading the way in promoting the use of digital currencies and making the online transfer of financial assets more efficient (Broby, 2021). The use of this technological breakthrough is pushing banks to adopt a more customer-centric strategy, thereby enhancing their competitive advantage in the financial industry (Broby, 2021).

A study that focused on a comparative analysis of Citibank and the Industrial and Commercial Bank of China (ICBC) emphasizes this transition, demonstrating how conventional banks are embracing fintech advancements such as cloud computing, big data, and mobile payment in order to stay competitive (Chen et al., 2017). Citibank has established itself as a frontrunner in fintech innovation, with the goal of revolutionizing conventional banking models (Chen et al., 2017). This transition involves the incorporation of financial services into mobile and internet platforms, enabling customers to have more efficient and convenient banking experiences (Arnaut & Bećirović, 2023).

1.1.2 Global Inflation and Increased Dependency on Borrowing

Globally, inflation is a problem facing the world economy in many contexts. The escalation of costs in several sectors has resulted in a heightened cost of living, impacting both individuals and businesses. The International Monetary Fund (IMF) predicts that worldwide inflation would decrease to 6.6 percent in 2023 and further decline to 4.3 percent in 2024, but it will still be higher than the levels observed before the pandemic. The ongoing spike in costs, frequently linked to factors such as economic policies, political hurdles, supply chain disruption, and market dynamics, has led to an increased dependence on borrowing (Maher, 2022).

Inflation fundamentally weakens the value of money, posing a challenge for consumers to sustain their quality of life without relying on financial aid. This circumstance has accelerated a reliance on borrowing, as individuals and firms pursue loans and credit facilities to overcome the gap created by inflationary pressures. Lenders profit when prices rise due to inflation since it boosts demand for borrowing and raises interest rates (Segal, 2023). In this context, the role of fintech is of utmost importance, since it provides more efficient and easily accessible lending alternatives. Consumers can conveniently obtain loans and credit facilities through digital platforms, allowing them to properly manage their financial needs in an inflationary climate (El Masry, 2023).

The dual phenomena of technological advancement in banking and worldwide inflation has jointly led to a fundamental change in the financial industry. This shift is marked by a shift towards a technology-driven economy and a heightened reliance on borrowing, demonstrating the interconnectedness of technology, finance, and global economic patterns.

1.2 Fintech in Consumer Finance: Evolution, Services, and Financial Health

1.2.1 Fintech: Services, and History

Fintech, pertains to the incorporation of technology into the products and services provided by financial institutions in order to enhance their efficiency and accessibility for consumers (Barroso & Laborda, 2022). It refers to a collection of innovative business models, and technological applications that greatly influence the financial industry and the offerings of financial services (Li & Xu, 2021). Unbundling services traditionally provided by traditional financial institutions and developing new markets for these services are the primary mechanisms through which it operates (Abou Elwafa, 2023). The origin of fintech can be traced back to the introduction of credit cards in the 1950s. It has since evolved with the construction of Automated Teller Machines (ATM) networks in the 1960s, the growth of internet banking in the 1990s, and the recent emergence of blockchain and cryptocurrency (Feyen et al., 2021).

The fintech industry offers a wide range of services, including mobile payments, money transfers, consumer financing, asset management, and crowdfunding platforms, among others.   Each of these services employs technology to augment the effectiveness, convenience, and availability of conventional financial services (Metwally, 2023). Mobile payment services such as PayPal and Venmo have significantly transformed the process of money transfer, while peer-to-peer lending platforms have offered alternate options to conventional bank loans (Frost, 2020).

A particular area of interest in this discipline is consumer finance accomplished through the use of fintech platforms. It operates in a way that is conceptually and practically distinct from more conventional loans. Traditional loans entail borrowing from a financial institution with rigid terms and a defined payback schedule. In contrast, consumer financing through fintech platforms provides more flexibility, personalized terms, and a focus on customer experience (El Masry, 2023). In order to determine a user's creditworthiness, these platforms make use of data and sophisticated algorithms. For instance, algorithms can help in risk assessment to determine the likelihood of a prospective borrower fulfilling the loan repayment (Anikanova, 2022).

Likewise, through the massive amount of data collected, companies are now able to provide individualized financial products that are designed to meet the user's specific requirements. For instance, if a bank notices a significant increase in the usage of its mobile app, it may enhance the app's capabilities or introduce more functionalities. Likewise, if they identify a consistent pattern in buying habits, such as frequent purchases on a particular platform or for a highly sought-after item, they may create customized financial solutions to align with these spending trends. More importantly, fintech lenders have a distinct advantage in addressing financial shortages, particularly in areas where traditional banks are limited and local economies are difficult. This finding, which was emphasized by Jagtiani & Lemieux (2018), is especially prominent in regions where conventional banking facilities are less accessible.

1.2.2 Debt-Burden Ratio: An Explanation

The debt-burden ratio is a crucial financial measure employed to evaluate the financial well-being of an individual or a household (Xiao & Yao, 2022). It is determined by dividing the total amount of debt payments made by a person or household by their disposable income. A high debt-to-income ratio signifies that a substantial proportion of an individual's earnings is allocated towards debt repayment, which may imply financial hardship (Abad et al., 2022). This ratio is especially significant in the context of consumer financing via fintech, since it offers a metric to evaluate the influence of fintech loans on customers' financial welfare.

Fintech platforms, because of their emphasis on accessibility and personalization, have the potential to have an effect on the debt-burden ratio of customers. On the one hand, they can offer more readily available credit alternatives for individuals with limited access to conventional banks. On the flip side, the accessibility of loans offered by these platforms may result in a rise in the debt-to-income ratio for customers who may not possess a comprehensive understanding of the terms or consequences associated with these financial products (Maged, 2023). For instance, an individual could end up having to pay back installments that exceed his current income, which can increase the delinquency or default risks. According to an article posted at Harvard Business School discussing research conducted by Marco Di Maggio, Fintech firms appeal to a particular category of borrowers who are more prone to excessive spending (The Dark Side of Fintech Borrowing, 2020)

Fintech has transformed the landscape of the financial services industry, introducing groundbreaking approaches in banking, lending, and managing finances. To fully comprehend the breadth of this technological revolution, it's crucial to delve into the intricacies of consumer financing through innovative solutions and understand its impact on critical metrics, such as the debt-burden ratio.

1.3 Egypt in Context

The financial technology (fintech) industry in Egypt has grown rapidly in recent years, with the number of fintech startups and PSPs expanding by 5.5 times from 2017 to 2021 (Fintech Egypt Landscape Report, 2021. The demand for fintech and fintech-enabled solutions, which are revolutionizing Egypt's banking and financial sectors, is what is driving the expansion (Central Bank of Egypt, 2023). The Central Bank of Egypt plays a crucial role in fostering the fintech industry, as is highlighted in its initiative 'Fintech Egypt'. This initiative is responsible for releasing the 'Egypt's FinTech Landscape Report 2023,' a yearly overview that offers valuable information on the expansion and trends in Egypt's fintech sector. This report serves as a crucial tool for understanding the complex dynamics of fintech in Egypt. Produced through extensive polls with more than 250 fintech ecosystem participants, the most recent study from the 'Fintech Egypt' initiative provides in-depth insights into the sector's changing landscape. Investors, both domestically as well as abroad, have shown a great deal of interest in Egypt's fintech industry since 2020. The report reveals that over 50% of the participants are foreign investors, underscoring the interest the Egyptian fintech industry is receiving on a worldwide scale.

The Egyptian fintech startup ecosystem has grown by over fivefold in the last five years, as stated in the 2023 Egypt Fintech Landscape Report (Fintech Egypt & Central Bank of Egypt, 2023). It now comprises a total of 177 companies and payment service providers (PSPs) in 14 different creative fintech sub-sectors, such as digital payments, peer-to-peer lending, blockchain, personal finance management, insurtech, and remittances. The banking industry has played a crucial role in facilitating the expansion of fintech and fintech-enabled startups in Egypt. This has been achieved through the establishment of necessary financial infrastructure, forming partnerships with these startups, and making substantial investments, both directly and indirectly, totaling USD 290 million in 2022 (Fintech Egypt & Central Bank of Egypt, 2023).

1.3.1 Financial Inclusion and Egypt’s 2030 Agenda

Financial inclusion is one of the core pillars of Egypt's 2030 Vision, which seeks to foster a more equitable and sustainable economic system (Central Bank of Egypt, 2023). In spite of the huge strides being made towards economic reform, a sizable segment of Egyptians still does not have access to banking services (Hassouba, 2023). According to Bilodta and Romano (2023), a major obstacle to economic involvement for a large number of residents is their limited or nonexistent access to traditional financial services. Despite this, there has been a positive trend over the past few years, which is a gradual growth in the number of people having access to financial services. According to data made public by the Central Bank of Egypt, the rate of financial inclusion has grown from 33% in 2017 to 56.2% at the end of 2021. As of 2022, 42.3 million Egyptians, or 64.8% of the country's adult population over 16, had a bank, Egypt Post, mobile wallet, or prepaid card accounts (Abdulghany, 2022). Given Egypt's larger objectives for economic and social development, these figures clearly show the country's commitment to financial inclusion. This is quite promising. This beneficial growth may be credited, in part, to the expanding fintech sector in Egypt, which has been essential in bridging the gap for the unbanked and underbanked populations (Abou Elwafa, 2023).

1.3.2 Tech-Literacy, Credibility, and Trust in Fintech

In Egypt, increasing financial inclusion through the use of fintech presents a number of problems; one of the most significant is the lack of technological knowledge among the general population (Iskander, 2023). The level of ease and familiarity that users have with digital technology is a critical factor in the effective adoption of fintech solutions. There is a significant diversity of technological literacy in Egypt, which presents a barrier to the widespread adoption of fintech services (Maged, 2023). This barrier is especially common for some demographic groups, where illiteracy, poor infrastructure, frequent interruptions in electricity supply, and poor mobile reception—especially in rural areas—are the main causes of the lack of financial inclusion (Maged, 2023).

Additionally, the reputation and confidence that consumers have in financial platforms is an essential component. In the Egyptian market, like in many others throughout the world, there is a healthy amount of skepticism and fear regarding new financial innovations (Augustine, 2023). Establishing confidence in these digital platforms is necessary for the widespread use of them. This requires not only teaching potential users about the benefits and security features of fintech services, but also demonstrating their reliability and effectiveness in everyday financial transactions (Das & Das, 2020).

1.3.3 Policies and Regulations by Financial Regulatory Institutions

The regulatory framework is another challenge for the financial technology industry in Egypt. On the one hand, rigorous rules promote stability and security in the financial industry; on the other hand, they have the potential to inhibit innovation and limit the creation of new fintech enterprises (Abad et al., 2022).

These regulatory problems are not specific to Egypt but are a recurring topic in emerging nations wrestling with the integration of modern financial technologies into their existing frameworks. According to Rau (2017), nations with strong legal systems, anti-corruption laws, regulatory frameworks, accessibility, and bigger profit margins for current financial intermediaries are more likely to see an upsurge in fintech lending. On the other hand, Navaretti et al. (2017) observed that fintech investment is more common in nations with looser banking laws as per a World

Bank index. All of these studies collectively cast doubt on the notion that regulatory arbitrage is the main factor accelerating the uptake of fintech solutions.

In order to realize its goal of achieving financial inclusion as part of its 2030 strategy, Egypt must overcome a number of obstacles. When attempting to use fintech to increase financial access and participation among the population of a country, it is vital to take steps such as addressing difficulties relating to technological literacy, establishing trust in fintech platforms, and navigating a rigid regulatory landscape.

1.4 Problem Statement

The fusion of finance and technology involves pioneering solutions that differ from the offers of conventional banking organizations. The solutions encompass many financial activities, such as mobile banking, online money transfers, and digital lending services. The growth of digital payments in Egypt indicates an increasing acceptance of digital financial transactions. This trend could extend to installment sales, where digital payment methods would play a crucial role (Elnady, Taha, & Abdella, 2022). By offering a flexible payment option that may be more in line with the financial situation of many Egyptians, these services let customers make purchases from a wide variety of merchants and pay in monthly installments. However, the challenges posed to this progress are numerous and pose significant questions about consumer perceptions and the regulatory landscape in Egypt. This research focuses on examining the challenges and opportunities associated with the adoption of Fintech solutions in Egypt, highlighting the tension between the innovative promise of Fintech and the obstacles hindering its full integration with a particular emphasis on the existing policy framework and regulatory environment. It explores how these formal structures may act as significant barriers to the integration and acceptance of Fintech services among the populace.

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1.4.1 Research Purpose and Goals

The central aim of this study is to assess the extent to which the introduction of innovative consumer fintech solutions in Egypt has influenced consumer behaviors and perceptions towards banking services over the past five years. This study aims to comprehend the rapidly evolving policy and regulatory environment of financial technology in Egypt. The major objective is to assess the perception of various demographic groups towards fintech platforms in comparison to traditional banks, namely in terms of security, ease of use, and overall satisfaction. Additionally, the study will explore their risk tolerance and preferences for borrowing. Furthermore, it aims to uncover the unique characteristics that differentiate fintech technologies from traditional banking institutions in the Egyptian market. This investigation encompasses not only the positive aspects of innovation but also the need for caution, since the research aims to pinpoint the primary sources of risk for entrants in Egypt's fintech industry. Furthermore, a crucial element of this study is providing insight into the regulatory framework that governs Egypt's financial sector, examining the risks linked to it, and understanding how these policies influence the fintech environment.

This study utilizes a mixed-method methodology, integrating both quantitative and qualitative methodologies. The study aims to quantitatively evaluate the general consumer perception of fintech solutions in Egypt and compare it to the assessment metrics of traditional banking services. The surveys investigate different aspects, such as previous use of fintech consumer financing services, satisfaction levels with fintech apps in comparison to traditional banking, trust in the security and privacy of fintech applications versus traditional banking, and the perceived effectiveness of fintech in fulfilling financial requirements that are not addressed by traditional banks. In addition, it assesses the user-friendliness of fintech applications compared to traditional banking services as well as measuring the probability of using consumer finance services at present compared to five years ago. The study uses a qualitative approach to look into opinions from experts about the regulatory landscape, as well as attitudes and views about fintech and conventional banking services.

The findings aim to offer recommendations to policymakers for facilitating a smoother transition towards a digitally inclusive financial landscape in Egypt.

1.4.2 Research Question and Sub-Questions

The primary research question is:

What are the advantages and disadvantages of fintech use for citizens in Egypt, and how can policy frameworks be reformed to enhance the benefits and mitigate the drawbacks?

This overarching question is supported by several sub-questions:

> ***1. How does the regulatory environment for consumer fintech firms compare with that of traditional banking institutions?*** This question is designed to examine and contrast the regulatory frameworks governing consumer fintech firms and traditional banking institutions. Relevance: Investigating the regulatory landscape is essential for understanding the challenges and opportunities faced by fintech firms in comparison to traditional banks. It sheds light on how regulations impact the operation, innovation, and growth of fintech companies. Additionally, this understanding is crucial for stakeholders, including policymakers, to ensure that regulations foster a balanced growth of fintech while ensuring consumer protection and financial stability***2. How do consumer fintech firms vary from traditional banks regarding the unconventional technologies they***

employ? This question aims to identify the distinct technological approaches utilized by consumer fintech firms and compare them to the technologies employed by traditional banks. Relevance: Understanding the different technological applications gives insight into the competitive advantages fintech firms may hold over traditional banks. Recognizing these differences can provide context for understanding why consumer behavior may shift towards these newer financial service providers.

3. What are the main drivers for change in Egyptian customer preferences for consumer fintech options over traditional banking services? This question endeavors to identify the key factors influencing the shift in preference among Egyptian consumers from traditional banking services to fintech options. Relevance: Understanding these drivers is crucial as it can inform both fintech firms and traditional banks on areas to focus on to attract and retain customers. Furthermore, it provides valuable insights for policymakers as they seek to create an enabling environment that fosters fintech growth and improves financial inclusion.

This comprehensive approach allows for a multifaceted exploration of the impact of consumer fintech in Egypt, providing insights that are vital for stakeholders in the financial sector.

This study aims to fill a literature gap in existing fintech research by specifically examining the viewpoints and encounters of consumers. Earlier studies (see Chapter 2) have mostly focused on the technological and business-related aspects of fintech, but there is a lack of comprehensive understanding regarding the perceptions and interactions of end-users, particularly in Egypt (Rezk & Halim, 2022). Furthermore, the study seeks to establish a connection between market risk, fintech development, and user experience by comparing consumer views with expert viewpoints. This approach attempts to provide a comprehensive perspective on the fintech sector, minimizing any gaps or inaccuracies. The study aims to understand the benefits and future potential of fintech in the Egyptian market by analyzing citizens' experiences and expert perspectives. This approach seeks to uncover the real value and societal perception of fintech, alongside assessing its opportunities and challenges ahead.

The research findings are of important policy-relevance, especially in the areas of financial regulation and the transformation of traditional banking. In order to stay competitive, traditional banks must innovate and adapt as fintech continues to evolve. The objective of this study is to pinpoint specific areas that require modernization in traditional banking practices and offer practical ideas and policy suggestions for enhancement. Furthermore, the research will provide input for regulatory and policy frameworks, ensuring that they create a favorable environment for the expansion of fintech while also protecting consumer interests and maintaining financial stability. This is in line with the objective of advancing financial inclusion, particularly for marginalized communities, and facilitates the establishment of a more inclusive, adaptable, and sustainable financial system.

1.4.3 Thesis Outline

In addition to the introduction, the thesis is divided into six chapters:

Chapter 2 - Literature Review: This chapter reviews existing literature on the evolution of FinTech services, examining factors from the 2008 financial crisis to COVID-19 pandemic, growth catalysts for FinTech startups, regulatory challenges, and the impact of FinTech on consumer financing. It also explores FinTech's role in transforming finance in Egypt and identifies gaps in current research.

Chapter 3 - Egyptian Policy Context for FinTech: This chapter delves into the policy landscape of FinTech in Egypt, discussing interest rate policies, debt-burden and credit policies, regulatory frameworks, Egypt's ICT 2030 Strategy, and the IMF-backed economic reform program. It also examines the evolving investment landscape and the success of FinTech startups in Egypt.

Chapter 4 - Research Methodology: This chapter outlines the research methodology, including the rationale, data collection methods (qualitative and quantitative), data analysis, limitations of the study, and ethical considerations involved in the research process.

Chapter 5 - Conceptual Framework: This chapter presents the conceptual framework of the study, detailing factors influencing consumer preferences, mediating variables, control variables, and the expected outcomes of the research.

Chapter 6 - Findings & Discussion: This chapter discusses the findings from quantitative surveys and qualitative expert interviews, exploring the transformation of Egypt's financial landscape, navigating policy and practical challenges in the FinTech ecosystem, and policy-driven approaches in shaping the future of the market.

Chapter 7 - Conclusion: The final chapter concludes the thesis, summarizing the findings and offering policy recommendations based on the research.

Chapter 2: Literature Review

This chapter provides a comprehensive analysis of the growth of Fintech and its impact on banking and financial behaviors, with a particular focus on the Egyptian market and its interactions with global dynamics. This analysis explores the progression of fintech services, from the inception of credit cards and ATMs to the modern era of neobanks—digital-only banks without traditional physical branch networks, offering streamlined, customer-centric financial services—and decentralized finance, which leverages blockchain technology to offer financial instruments without relying on intermediaries. The topic has also been expanded to involve an analysis of the COVID-19 pandemic and the 2008 financial crisis as significant factors that propelled the growth of Fintech. This highlights the influence of Fintech on transforming consumer financial behavior and traditional banking models. The chapter then turns to examine several developing markets, providing a comparative analysis of how Fintech acceptance has been impacted by demography, technology breakthroughs, and strategic partnerships. Next, the chapter looks at the economic foundations of Fintech firms and the role venture capital plays in supporting them, analyzing the ways in which these factors interact in different settings to support the sector's expansion. Subsequently, an examination of the policy changes and regulatory challenges arising from Fintech's rapid growth is presented, underscoring the necessity of flexible and dynamic regulatory structures. The last section shifts to the particular context of Egypt, where it discusses how Fintech innovations are changing the banking environment.

2.1 Evolution of Fintech Services

The development of Fintech services represents a considerable change in the global financial environment, altering the manner in which financial services are obtained and provided. This section explores the evolution of fintech, starting from its initial phases to the present era of startups. It incorporates information from several scholarly sources to offer a thorough summary of fintech's influence on banking, market dynamics, and regulatory obstacles.

2.1.1 Catalysts of Change: From the 2008 Financial Crisis to COVID-19

With the introduction of credit cards and ATMs, fintech's journey began, paving the way for the digital revolution in finance. This initial stage established the foundation for internet banking and the rise of fintech firms, particularly in the aftermath of the 2008 financial crisis (Barroso & Laborda, 2022). The crisis served as a catalyst for the rise of fintech, resulting in advancements in financing, asset management, and payment processes (Basdekis et al., 2022). Fintech has appeared as a substitute for conventional banking, with a specific emphasis on digital platforms and cutting-edge technology (Barroso & Laborda, 2022). Darolles (2016) highlights that this crisis resulted in a significant decline in trust in conventional banking institutions, which in turn provided an ideal environment for the rise of Fintech businesses. These emerging businesses took advantage of the growing technological knowledge and evolving needs of customers by providing financial services that are more efficient and cost-effective (Darolles, 2016). The appeal of Fintech arises not alone from its innovative approach but also from its capacity to offer inexpensive solutions. Wang, Xiuping, and Zhang (2021) argue that the emergence of Fintech has allowed commercial banks to boost their profitability and innovation, while also enhancing their risk control procedures. According to Basdekis et al. (2022), there was a noticeable surge in the focus on regulatory technology, or RegTech, during this time frame in order to manage heightened risks and comply with regulations. This advancement holds great importance within the banking industry's requirement for higher availability and adaptability in financial services.

Following the crisis, there was an emergence of neobanks and decentralized finance (DeFi). Neobanks provide banking services without physical branches, using digital platforms, with the aim of serving consumers who have limited access to financial services. On the other hand, DeFi, which relies on blockchain technology, offers novel investment prospects (Abad et al., 2022). Using their advanced technical capabilities and customer contacts, large technology companies started to venture into the banking industry. This transition marked a substantial transformation in the business, as these companies entered into competition with conventional financial institutions (Bilotta & Romano, 2023). According to Diakonova and Drofa (2019), Fintech companies have successfully improved the accessibility and user-friendliness of financial services, targeting a demographic that was previously neglected by conventional financial institutions. The advent of Fintech has brought about a major change in the banking industry, resulting in a reconfiguration of how financial services are provided. This transformation has brought financial services more in line with the current demands and preferences of consumers and businesses (Diakonova & Drofa, 2019). This was further expedited by the COVID-19 pandemic which further accelerated the adoption of digital technology in the finance industry decreasing dependency on traditional bank branches and encouraging more dynamic, flexible banking models (Basdekis et al., 2022). Fintech enterprises, such as neobanks and DeFi platforms, possess distinct attributes that introduce fresh vulnerabilities and financial stability concerns. Consequently, it has become imperative to establish resilient regulatory frameworks to address these difficulties (Abad et al., 2022).

2.1.2 Catalysts for Fintech Startup Growth: Economic Foundations and Venture Capital

The relationship between developed economies and the availability of venture capital in promoting the establishment of Fintech companies has drawn considerable scholarly attention in the emerging field of financial technology (Fintech). This portion of the literature review examines the combined impact of these factors on the Fintech industry in different nations.

Haddad and Hornuf (2016) present a groundbreaking study that covered 64 countries including the United States which has the largest fintech market, followed by the United Kingdom, Canada, India, and Germany. Their emphasis on how the rise of Fintech firms was particularly noticeable in nations with strong economies and readily available venture funding. Their research highlights the significance of a stable economic environment and the readiness of investment funds in fostering the growth of the Fintech ecosystem. They also emphasize the beneficial influence of technological infrastructure, such as robust internet servers and mobile telephone subscriptions, on the advancement of Fintech (Haddad & Hornuf, 2016). In another study by Kolokas et al. (2020) investigate the impact of venture capital and credit markets in 53 countries on the development of Fintech firms. According to Kolokas et al. (2020), venture capital markets have a substantial impact on Fintech entrepreneurship, especially in nations where there is a larger number of Fintech businesses.

Berman et al. (2021) explicitly examine the influence of Fintech innovation in the United States. It is noted that the use of advanced technology in Fintech has significantly boosted entrepreneurial activities in the financial planning business. Fintech advances empower startups and smaller enterprises, increasing competitive pressure on larger financial institutions. This tendency is reinforced in nations with strong technology infrastructures (Berman et al., 2021).

These studies suggest that Fintech businesses thrive in countries with advanced economies and a robust venture capital industry. The interdependent connection between economic stability, the availability of cash, and technology infrastructure offers an ideal setting for cultivating innovation and entrepreneurship in the Fintech industry.

2.1.3 Regulatory Challenges and Policy Changes

Rapid advancements in financial technology (FinTech) have created special regulatory issues and prompted a range of legislative responses worldwide. This section of the literature review examines the regulatory obstacles encountered by FinTech companies as reported in scholarship and the diverse policy modifications witnessed in various global economies.

Regulatory sandboxes are controlled environments allowing firms to test innovative products or services with reduced regulatory constraints, facilitating innovation while maintaining regulatory oversight (Knight & Mitchell, 2020). They can come in as a means to address the challenges associated with FinTech regulation. Sandboxes are meant to function as real-life platforms for FinTech companies to experiment with their products and services in a regulated environment, reducing conflicts between new financial services and established regulatory frameworks (Ahern, 2020). This method has been used in numerous developed nations such as Australia, Canada, Singapore, the United Kingdom, and the United States, as well as in the European Union and developing countries like India, Indonesia, Malaysia, Mauritius, and Thailand. As Bromberg, Godwin, and Ramsay (2017) have observed, this transition is indicative of a worldwide pattern towards regulatory practices that are adaptable and dynamic to innovation rather than the traditional regulatory approaches.

Moreover, the rise of FinTech has called for a similar advancement in regulatory technology (RegTech), which refers to the use of information technology to enhance regulatory processes through the automation of compliance and reporting for financial institutions (Firmansyah & Arman, 2022). A reason why this came to light is how the FinTech sector is marked by its vast increase in startups and new players, which is posing new issues for regulators (Arner, Barberis, & Buckley, 2017).

It's also worth noting how the emergence of FinTech presents significant challenges for worldwide financial regulation. As further explained by Yadav (2020), the increase of technological advances might in return, increase the risk of systematic issues, loss of data, unconsented surveillance, or problematic default and delinquency rates. In response to the rapid growth of digital financial services in China, Zhou, Arner, and Buckley (2018) examine the necessity of a strong regulatory framework to tackle concerns about consumer data protection and the stability of financial institutions (Zhou, Arner, & Buckley, 2018). This results in a necessity to explore simple, unbiased standards that are able to create a harmonized approach to policy and regulation (Yadav, 2020).

For instance, emerging economies, like Vietnam, necessitate carefully designed regulatory frameworks to efficiently monitor the development of fintech and ensure its sustainable integration into the financial sector (Nguyen & Dang, 2022). Establishing robust regulatory frameworks is essential for efficiently overseeing the expansion of FinTech and ensuring its long-term integration into the financial industry. This is fundamental for preserving financial stability and protecting consumer interests (Nguyen & Dang, 2022). The challenges of overseeing a rapidly expanding sector that lacks legislation in place could jeopardize global financial stability (Alshaleel & Hoekstra, 2020).

One notable transformation taking place in the sector is the increasing dependence on emerging technologies such as artificial intelligence and big data, new business models like ICO (a fundraising mechanism similar to an Initial Public Offering (IPO) but specifically for cryptocurrencies) and P2P lending (a method of debt financing that enables individuals to borrow and lend money without using an official financial institution as an intermediary) are leading to a restructuring of the financial industry (Ofir & Sadeh, 2020). This shared impact requires the reassessment of current regulations and the creation of alternative regulatory approaches and tactics (Ofir & Sadeh, 2020). A good example of why regulatory changes may be required due to technological advancements is the incorporation of AI, machine learning, and blockchain in FinTech, which improves banking services but also poses risks such as data security, fraud, and heightened reliance on technological systems. If not properly secured, these technologies can introduce vulnerabilities into financial systems (Varma et al., 2022). Another example is the potential disruption of traditional banking systems caused by the transition towards a more digital financial industry. This move poses problems in terms of modifying existing systems and business models to accommodate new technology, a shift that may also have an effect on employment within the financial sector, necessitating the acquisition of new skills and training for workers (Lee & Shin, 2018).

2.1.4 Trends in Fintech Adoption – Developing Countries

The global adoption of Fintech demonstrates a varied combination of advancements and obstacles that highlight the sector's dynamic growth.

The Fintech adoption rate in India is remarkably high at 87%, surpassing the global average. The spike in growth can be mostly ascribed to the government's aggressive measures and the smart collaborations between conventional financial institutions and Fintech companies. These partnerships seek to completely revamp digital banking and payment systems and provide financial services to marginalized and low-income groups, hence improving financial inclusion

(Das & Das, 2020; Frost, 2020; Bhasin, N., & Rajesh, A., 2021; Raj & Upadhyay, 2020). The utilization of technology by non-banking financial organizations (NBFCs) to fulfill the financial requirements of individuals and businesses demonstrates the changing customer behavior towards Fintech solutions (J. & Sreepal, 2020). Nevertheless, there are ongoing issues related to security concerns and system reliability that require enhancements in service capacity to meet the different wants of consumers (Baporikar, N., 2021).

Sub-Saharan Africa, as well as other regions such as Indonesia, and Bangladesh exemplify the diverse priorities and results of Fintech implementation. Fintech in Sub-Saharan Africa largely promotes financial inclusion by using mobile money services, which have a significant influence on small-scale farming by facilitating access to finance and insurance (Mapanje et al., 2023). Nevertheless, the region has challenges in terms of inadequate infrastructure, regulatory obstacles, and the necessity for educating consumers about digital financial services. The Fintech industry in Indonesia has played a crucial role in promoting economic resilience during the COVID-19 epidemic, particularly through the use of digital payments (Candy et al., 2022). Furthermore, Bangladesh's adoption of mobile money systems and internet banking exemplifies the capacity of Fintech to enhance the overall well-being of the nation, despite encountering regulatory and cybersecurity obstacles (Ahmed & Hasan, 2021).

2.2 Fintech and Consumer Financing

The influence of fintech on consumer finance has been extensive and revolutionary. Fintech has fundamentally transformed the global financial environment by promoting financial inclusion, revolutionizing banking practices, challenging established financial institutions, and prompting regulatory reforms (Vergara & Agudo, 2021) The ongoing development of this technology holds the potential for more advancements and possibilities. However, it is crucial to exercise caution in managing and regulating it to maintain its favorable effects (Asif et al., 2023; Alnsour, 2022).

2.2.1 Impact on the Banking Sector

The incorporation of financial technology (fintech) with consumer financing has significantly revolutionized the banking and financial sector on a global scale. This has allowed individuals and small enterprises that were previously excluded to now have access to financial services (Alnsour, 2022). According to Asif et al. (2023), fintech's expansion in India has been essential in supporting government efforts to extend financial services to underbanked populations, thereby contributing significantly to both economic development and poverty eradication.

The influence of fintech on banking practices is diverse and complex. For instance, the banking sector in Greece has experienced substantial transformations as a result of technical improvements facilitated by fintech (Basdekis et al., 2022). These enhancements entail the creation of financial models that are more adaptable and responsive, particularly in response to the COVID-19 pandemic, which expedited the integration of digital technology in the banking industry (Basdekis et al., 2022). Simultaneously, the United Arab Emirates has observed a favorable impact on the competitiveness and performance of the banking sector due to the use of fintech. These outcomes have been observed as a result of greater profitability, advanced financial innovation, enhanced risk control, and the development of customer-centric business models (Dwivedi et al., 2021).

A more specific example of the notable impact of FinTech can be observed in its role in facilitating the supply of credit to small and medium firms (SMEs), which is particularly evident in the Chinese banking industry. According to Sheng (2020), FinTech has facilitated the ability of large banks, rather than smaller ones, to provide loans to small and medium-sized enterprises (SMEs). Major financial institutions often possess more funds to allocate towards FinTech solutions, including advanced data analytics and risk evaluation tools. These technologies help them evaluate SMEs' creditworthiness more accurately because, historically, they might not have had the comprehensive financial records needed by traditional banking requirements (Huang et al., 2020). Moreover, FinTech platforms frequently simplify the loan application procedure, enhancing its efficiency and reducing costs for both financial institutions and borrowers (Beaumont et al., 2022). This highlights the important role of technological advances in facilitating financial access to a wider range of people.

That being said, it's easy to note how the relationship between banks and FinTech startups is intricate, marked by a combination of competition and cooperation. According to Navaretti et al., (2018), this situation might be described as a cooperative competition, in which banks are forced to adjust and plan their actions in reaction to the new methods brought in by FinTech enterprises. Banks could make significant investments in technology, such as purchasing software and FinTech companies themselves, to ensure their position in the digital era (Navaretti et al., 2018). This is further highlighted by Lestari and Rahmanto (2021), who demonstrate, through a qualitative study, a symbiotic relationship between traditional banking and FinTech innovations by describing how banks have developed diverse strategies including investing in software, hardware or fintech companies to thrive in the midst of the FinTech revolution. Simultaneously, FinTech's innovative technical solutions have introduced both supplementary and alternative services to conventional banking services, as outlined by Campino, Brochado, and Rosa (2020). This has compelled traditional financial institutions to engage in innovation and revamp their old models through means such as developing their own digital solutions (app, mobile wallets, etc.)

and developing customer-oriented solutions (simpler money transfer and payment systems) in order to maintain competitiveness in a progressively digital economy (Campino, Brochado, & Rosa, 2020).

2.2.2 FinTech Firms and Scale: Impact on Consumers and Banking

More recently, BigTech corporations have succeeded in entering the FinTech industry by utilizing their vast data and client connections from their primary operations. According to Tanda and Schena (2019), these companies—mostly in the US and China—are providing a wider variety of financial goods, such as wealth management, lending, and payment services. This expansion allows BigTech to meet a wide range of customer needs, leveraging their significant market position to strengthen their main business and broaden their range of services. Moreover, King (2019) highlights the immense difficulty presented by Fintechs like China Ant Financial and WePay, as well as BigTech corporations like Amazon, Apple, Facebook, and Google. These organizations utilize extensive information on client transactions and behaviors within their systems to redefine financial services, ultimately enhancing financial inclusion. Although these companies do not aim to go up against the banks, their data-driven strategy provides them with a significant competitive advantage, enabling them to effectively challenge conventional financial institutions (King, 2019). The increasing reliance on data-driven finance highlights the necessity for flexible regulatory measures and a reassessment of conventional banking models in response to the expanding influence of BigTech (Frost et al., 2019).

Conversely, small-scale FinTech firms focus mostly on specific markets and specialized services, addressing the areas that larger financial institutions overlook and competing with them in particular product domains such as lending to small businesses. However, they do not necessarily replace traditional banking operations, as Stulz (2019) has argued. According to

Haddad and Hornuf (2016), these firms flourish in economically advanced environments where venture capital is readily accessible. That being said, they have a crucial role in encouraging entrepreneurial entry into the financial industry, notably strengthening smaller enterprises and startups, while imposing competitive pressure on larger traditional financial institutions, as Berman, Cano-Kollmann, and Mudambi (2021) emphasize. Moreover, Abbasi et al. (2021) and Sheng (2020) provide evidence that FinTechs have a beneficial effect on the operational effectiveness of Small and Medium Enterprises (SMEs) and aid in the offering of credit. This highlights the crucial importance of FinTech firms in improving operational efficiency beyond the financial sector, leading to a shift towards more flexible and creative financial services, and emphasizing their significance in the changing face of the financial business.

2.2.3 Risks Associated with the Borrowing Caps

In the rapidly growing domain of consumer lending, the lack of borrowing limits poses a notable hazard, mainly in terms of borrowers accumulating unmanageable debts. Byanjankar, Heikkilä, and Mezei (2015) highlight the significant likelihood of investment failure in peer-to-peer lending as a result of lack of information transparency and the absence of collateral for loans, which is further exacerbated by the absence of limits on borrowing. This scenario may result in consumers taking commitments that are inappropriate to their income, dedicating a significant amount of their wages to debt repayment, and having limited funds available for other expenses. The study conducted by Lin, Li, and Zheng (2017) emphasizes that various factors, including gender, age, marital status, and debt-to-income ratio, have a significant impact on loan defaults in peer-to-peer lending. This suggests that without borrowing caps, there is a potential for a harmful cycle of debt (Byanjankar, Heikkilä, & Mezei, 2015); (Lin, Li, & Zheng, 2017).

The absence of borrowing limits in peer-to-peer (P2P) lending highlights the need for well-balanced regulatory frameworks and ethical lending practices. In their study, Hu, Liu, He, and Ma (2019) discovered that investors participating in P2P platforms may lack a complete understanding of the connection between borrower data and the risk of default. This highlights the necessity of regulatory supervision to establish borrowing limits and safeguard borrowers from excessive debt. Gao and Wang (2021) discuss the importance of innovative techniques for forecasting default risk in P2P lending, highlighting the significance of efficient risk management tools to guarantee the sector's long-term growth.

2.2.4 The Consumer Experience - Global Insights

Fintech has caused a fundamental change in the way financial services are provided and utilized. It has improved accessibility for a wider range of customers by simplifying access to financial services. Fintech has played a crucial role in promoting financial inclusion in developing nations by facilitating services such as microfinancing, peer-to-peer lending, and affordable payment options (Ehrentraud et al., 2020). The emergence of mobile banking and payment applications has simplified the management of individuals' financial affairs, enabling them to conduct transactions and obtain credit more conveniently. Consequently, this has contributed to the promotion of economic empowerment and expansion (Feyen et al., 2021).

That being said, the impact of fintech on consumer experience and loyalty intents is apparent worldwide, as demonstrated by studies such as one conducted on Jordanian Islamic Banks (Feyen et al., 2021). The study shows that fintech significantly influences loyalty among Islamic banking consumers, suggesting that enhanced fintech services can boost customer loyalty. Furthermore, the analysis of fintech's influence in India enhances the global viewpoint, particularly in terms of its substantial contribution to financial inclusion. This corresponds with the government's endeavours to extend financial services to sectors of the population that have limited access to banking facilities (Asif et al., 2023).

For instance, "FinTech's Rapid Growth and Its Effect on the Banking Sector" by Basdekis et al. (2022) investigates the rise and expansion of fintech, advancements in technology, and the influence of the COVID-19 pandemic on the banking industry. The study underscores the importance of focusing on the next generation, particularly Millennials, as key to the future of banking, necessitating strategic investments in technology and knowledge (Basdekis et al., 2022).

Similarly, the study "Role of FinTech Adoption for Competitiveness and Performance of the Bank" by Dwivedi et al. (2021) examines the impact of fintech adoption on the competitiveness and performance of banks, specifically in the United Arab Emirates (UAE). It concluded that the UAE's banking sector has the potential for further growth and enhanced competitiveness through the gradual and improved implementation of technology and innovative strategies.

2.2.5 The Consumer Experience - Assessment KPIs

Expanding on the understanding of FinTech's revolutionary influence on the consumer experience, as highlighted in the preceding part, it is crucial to further explore how this technical advancement converts into measured outcomes for banks and financial institutions. The next section examines Key Performance Indicators (KPIs) such as client satisfaction, trust and security, and ease of use, in order to quantitatively evaluate the impact of FinTech on the banking industry.

Client satisfaction is a crucial KPI in banking since it has a direct relationship with client loyalty and the ability to retain customers. The model developed by Bitkina, Park, and Kim (2022) is essential in this context because it provides a comprehensive perspective on customer satisfaction across different financial platforms, facilitating a more profound comprehension of client preferences and behaviors. In the same vein, Diep & Cảnh (2022) examine the levels of satisfaction among users of P2P FinTech, highlighting the transformative impact of novel financial products on customer expectations. In their assessment of the effects of various banking interfaces—such as automated vs human tellers—on customer satisfaction, Moutinho & Smith (2000) provide a valuable contribution and emphasize the significance of high-quality client interactions in banking services. These studies emphasize the importance of banks consistently adapting and customizing their services to improve customer satisfaction (Bitkina, Park, & Kim, 2022;Diep & Cảnh, 2022; Moutinho & Smith, 2000).

Trust and security are essential KPIs in the banking sector, having a major impact on client tendency to interact with a financial organization. Campanella, Serino, & Crisci (2022) emphasize the significance of combining technology excellence with an environmentally friendly reputation to increase trust in FinTech providers. This is a crucial element for maintaining client loyalty and retention. Hoang et al. (2021) establish the significant influence of trust on the acceptance of FinTech services, highlighting its relevance in customer decision-making procedures. Chu, Lee, & Chao (2012) highlight the significance of trust as a mediator in attaining client loyalty in e-banking, demonstrating that ensuring consumer trust is crucial for the success of digital banking platforms. These investigations confirm that the absence of trust and guaranteed security exposes banks and FinTech services to the possibility of losing client confidence and business (Campanella, Serino, & Crisci, 2022; Hoang et al., 2021; Chu, Lee, & Chao, 2012).

The degree of ease of use is a crucial KPI in the banking sector, especially when it comes to digital banking services. This factor has a direct influence on client acceptance and ongoing usage. Reguera-Alvarado, Blanco-Oliver, and Martín-Ruiz (2016) demonstrate the impact of user-friendliness on the quality of customer relationships in online banking. They emphasize its importance in customer satisfaction and retention tactics. According to Yap, Ramayah, & Shahidan (2012), the ease of use of banking interfaces has a beneficial impact on customer satisfaction, trust, and loyalty. Ma, Zhao, and Li (2013) highlight the significance of ease of use in assessing customer satisfaction in online banking. They assert that uncomplicated and instinctive banking interfaces are crucial for recruiting and retaining clients. These insights illustrate that the level of user-friendliness is not merely a matter of convenience, but a vital element in establishing a devoted client base within the banking industry (Ma, Zhao, & Li, 2013).

2.3 Intersecting Worlds: Egypt's Fintech Evolution and Global Dynamics

The fintech industry in Egypt is undergoing significant expansion, propelled by advancements in mobile banking, digital wallets, and agent banking. For the unbanked and underbanked in particular, this expansion is essential to improving financial inclusion (Alhosseiny, 2023). The incorporation of technology such as blockchain and AI is transforming financial transactions and services, a phenomenon that is being observed worldwide (United Nations Economist Network, 2023).

The thorough examination of the literature uncovers a subtle connection between Egypt's financial sector, specifically its fintech landscape, and worldwide patterns in fintech advancement. This section compiles information from several sources to create a comprehensive knowledge of how local and global fintech dynamics are intertwined.

2.3.1 The Effect of Fintech Adoption on Productivity and Financial Inclusion in Egypt

The swift advancement of Fintech in Egypt has played a crucial role in the country's economic transformation. This development is closely connected to the wider digital change that Egypt is currently experiencing, resulting in substantial effects on productivity and financial inclusion.

The notion of financial inclusion has gained major importance in Egypt's economic transition, acting as a crucial instrument for promoting economic expansion, sustainable progress, and comprehensive development of the financial sector. Research conducted by Wafik and Omar (2022) underscores the favorable influence of financial inclusion on Egypt's economic expansion, emphasizing the importance of ensuring widespread availability of financial services across all societal groups. Financial inclusion has a crucial role in promoting economic development by facilitating broader involvement in the financial system, which in turn promotes equitable economic expansion (Wafik & Omar, 2022). In a similar vein, Saman and Ismael (2023) examined the intersection of financial inclusion and environmental sustainability. They discovered that endeavors focused on enhancing digital financial inclusion can effectively contribute to the enduring environmental sustainability, which is a vital component of Egypt's growth plan. The aforementioned research demonstrates the diverse effects of financial inclusion in Egypt, which go beyond simple financial accessibility and embrace larger economic and environmental objectives (Wafik & Omar, 2022; Saman & Ismael, 2023).

Understanding the future trajectory of Egypt's financial inclusion environment requires a vital examination of the problems and possibilities it faces. Rezk and Halim's research (2022) explores both the opportunities and challenges that exist in the finance sector, with a focus on integrating innovative financial solutions to improve inclusion. Their research indicates that although there are promising opportunities for expanding financial inclusion in Egypt, there are also substantial obstacles that must be overcome, such as legal impediments, technological implementation, and reaching the population without access to banking services. Expanding financial inclusion and supporting Egypt's broader economic objectives requires the integration of creative solutions, regulatory reforms, and infrastructural development. The aforementioned analysis offers a thorough comprehension of the financial inclusion situation in Egypt, emphasizing its crucial contribution to the advancement of the country's economy and sustainable growth (Rezk & Halim, 2022).

The relationship between monetary policy and financial inclusion is thoroughly examined by Maher (2022), with particular attention to Egypt. The study highlights the significant influence of fintech adoption on financial systems. The rapid advancement of fintech and its impact on traditional banking models, facilitating greater accessibility to financial services, is evident in both local and international contexts. Maher (2022) explores the influence of financial inclusion on monetary policy in their study titled "Financial Inclusion and Monetary Policy - Investigating the Relationship between Financial Inclusion and Monetary Policy: The Case of Egypt." The paper emphasizes the crucial significance of financial inclusion in promoting economic development, alleviating poverty, and improving the efficacy of monetary policy in Egypt. They emphasize the vital necessity of incorporating Fintech into conventional banking institutions for the purpose of fostering economic growth and stability. Additionally, according to El Masry (2023), Fintech has a significant impact on reducing gaps in communication and barriers in the market, resulting in lower prices for transactions and improved suitability for users. This has a significant effect on promoting financial inclusion, which is crucial for reducing poverty and fostering economic growth in emerging economies such as Egypt. Fintech firms are entering the voids created by conventional financial institutions, providing reduced expenses and enhanced risk control (Pascual & Natalucci, 2022).

Abou Elwafa (2023) describes how the dynamic interaction between Fintech businesses and traditional banks in Egypt is changing the financial inclusion landscape. Fintech companies, with their rapid adoption, cost-efficient offerings, and quicker service delivery, are contributing to an increase of interest and number of customers. As a result, banks have been intrigued to either purchase or form partnerships with Fintech companies. Kamel's (2021) analysis emphasizes the impact of Fintech's development on traditional banking models in Egypt. Notwithstanding possible obstacles such as legislative barriers, a large proportion of the population without access to banking services, and limitations in technology, the Fintech industry in Egypt presents substantial prospects for advancement and expansion in the financial sector through an increased access to the underserved and underserved populations.

2.3.2 Transforming Finance: Fintech Innovation and Its Impact on Egypt's Banking Landscape

Advancements in mobile banking, digital wallets, and consumer financing have driven a significant expansion of the fintech sector in Egypt. The expansion is crucial for improving financial inclusion, especially for individuals who do not have access to banking services or have limited access (Alhosseiny, 2023). The advancement of financial technology (fintech) is causing significant changes to existing banking models by providing easier access to financial services and questioning established banking practices.

Recent studies offer useful insights into the advancements and challenges facing Egypt's banking landscape in the light of fintech's impact. El-Hadidi (2022) examines the integration of fintech and microfinance, with a specific focus on Egypt's efforts to fight poverty. With its thorough analysis of the Egyptian context, the research sheds insight on how fintech may transform the banking landscape with regard to microfinancing and promote socioeconomic advancement. This approach is crucial in comprehending the broader implications of fintech in boosting banking access and services for poor people in Egypt, therefore harmonizing with global poverty reduction goals (El-Hadidi, 2022).

Furthermore, the peculiar difficulties encountered by Egyptian banks when integrating fintech were explored in the study carried out by Abd El Baset (2021). This report emphasizes the discrepancy in the adoption of fintech between public and private banks in Egypt, specifically identifying regulatory settings, technological infrastructure, and human resources as significant areas of concern. These insights are crucial for comprehending the obstacles that must be overcome to achieve successful integration of fintech in Egyptian banking processes. It is essential to tackle these obstacles in order to fully exploit the transformative power of fintech in transforming banking services and operations in Egypt. This would ultimately contribute to the financial stability and growth of the country (عبد الباسط, 2021).

Numerous changes, many of which seemed impossible just ten years ago, are being driven by digital technology across almost all aspects of the global financial industry (Huaa & Huang, 2020). The Central Bank of Egypt (CBE) is actively tackling the issue of low financial inclusion in Egypt, which is among the lowest in the MENAP area. This is being done through the implementation of digital banking approvals, interbank government prepaid cards, and SME financing programmes. These endeavors are a component of a more extensive approach aimed at enhancing overall financial stability and productivity (Maher, 2022). The expansion of fintech in Egypt, demonstrated through inventive technologies and unique business models, not only corresponds with worldwide patterns but also provides distinctive perspectives on how fintech can be utilized to improve financial inclusion, transform conventional banking, and contribute to overall economic advancement (Iskander, 2023).

2.3.3 Fintech Adoption and Financial Behaviors in Egypt

The evolution of Fintech in Egypt presents an intriguing example of how technology is being incorporated into financial services on a worldwide scale. This occurrence is a component of a broader digital revolution that Egypt is currently experiencing, as evidenced by multiple aspects of its socio-economic structure.

The acceptance and effective usage of Fintech solutions in Egypt are greatly influenced by social norms and attitudes. The societal perception of these technologies plays a vital role in influencing individuals' intentions and behaviors towards Fintech services. According to El Masry's (2023) journal article "The Wallet of Digital Citizens," various elements, including behavioral, institutional, and social aspects, have a substantial influence on the adoption of digital payments in the public sector. This underscores the significance of trust and intention while utilizing Fintech services, specifically in regards to serving underserved populations and improving the effectiveness of the financial industry. In addition, Hajar Alhosseiny (2023), emphasizes the significance of social influence and behavioral impact in the acceptance of Fintech in Egypt. This has resulted in the transformation of conventional banking practices and customer behaviors, ultimately giving rise to novel financial service solutions.

The dynamic Fintech environment in Egypt, marked by the integration of contemporary internet-based technology with conventional financial services, has a substantial impact on consumer behavior. Abou Elwafa (2023) explores the process of transformation, specifically examining the impact of digitalization and digitization on consumer engagement with financial activities. This integration of technology not only promotes the development of new ideas and effectiveness, but also incorporates financial technology into the daily economic actions of consumers. It results in reduced transaction expenses and an improved service quality (Abou Elwafa, 2023). As a result, there is an increasing inclination among the general population towards digital technologies that offer customized services that can be accessed through mobile devices and internet platforms. This reflects a change in consumer behaviour towards digital financial solutions (Wang & Huang, 2023).

With a special emphasis on credit card usage in Egypt, Umuhoza et al. (2020) add to this conversation by examining customer behavior. The study presents a conceptual framework for comprehending the spending patterns of individuals who use credit cards, which are influenced by the dynamic developments in the Fintech and e-payment sectors. The study highlighted that consumer behavior towards credit card usage is multifaceted, impacted by personal factors such as needs and lifestyle which drive many consumers to utilize credit cards. This suggests that understanding consumer behavior is essential for creating financial products and services that are in line with the evolving demands and preferences of Egyptian customers (Umuhoza et al., 2020).

2.4 Research Gap

The current body of literature on fintech, although comprehensive in examining its technological progress, regulatory structures, and influence on financial inclusivity, notably falls short in two interconnected areas: understanding consumer viewpoints and accumulating qualitative perspectives from fintech professionals. This research includes both consumer views and expert perspectives from within the sector, which plays a pivotal role in driving fintech acceptance, innovation, and success.

Earlier research are presumably lacking a thorough examination of user attitudes and experiences. Gaining insight into consumer perceptions, which includes elements such as trust, satisfaction, perceived utility, and ease of use, is essential for influencing consumer behavior and encouraging the wider acceptance of fintech services.

At the same time, there is a notable shortage of qualitative research that includes comprehensive interviews with professionals in the fintech industry. The perspectives of professionals employed in fintech organizations are really useful for grasping the real-world challenges, emerging trends, and innovative resolutions within the sector. Qualitative research methods, such as interviews, have the potential to offer a comprehensive understanding of the functional, strategic, and regulatory dynamics inside the fintech business.

Conducting interviews as part of qualitative research can reveal subtle and intricate information about the fintech industry that quantitative statistics may fail to capture. It has the ability to disclose personal experiences, professional viewpoints, and insights into the practical aspects of incorporating fintech solutions on a daily basis. The insights are especially vital in areas such as Egypt, where the fintech ecosystem is rapidly developing and the professional experiences may provide distinct viewpoints compared to other regions.

Therefore, there is an evident need for comprehensive research that integrates a quantitative understanding of customer perspectives with qualitative interviews of fintech experts. This approach would not only address noteworthy gaps in the current body of knowledge but also yield a more comprehensive grasp of the fintech industry. Fintech startups, policymakers, and financial institutions would benefit greatly from this stretched study scope, which would provide a balanced perspective of the consumer market and the inner workings of the fintech industry.

Chapter 3: Egyptian Policy Context for Fintech

3.1 Fintech in Egypt: Policy Landscape and Implications for Growth

Egypt's policy environment has become more open to fintech innovation in recent years, which is indicative of a more comprehensive strategic response to both domestic fiscal requirements and global economic trends. With the help of digital transformation, economic stabilization policies, and regulatory reforms, the government is focusing its efforts on developing an environment that will support the rise of fintech companies. From determining interest rates to enabling the founding of new businesses, these regulations have a significant impact on the direction that the fintech industry takes.

3.1.1 Interest Rate Policies and Fintech Impact:

The Central Bank of Egypt (CBE) modifies its key policy rates in accordance to a range of economic issues, including devaluation of the currency and inflation (*Examining the Egyptian Economy | The American University in Cairo*, 2023). These interest rate changes have a significant impact on digital lending and savings platforms, which in turn shapes the fintech ecosystem. Increased borrowing expenses brought on by higher interest rates may affect the lending preferences and habits of consumers. decreased interest rates, on the other hand, might promote borrowing but also cut savings yields, which would impact fintech companies that provide savings products. Changes in interest rates and savings returns have a direct impact on consumer behavior and the demand for fintech services. This is because they influence the affordability and appeal of different financial products. To thrive in this ever-changing market and satisfy customers' demands, fintech companies must be quick to adapt to new monetary policies. (World Bank, 2023).

3.1.2 Debt-Burden and Credit Policies

The Central Bank of Egypt (CBE) is a key player in establishing policies concerning the internal debt burden ratio in Egypt. This ratio establishes the upper limit that an individual may borrow based on their income. Notably, the CBE has implemented regulations to govern consumer financing activities and mitigate credit risk. Among these is the following:

- **Raising Loan Installment Limits:** The borrowing cap on credit cards, personal loans, and loans for the purchase of personal vehicles was recently increased by the CBE from 35% to 50% of a client's monthly gross income. The cap on mortgage loans for individual homes is 40% of the monthly income. According to Ahram Online (2023), the CBE has made this policy adjustment in reaction to the improvement in economic indicators and increasing GDP.

The CBE's and the Egyptian government's policies, in particular, have a significant impact on digital lending platforms and fintech solutions that deal with credit and debt management, which in turn shapes the fintech industry. They guarantee responsible lending practices and financial stability by being in line with national budgetary objectives and consumer protection standards (Herrera & Youssef, 2013).

3.1.3 Regulatory Framework for Fintech Startups:

The adoption of Law No. 5 of 2022 has reasonably improved Egypt's regulatory environment for fintech businesses (Euromoney, 2023). The non-banking financial sector, which includes a broad variety of services like insurance, real estate financing, financial leasing, and consumer finance, is the particular focus of this law. The Egyptian Financial Regulatory Authority (FRA) has introduced Law No. 5 of 2022 and subsequent Decrees No. 139, 140, and 141, which came into force in July 2023, establishing a comprehensive regulatory framework for fintech in non-banking financial services. This legislation aimed to propel the digitization of Egypt's financial markets, facilitating the adoption and integration of fintech tools and channels by licensed companies, new entities seeking licensure, and outsourcing service providers (Clyde & Co, 2023; Baker McKenzie, 2023). The law notably recognizes 'click-to-accept' contracts, smart contracts, and the use of blockchain technology for e-registration and e-signatures, provided they meet the FRA's security standards (Citadel Law Africa, 2023).

Notably, fintech innovation is highly supported by the regulatory framework. Fintech growth is strongly supported by the Financial Regulatory Authority and the Central Bank of Egypt. This involves setting up regulatory environments, which let fintech companies test their innovative services and applications on actual users while staying under regulatory watch. Egypt's commitment to developing a strong and vibrant fintech environment, promoting innovation, and assisting in economic growth is demonstrated by this progressive approach to regulation (ICLG, 2023).

3.1.4 Egypt's ICT 2030 Strategy:

Building a "Digital Egypt" is the main goal of this plan, which is a part of Egypt's Vision 2030. As stated by the Ministry of Communications and Information Technology (n.d.), its objectives include expanding Egypt's ICT footprint globally and regionally, promoting digital inclusion, advancing the country's transition to a knowledge-based economy, building capacities, fostering innovation, combating corruption, ensuring cybersecurity, and encouraging more innovation. Egypt fosters a thriving environment for fintech innovation due to its emphasis on digital transformation, which includes investments in the ICT sector. This policy direction fosters a technologically advanced environment that is necessary for fintech enterprises to thrive by facilitating the development of digital infrastructure that is essential for fintech operations (U.S. Department of State, 2023).

3.1.5 IMF-Backed Economic Reform Programme - IMF's Extended Fund Facility

By obtaining a $3 billion loan under the IMF's Extended Fund Facility (EFF), the IMF-backed Economic Reform Programme in Egypt seeks to address a number of issues, including those resulting from the Russian-Ukrainian War. This program supports budget and balance of payments, catalyzes funding, maintains economic stability, addresses macroeconomic imbalances, and advances profound structural and governance changes. The reform also includes switching to a flexible exchange rate system, which should increase Egypt's competitiveness and draw in outside capital. Furthermore, the program helps the Central Bank of Egypt enhance the way the foreign exchange market operates and how monetary policy is communicated. The EFF seeks to limit state intervention, promote private sector growth, improve trade facilitation, and increase transparency in order to realize Egypt's growth potential through structural and governance changes (Ahram Online, 2023).

The fintech industry benefits greatly from the Economic Reform Programme in Egypt, which is supported by the IMF and creates an environment that is more stable, transparent, and efficient. Improved transparency—which includes clearer legal frameworks, publicly available government data, and strong accountability mechanisms creates the necessary trust that fintech businesses require. Adherence to international standards and simplified trade procedures lower operational costs and boost reputation on a global scale, which in turn attracts investment from around the world. These policies encourage financial inclusion by expanding fintech services to underprivileged groups and foster private sector growth, benefiting fintech startups and companies. All things considered, the program's emphasis on structural and governance improvements combined with advantageous monetary and economic policies sets Egypt's fintech industry up for expansion and innovation.

In sum, Egypt's policy climate in 2023 was potentially favorable to the development of fintech. Fiscal policy, debt management, regulatory changes, digital transformation projects, and economic reform initiatives all work together to construct an elaborate framework that supports fintech development and growth. The fintech industry is expected to gain a great deal from these policy directives as the government continues to manage economic issues. This is certainly helping Egypt achieve its wider economic goals and advance its financial sector.

3.1.6 Economic Challenges Impacting Fintech Growth in Egypt

Although Egypt's policy environment has become more favorable for fintech growth, it is important to consider the wider economic context in which these innovations are taking place. Egypt is currently facing an intricate economic environment, marked by numerous substantial obstacles that could potentially affect the expansion of the fintech industry.

To begin with, the country is dealing with a severe scarcity of dollar liquidity and extraordinary volatility in the dollar exchange rate, resulting in the currency's value virtually doubling the official bank rate on the parallel market. The intricacy of international and regional situations has contributed to this predicament affecting Egypt's economy (Al Arabiya News, 2024). Discussions with the International Monetary Fund (IMF) are currently taking place to secure a potential $3 billion loan and implement a comprehensive set of economic reforms, which may involve allowing the Egyptian pound to fluctuate in value. These debates emphasize the crucial importance of Egypt's financial stability and the possibility of another devaluation of the Egyptian pound (Al Arabiya News, 2024; Reuters, 2024).

Furthermore, Egypt commenced the year 2024 with significant surges in the costs of essential services, further exacerbating the economic burden on its citizens. The government's endeavors to stabilize the economy by renewing the IMF program are being undertaken in the face of problems such as the mounting foreign debt, which reached a staggering $164.7 billion as of June 2023, and the volatile currency rates. Egypt is currently facing the challenge of a decrease in sources of foreign currency, such as a notable loss in earnings from the Suez Canal and remittances from expatriates (TRENDS Mena, 2024).

To summarize, Egypt's fintech policy framework and programs such as the IMF-backed Economic Reform Programme create a favorable setting for the expansion of fintech companies. However, it is crucial to recognize the wider economic difficulties that exist. The confluence of currency depreciation, elevated inflation rates, escalating foreign debt, and economic deficits creates an intricate setting for the expansion of fintech. As the government works towards economic stabilization and reform, the fintech sector's potential to prosper will likely depend on the broader economic health of the country and the successful navigation of these obstacles.

3.2 Evolving Investment Landscape and International Growth

Through a variety of funding sources, government efforts, regional expansion, and international recognition, Egypt's fintech industry has demonstrated incredible endurance and growth as the following will describe.

3.2.1 Growth and Diversity in the Fintech Sector

The fintech ecosystem in Egypt has grown significantly in the last few years. Egypt has had a 5.5-fold rise in fintech companies and payment service providers (PSPs) over the previous five years, with 177 of them operating as of 2022. These organizations span 14 subsectors, illustrating the sector's diversity and invention. It is noteworthy that roughly 60% of fintech companies in the nation are involved in lending and alternative finance, payments and remittance, and business-to-business (B2B) marketplaces. Other segments that contribute to the diversity of the sector include data analytics and AI, open banking, healthtech and insurtech, and personal finance management (XPay, 2023; Fintechnews Middle East, 2023).

3.2.2 Investment Landscape Transformation

The financing environment for Egypt's fintech industry has seen a radical change, especially in 2022 when private equity investments surpassed venture capital and angel investments, currently accounting for 55% of the sector's funding (Fast Company Middle East, 2022). This shift represents a market that is maturing and a diversification of investment opportunities. Interestingly, private equity firms doubled previous investment estimates in the financial industry, investing a record $877 million across 76 projects, including fintech. Egypt continued to see robust investment inflows despite a global drop in startup funding, as seen by notable rounds such as MNT Halan's $400 million combination of loan and equity. These patterns demonstrate the industry's rapid development and rising investor confidence, solidifying Egypt's fintech scene as a major participant in both the African and international markets (TechCabal, 2023; African Private Capital Association, 2023).

3.2.3 Regional Expansion and Investor Interest

Due to these countries' huge consumer bases, Egyptian fintech companies are progressively growing into the region. Customers in the United Arab Emirates, Saudi Arabia, and Nigeria are served by approximately 30 Egyptian fintechs. Egypt's expanding importance in the fintech sector throughout the MENA region is demonstrated by this expansion, which is a reflection of strong regional ties (TechCabal, 2023). Egyptian fintechs have garnered international recognition for their creative solutions that tackle local financial inclusion issues by utilizing blockchain and

AI. Egypt's accomplishments establish it as a fintech hotspot in the area that can attract foreign investment and collaborations (World Finance Council, 2023).

3.2.4 Foreign Investment in Egypt's Fintech Sector

Despite a number of crises, such as economic difficulties and political unrest, Egypt's fintech industry has drawn a sizable amount of foreign direct investment (FDI). Fintech investments surged between 2017 and 2022, amounting to roughly USD 167 million in the first half of 2022 alone. This increase in investment highlights the sector's growing allure to foreign investors, as it comes from places including the Middle East, North Africa, the US, and China (Chambers and Partners, 2023).

3.3 Successful Fintech Startups

Several Egyptian fintech businesses have made significant progress, as shown by their ranking among the top 30 Fintech companies in 2023 by Forbes Middle East. Key players include:

1. **Fawry**: Leading e-payment platform Fawry was founded in 2008 and offers mobile top-ups and electronic bill payments. Fawry has a substantial impact on Egypt's digital payment environment; in 2022, it completed transactions totaling $6.8 billion, with over 280,000 agents and 49.4 million consumers.

2. **MNT-Halan**: MNT-Halan was established in 2018 to offer unbanked clients digital banking services, including as loans and consumer finance. It became one of the biggest in the MENA region, servicing millions of people and handling transactions valued at $1.8 billion in 2022, after obtaining over $200 million in investment.

3. **Paymob**: Since its launch in 2015, Paymob has expanded to support more than 170,000 companies and 18 million users of mobile wallets, demonstrating its significance in the digitalization of payments in Egypt and other countries.

4. **AMAN Holding**: AMAN Holding has been providing financial services and e-payments since 2015. It serves 40 million consumers each month and handled $1.5 billion in of transactions through its many offices and retail locations in 2022.

5. **valU**: valU is a buy now, pay later (BNPL) platform that was founded in 2017 and is a subsidiary of EFG Hermes Holding. It processes more than a million transactions in 2022 and provides flexible payment plans to a large number of Egyptian businesses and websites.

6. **MoneyFellows:** Launched in 2017, MoneyFellows is a digital platform that digitises money circles, also referred to as rotating savings and credit associations (ROSCA) or "Gameya" in Arab countries. In comparison to 2021, the total value of money circles that MoneyFellows digitized doubled. This notable expansion indicates how MoneyFellows' digital platform is becoming more and more widely used for facilitating money circles. Furthermore, the MoneyFellows app had 4.2 million downloads by the end of 2022, demonstrating a sizable user base.

7. **PaySky:** PaySky was established in 2017 and provides digital payment solutions to companies and financial institutions worldwide. Innovative products like the Yalla Card and Yalla Super app, which have millions of downloads and active users, have been introduced by the company.

8. **Thndr:** Thndr is a digital investment platform that lets users buy and sell a variety of financial assets including stocks. It was introduced in 2020. Through its platform, it claims a sizable portion of newly registered users on the regional Egyptian exchanges. Thndr accounted for 36% of all new registrations in the local Egyptian exchanges during 2021 (Khaleej Times, 2023).

The preceding sections provide an overview of Egypt's policy framework for fintech development and economic reform, which paves the way for a more in-depth quantitative and qualitative examination of the evolution of the fintech sector. This study will examine the quantifiable effects as well as the qualitative trends and underlying causes that are propelling the development of Egypt's fintech sector. This research has important policy implications, especially in light of Egypt's ambitious Vision 2030, which prioritizes financial inclusion as a major objective. By assisting in the creation of a more inclusive and sustainable financial environment in Egypt, the research's conclusions and insights will help realize this goal. In particular, as outlined below, the study will provide insightful data to regulators, financial institutions, and policymakers:

a. **Inform policymaking:** Understanding adoption trends might help governments improve financial inclusion by targeting fintech-savvy groups. For instance, if rural or low-income areas use specific fintech apps, governments may improve digital infrastructure or create better circumstances for fintech servicing these communities.

b. **Streamline regulations:** The study intends to offer an understanding of the challenges that are present to fintech startups. Regulators may use this data to simplify rules and foster an atmosphere that supports innovation in the fintech sector. This strategy maintains consumer protection and financial stability while encouraging healthy competition.

c. **Enhance financial institution offerings:** The research findings will be relevant to financial institutions, allowing them to gain a deeper understanding of consumer behavior and preferences. Financial institutions can tweak their products and enhance client experiences to stay competitive in the rapidly changing financial environment by recognizing the most valued aspects of fintech apps and comprehending how they vary from conventional banking services.

Through the integration of a thorough quantitative and qualitative analysis with the policy landscape, a more nuanced picture of the fintech sector's trajectory in Egypt may be obtained. This approach will not only draw attention to the immediate effects of particular policies, but it will also make clear the intricate interactions between market dynamics, regulatory frameworks, and technical developments that are propelling the growth of the fintech sector.

Chapter 4: Research Methodology

This chapter focuses on the research methodology used in this study. It employs a mixed-methods approach, incorporating both qualitative and quantitative methods. The aim is to analyze the impact of consumer fintech in Egypt on banking attitudes and actions over the past five years. The purpose of this approach is explained in this section, along with how standardized questionnaires were used to collect quantitative data and semi-structured interviews with fintech and banking professionals were used to gain qualitative insights. Along with outlining the data analysis methods used, this section additionally talks about the study's limitations and the ethical standards that were maintained over the whole research.

4.1 Study Rationale

This study utilized a mixed-methods approach, integrating both qualitative and quantitative research methods to provide a comprehensive analysis of the problem at hand (Neuman, 2014). This study utilizes a mixed-methods approach, combining qualitative and quantitative research methods, to conduct a thorough analysis of the research question: " **What are the advantages and disadvantages of fintech use for citizens in Egypt, and how can policy frameworks be reformed to enhance the benefits and mitigate the drawbacks**?"

The utilization of mixed methods research is especially beneficial in the present scenario as it enables an in-depth examination of the complex subject under study. As it allows for delving further into an area of study by integrating qualitative data (such as interviews and focus groups) with quantitative data (such surveys and financial indicators). This approach facilitates an in-depth understanding of how cultural norms, government laws, and market conditions in Egypt have impacted customer attitudes and behaviors towards fintech in the financial industry. In addition, mixed methods research promotes triangulation, hence improving the validity and dependability of the findings. Additionally, it enables the investigation of unanticipated factors that quantitative data alone may fail to capture, like regulatory issues and expert-view points thereby offering a comprehensive and nuanced perspective on the subject. This research technique offers the potential to provide practical and valuable information that can guide policy-makers, banks and fintech companies in Egypt in developing successful strategies to adjust to the changing consumer environment.

4.2 Qualitative Data

Bruce L. Berg (1988) demonstrated the value of qualitative research in comprehending social issues and human behavior. He emphasized the importance of qualitative approaches in obtaining detailed, extensive descriptions of events from the viewpoints of persons experiencing them. In this study, semi-structured interviews with industry experts in the fintech domain were used to gather qualitative data. This approach makes it easier to comprehend the consumer fintech environment in Egypt and how it differs from conventional banking. The selection of experts for interviews followed an approach that's aiming to include a wide range of perspectives. Experts were selected for this study based on their professional roles and expertise in the Egyptian fintech sector using a purposive sampling method. Those with a solid background in the field were identified during this first selection procedure. In order to expand the pool of participants and gather a broader range of insights, a snowball sampling technique was implemented. This entailed collecting recommendations These entailed collecting recommendations from the initial experts, enabling for the inclusion of other individuals deemed relevant and knowledgeable in the field of fintech in the Egyptian market.

The combined method allowed for a more comprehensive and diverse representation of viewpoints, which enhanced the richness and breadth of the qualitative data collected via semi-structured interviews. The semi-structured interviews ran in parallel with quantitative surveys from September till December 2023, allowing for a comprehensive data collection process. To ensure a well-rounded perspective, the study involved interviews with 10 experts, with the sample carefully curated to include equal coverage of experts from different domains of financial offerings. Each interview lasted approximately 30 to 35 minutes and was conducted primarily through Zoom video chats, facilitating flexible and in-depth discussions with these industry experts. The characteristics of the interviewees is explained as follows.

Traditional Banking Experts

1. **Manager, Investor Relations** - One of Egypt's largest Investment Banks (Interviewed in December 2023)

2. **Senior Assessment Analyst, Credit Risk** - Egyptian Bank (Interviewed in December 2023)

These individuals from the traditional banking sector offered insights into how established financial institutions perceive and adapt to the fintech revolution, providing context on risk management and investor relations from a conventional banking perspective.

Fintech Experts:

1. **Executive Director of Product** - Arab Fintech, currently in the process of launching in Egypt (Interviewed in August 2023)

2. **Manager, Investor Relations** - One of Egypt's largest Fintech Companies (Interviewed in November 2023)

3. **Growth Manager** - Egyptian tech-intensive start-up (Interviewed in August 2023)

4. **Principal Product Manager, BNPL (Buy Now Pay Later)** - One of Egypt's largest Fintech Companies (Interviewed in November 2023)

5. **Department Lead, Corporate Venturing** - Diversified Financial Services Conglomerate (Interviewed in September 2023)

6. **Product Manager** - Emerging Fintech company with an international presence (Interviewed in December 2023)

7. **Product Manager, Investment and Saving** - One of Egypt's largest Fintech Companies (Interviewed in November 2023)

8. **Product Manager** - Established Egyptian Fintech (Interviewed in November 2023)

The fintech professionals offered insights into the latest trends in the fintech industry. They delved into various topics including product development, market growth, customer engagement strategies, and emerging financial solutions like buy now pay later (BNPL) services. The diversity of experiences allows a better chance to shed light on the difficulties and possibilities that arise when launching new services, expanding operations, and maneuvering through Egypt's intricate financial environment.

Questions like "How do you think customers perceive the ease of use and reliability of fintech services compared to traditional banking services?" and "What are the most valued features of fintech applications among Egyptian consumers and why?" will reveal customer preferences, perceived value, and adoption challenges. Answers to regulatory issues will also clarify Egypt's fintech market challenges. These qualitative insights can help explain consumer behavior and fintech adoption decisions more deeply. A detailed list of the question can be found in annex 1

4.3 Quantitative Data

In order to focus on precise measurements and for a more deductive methodology, a quantitative approach was also used. This requires careful preparation before data collection and analysis.

Thus, greater attention to data analysis and sample design must be considered (Neuman, 2014). That being said, quantitative data was acquired from a sample of 105 respondents.—through structured questionnaires. A Convenience Sampling also referred to as Voluntary Response Sampling approach was utilized within the target group, and surveys were conducted through google forms. The survey link was subsequently distributed through extended networks and social media groups to capitalize on voluntary response sampling.

This section of the research aims to assess fintech adoption, evaluate it against conventional banking, and identify the key factors influencing the shift in consumers' preferences for fintech products. Structured questions were used in the survey, which took around 10 minutes to complete. The selection of the KPIs was determined by the emphasis on specific key indicators discussed in the literature, as previously outlined in the literature review. Satisfaction levels with fintech services versus traditional banks were measured on a 5-point scale. The survey also probed the ease of use, where fintech's user-friendly interfaces gained preference over conventional banking systems. Trust and security perceptions were also captured to measure the stance on fintech's privacy assurances among the surveyed participants. Additionally, the survey aimed to measure the adoption rates of fintech consumer financing, the debt-burden ratio respondents were most comfortable with, as well as categories with most borrowing preferences. The survey questions are detailed in annex 2.

4.4 Data Analysis

Marshall and Rossman (2016) describe data analysis as the method for organizing, structuring, and giving meaning to a large unorganized body of gathered data. A directed content analysis was used to analyze and understand qualitative data from industry experts' in-depth interviews. This method helps us understand and categorize and code interviewees' replies by themes, perspectives, and opinions that are in accordance with the theoretical framework and research focus (Marshall & Rossman, 2016).

To summarize and explain the quantitative data from the surveys, a descriptive statistical analysis approach was used (Neuman, 2014). This strategy will involve calculating some descriptive statistics for questions like "Which specific fintech applications do you use the most and why?" and the use of fintech applications in comparison to traditional banking services, as well as Likert scale questions measuring the perception of ease of use, credibility, or satisfaction of fintech applications in comparison to traditional banking services. An extensive descriptive statistical analysis was conducted to efficiently organize and interpret the quantitative data obtained from the surveys. The analysis involved using Google Forms for data collection and Microsoft Excel for data processing. Descriptive statistics were calculated for various questions. These included analyzing the frequency of using specific fintech applications and making comparisons between fintech and traditional banking services. The data was analyzed in detail using pivot tables in Excel, allowing for a thorough examination of the responses across different segments such as demographics, age groups, income brackets, and education levels. The systematic approach used in this study allowed for the discovery of descriptive statistics and the detection of significant trends. The use of Likert scale questions played a crucial role in assessing user opinions on the ease of use, credibility, and overall satisfaction of fintech applications compared to traditional banking services. The analysis presented in the study offers a thorough examination of usage patterns and customer satisfaction with fintech services among various consumer demographics.

4.5 Limitations

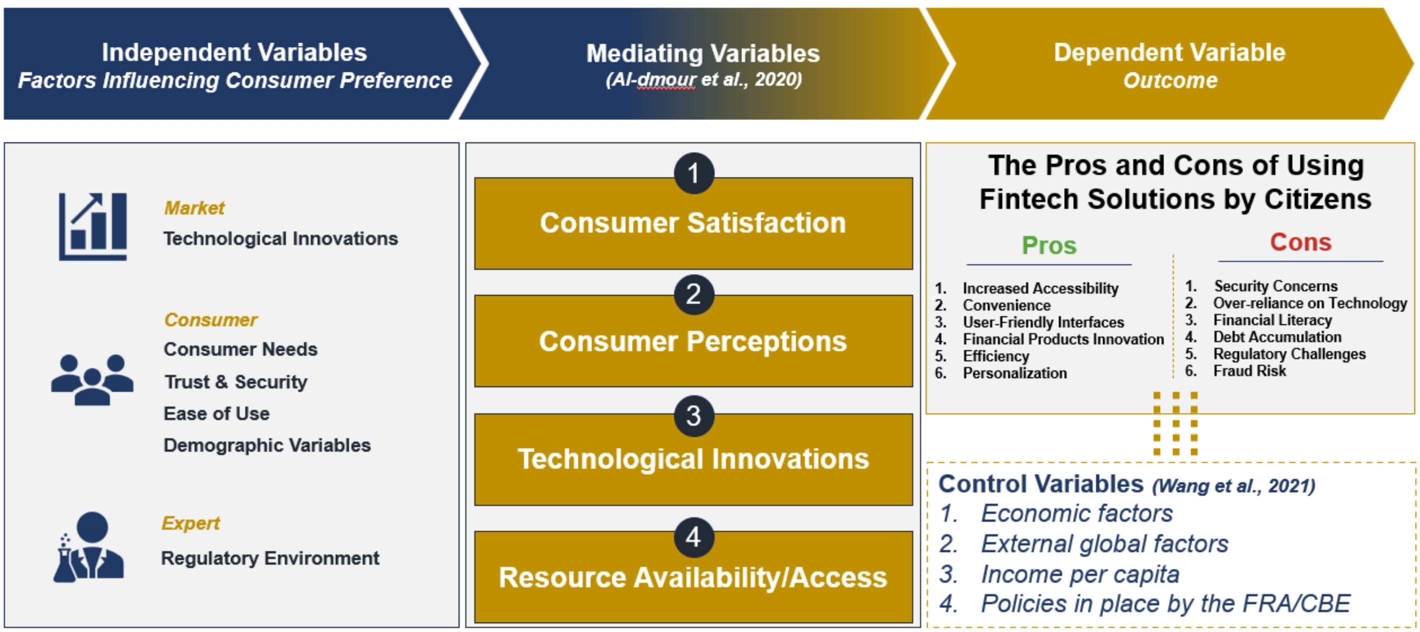
This study recognizes several issues that need to be addressed. The depth and accuracy of the conclusions are first and foremost challenged by the scarcity of market data for recently founded fintech businesses. Alternative data sources, such as business reports and academic papers, were used to overcome this obstacle, along with in-depth interviews with industry professionals that were used to provide important insights into the workings and effects of these companies. For this research, it was crucial to take the validity and representativeness of the data gathered into account. The surveys used approved scales and standardized measuring techniques to increase reliability. Finally, to guarantee validity, participants were provided with clear instructions and explanations of the survey questions and a detailed explanation of the term "consumer fintech," assuring uniform knowledge. By addressing these limitations through the proposed solutions, the credibility, reliability, and validity of the research findings were strengthened.

4.6 Ethical Considerations

The highest standards of ethical research conduct will be followed in this study. Assuring the privacy and confidentiality of every interviewee and survey respondent is first among ethical obligations (American Psychological Association, 2017). Consent declarations were elaborated from each respondent and to maintain anonymity, no personal information will be gathered, and all answers will be provided in aggregate form. Second, the study is to gather, analyze, and interpret data in a fully transparent manner (American Psychological Association, 2017). Every step of the process will be described in detail, and any possible conflicts of interest will be made known upfront. Finally, there is an obligation to report findings objectively, without bias or influence. Regardless of personal ideas or expectations, the researcher will strive to offer an accurate and fair description of the findings gathered (American Psychological Association, 2017).

Chapter 5: Conceptual Framework

This conceptual framework lays out a model for understanding the elements that impact consumer preferences, the variables that mediate these preferences, and the final result of these processes (Berman, 2013).



5.1 Factors Influencing Consumer Preference:

These represent the various dimensions that the thesis explores as determinants of consumer behavior towards fintech solutions, particularly in the context of consumer financing & borrowing in Egypt.

a) **Market:** It investigates the market conditions, such as the competition and the availability of fintech options.

b) **Consumer:** The focus is on the individual consumer's characteristics, including their needs, trust in fintech solutions, and demographic factors.

c) **Experts:** The thesis looks into expert insights and regulatory environments that shape the fintech landscape in Egypt.

5.2 Mediating Variables:

These variables mediate the relationship between the factors influencing consumer preference and the outcomes (Wang, Badley, & Gignac, 2006). They are essentially the 'how' and 'why' the factors influence consumer preferences.

a) **Consumer Satisfaction**: How the fintech solutions meet consumer expectations.

b) **Consumer Perceptions**: The consumers' views and beliefs about fintech solutions.

c) **Technological Innovations**: The influence of new technologies on consumer preferences.

d) **Resource Availability/Access**: The extent to which consumers can access fintech resources.

5.3 Control Variables:

These are factors that the research aims to control for or consider in its analysis to accurately attribute changes in consumer preference to the identified influencing factors and not to these external factors.

a) **Economic factors:** How broader economic conditions may affect consumer choices.

b) **External global factors:** International events or trends that might influence local consumer behavior.

c) **Income per capita:** The average income of individuals, which may affect their ability to use fintech solutions.

d) **Policies in place by the FRA/CBE:** The regulatory framework established by the Financial Regulatory Authority and the Central Bank of Egypt, which could shape the fintech landscape.

5.4 Outcome

The framework seeks to describes the dual effects — pros and cons — of fintech solutions on Egyptian citizens' behaviors regarding borrowing and financing. The arrows in the framework illustrate the influence of market trends, consumer needs, and regulatory environment on the mediating variables like consumer satisfaction and technological perceptions. These mediators then split the outcome into two distinct categories: the advantages and challenges faced by citizens when utilizing fintech for financial activities.

- Pros of Using Fintech Solutions:
  a) **Increased Accessibility:** Fintech platforms often provide services to underserved segments of the population, expanding financial inclusion.

  b) **Convenience:** The ability to conduct transactions digitally, without the need for physical bank visits, appeals to tech-savvy consumers.

  c) **User-Friendly Interfaces:** Fintech applications tend to have more intuitive designs and user experiences compared to traditional banking interfaces.

  d) **Innovation in Financial Products:** Fintech companies are at the forefront of creating new financial products that address specific consumer needs.

  e) **Efficiency:** Transactions and processes are usually quicker through fintech platforms than traditional banks.

f) **Personalization:** Fintech solutions can offer more tailored financial advice and products based on individual user data.

- Cons of Using Fintech Solutions:

a) **Security Concerns:** There may be skepticism about the security and privacy of fintech platforms, especially for newer or less well-known companies.

b) **Over-reliance on Technology:** When fintech systems fail or face technical issues, users can be left without access to their funds or the ability to conduct transactions.

c) **Financial Literacy:** A lack of understanding about how fintech products work can lead to misuse or financial mismanagement.

d) **Debt Accumulation:** Easy access to financing can lead to consumers taking on more debt than they can handle, potentially leading to higher default rates.

e) **Regulatory Challenges:** Fintech operates in a dynamic regulatory environment which can impact the stability and longevity of fintech services.

f) **Fraud Risk:** The digital nature of fintech can make it a target for cybercriminals, leading to potential fraud risks for users.

Chapter 6: Findings and Discussion

6.1 Quantitative Survey Data Findings

This research aimed to analyze the usage and evaluation of fintech services among Egyptian consumers. The sample achieved entailed a diverse set of 105 individuals, encompassing various occupation sectors, age groups, income levels, and educational backgrounds. The KPIs for this study included ease of use, trust and security, and overall satisfaction with fintech services.

To gain comprehensive insights, specific preferences were explored in financial categories and investigated the acceptable debt burden ratio relative to individual income. The study was designed to not only compare these factors across different demographic splits but also to identify any noteworthy trends or patterns.

Data was meticulously gathered, ensuring a balanced representation of the Egyptian consumer base in the fintech domain. This approach allowed for an in-depth understanding of how different segments of the population perceive and utilize fintech services, thereby providing valuable insights into market needs and areas for improvement in this rapidly evolving sector.

6.1.1 Sample Overview

6.1.1.1 Occupational Sector

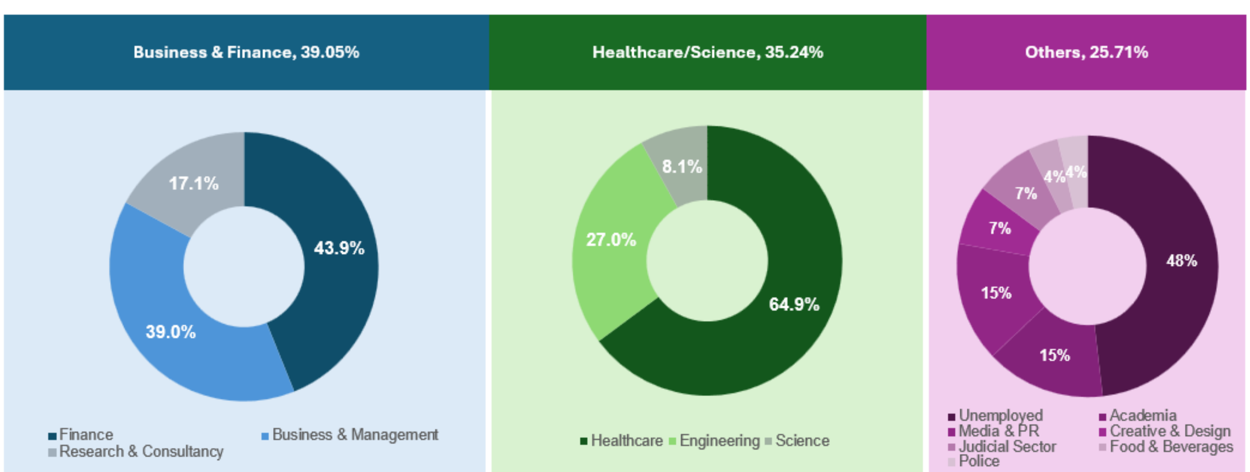


Figure 1

Despite being relatively small. the sample is pretty diverse. The sample is structured across three main sectors: Business & Finance, Healthcare/Science, and Others. The Business and Finance sector is the most prominent, constituting 39.05% of the sample with a strong leaning towards Business & Management roles. The Healthcare/Science sector comprises 35.24% of the sample, with the majority in Healthcare roles. The Others sector accounts for 25.71%, showing a diverse range of roles with Creative & Design being the most significant. This structure reflects a sample with a heavy orientation towards business, healthcare, and creative professions such as graphic design and social media.

6.1.1.2 Demographics

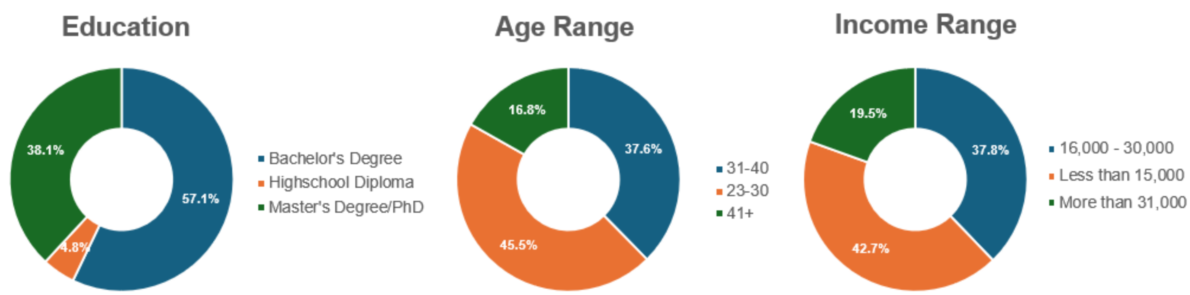


Figure 2

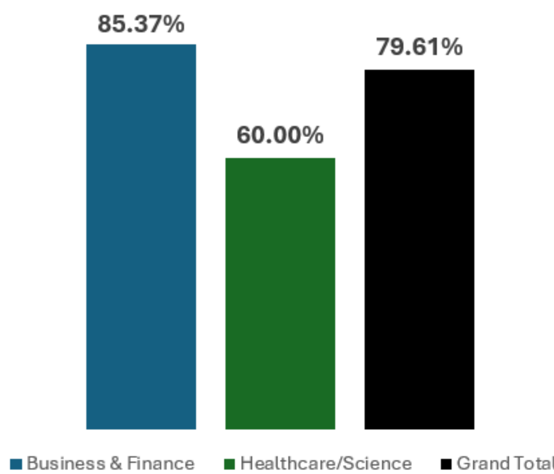
When observing the sample's in terms of various demographics, educational background reveals a predominant level of Bachelor's degrees, accounting for 57.1% of the sample, followed by a substantial 38.1% holding a Master's degree or PhD, and a minimal 4.8% with only a high school diploma. Age distribution indicates a concentration in the mid-range brackets, with 45.5% of individuals falling within the 31-40 age group, 37.6% in the 23-30 range, and the remaining 16.8% aged 41 and above. In terms of income, the sample tilts towards higher earnings, with 42.7% earning above EGP (Egyptian Pounds) 31,000, whereas those earning between EGP 16,000 and 30,000 comprise 37.8%, and a smaller portion, 19.5%, earn less than 15,000. The data, represented through color-coded donut charts, suggests a sample leaning towards higher education levels, a youthful demographic predominantly in their thirties, and a skew towards the higher income bracket.

6.1.2 Main Findings

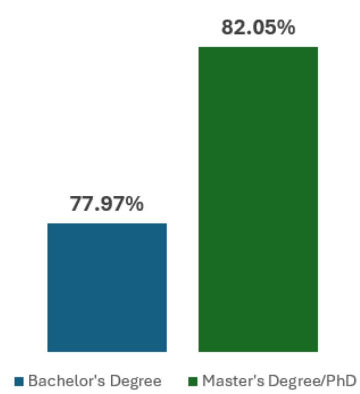
The research conducted on Egyptian consumer financing practices provides insightful trends and preferences, particularly highlighting the growing inclination towards fintech solutions. This study, encompassing various occupational sectors, age groups, and educational backgrounds, reveals a comprehensive picture of the financial behavior among Egyptian consumers.

6.1.2.1 Borrowing General Usage - Have you ever used any form of financing before?

This question explored whether the respondents have used any form of borrowing before, this includes the use of credit cards and regular bank installments.



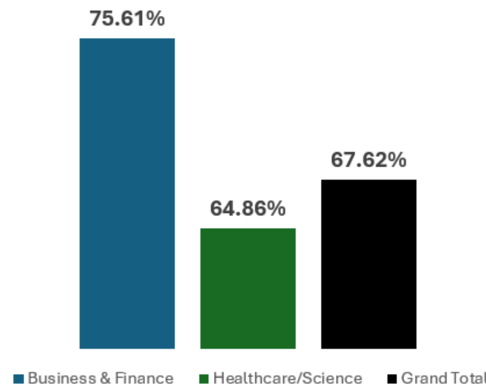
On an overall level, the study found that a significant 79.61% of the total sample have used some form of consumer financing. Notably, individuals working in business and finance showed the highest usage at 85.37%, while the healthcare, science, and engineering sectors lagged behind at 60.00%. This significant discrepancy suggests sector-specific financial behaviors, potentially influenced by the nature of the job sector and its relationship with financial literacy and risk appetite. Despite these occupational differences, age and income did not significantly affect consumer financing



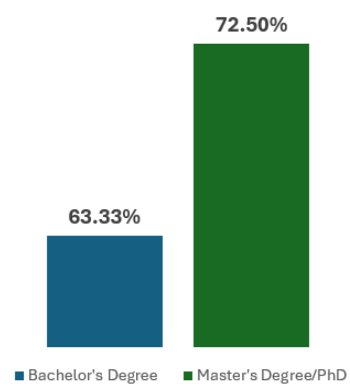
usage, indicating a uniform adoption across these demographics. However, a direct relationship was found between higher academic qualifications and increased consumer financing usage, suggesting that education level might play a role in financial decision-making.

6.1.2.2 *Consumer Financing (Fintech) Adoption - Have you used fintech consumer financing facilities to purchase/pay for a product/service before?*

This question explored whether the respondents have used any of the fintech platform to get financed or pay for a product



When it comes to fintech solutions for purchasing or paying for services, there was a substantial overall usage rate of 67.62%. The business and finance sector again led the adoption rate, although the difference compared to other sectors was not statistically significant.

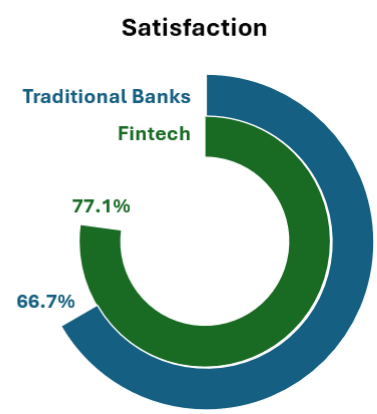


The trend towards higher fintech usage among those with higher educational qualifications, particularly at the master's degree level and above, was observed, pointing towards an educated demographic being more receptive to new financial technologies.

6.1.2.3 Evaluation KPIs – Traditional Banking vs. Fintech

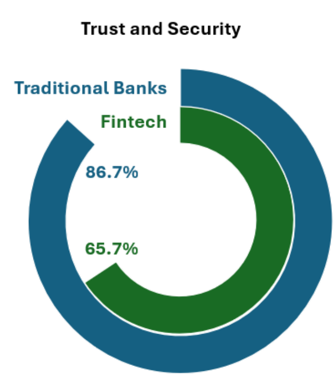
This series of questions explored how the respondents viewed and evaluated certain aspects of their experience with traditional banks vs fintech applications. Evaluation KPIs were asked in the form of 5-point scale questions (eg. 1 being the least satisfied and 5 being the most satisfied). The final score is calculated on the basis of top 2 box which is the sum of respondents who have given a score of 4 and those who have given a score of 5.

a) Satisfaction with Traditional Banks vs. Fintech:

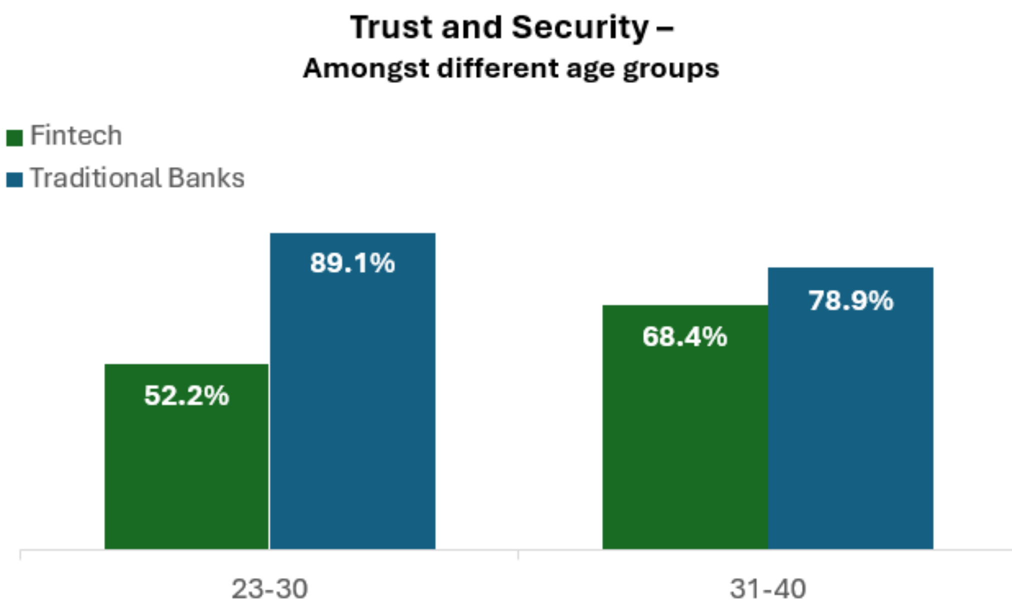


The top-two-box satisfaction levels offered an interesting insight, with fintech solutions receiving a higher satisfaction rate (77.14%) compared to traditional banks (66.67%) when observing the overall sample. This gap in satisfaction was particularly pronounced in the business/finance sector and among younger consumers aged 20-30. The income factor also influenced satisfaction levels, with those in the EGP 16-30K income range showing a marked preference for fintech.

b) Trust and Security of Traditional Banks vs. Fintech:

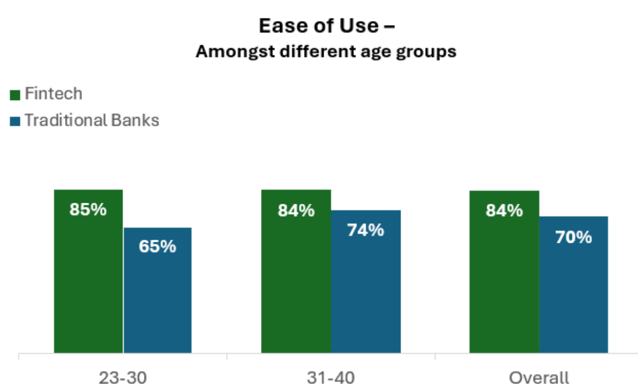


On the other hand, traditional banks still held the upper hand in terms of trust, security, and privacy, particularly among the younger age group of 20-30. This indicates that while fintech is preferred for its convenience and user experience, there remains a degree of skepticism regarding its security and trustworthiness.



c) Ease of Use of Traditional Banking Facilities vs Fintech:

The ease of use was a clear win for fintech solutions over traditional banks, especially among the younger demographic. This suggests that fintech's user-friendly interfaces and streamlined processes resonate well with the tech-savvy younger generation.



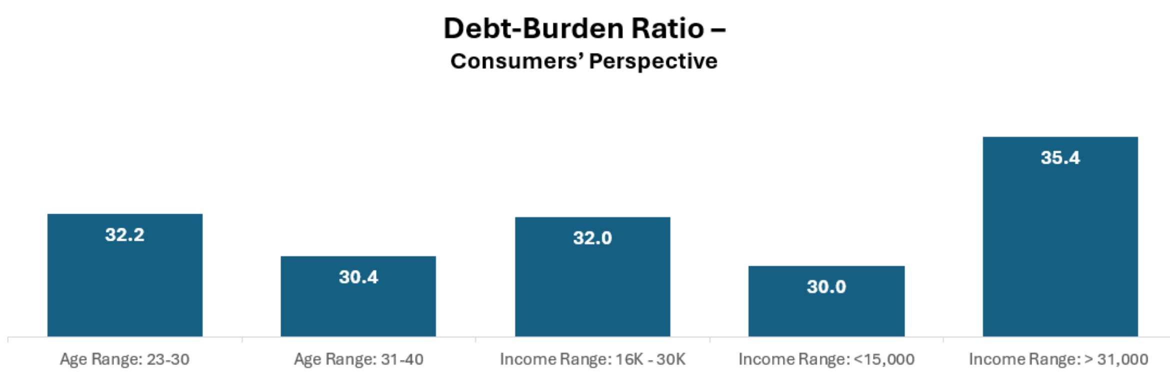
6.1.2.4 Borrowing Preferences

This section covers the respondents' interests in terms of financial choices, what's their debt appetite and what categories do they prefer to be financed.

a) **Debt-Burden Ratio – from the consumer's perspective:**

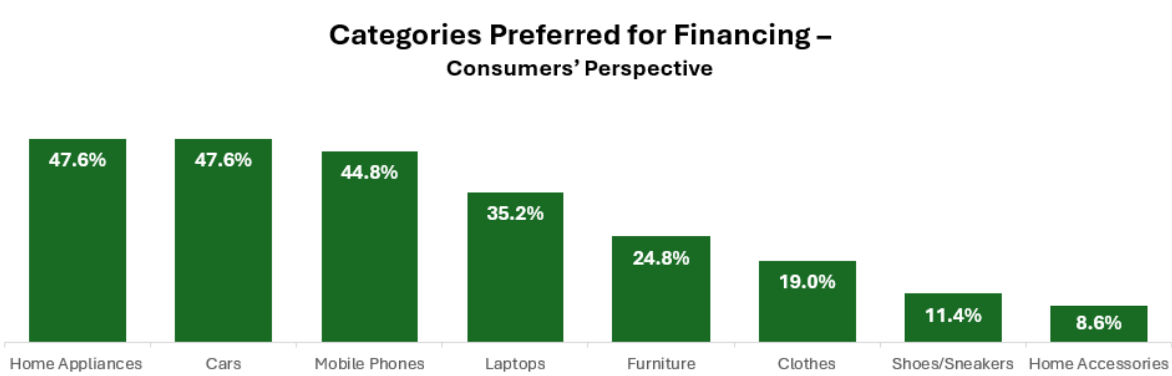
Outliers have been removed so that the percentages calculated are those between the range of 10 – 90% of one's income

The study also shed light on borrowing preferences, with respondents comfortable borrowing around 30% of their income, and a higher propensity to borrow among the 20-30 age group. Interestingly though, we can notice that as the income range increases, the level of borrowing consumers are comfortable with also increase which shows a positive proportionate relationship.



b) **Categories preferred to be financed:**

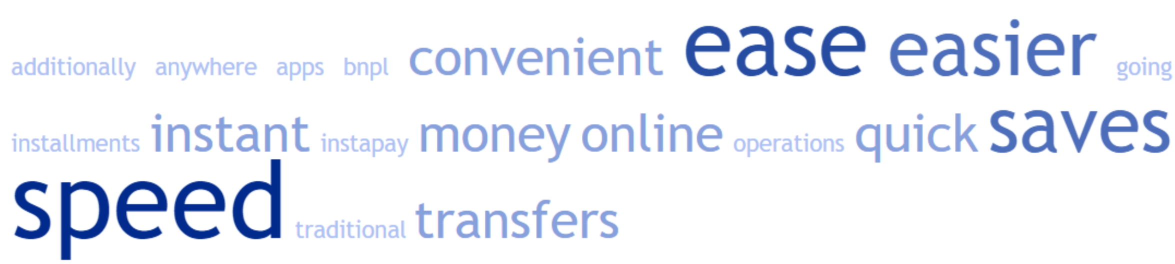
Mobile phones, appliances, and cars were the most popular categories for financing, indicating these as key areas of consumer interest and potential growth for financial services.



c) A Financial need that traditional banks did not meet

This section covers the respondents' verbatim input on the question of whether they thought fintech innovation has provided a need that traditional banks did not necessarily meet.

In an interesting visualization, the words 'ease', 'speed' and 'convenience' were mentioned the most amongst those who specified a need that they felt traditional banks have not been able to meet when compared to fintech institutions.



6.1.3 Summary of Main Findings

The research provides valuable insights into the evolving landscape of fintech adoption in Egypt, highlighting a significant shift towards digital financial solutions. This transition is particularly noticeable among educated, younger, and higher-income demographics. While traditional banks maintain their stronghold in areas of trust and security, fintech emerges as the preferred choice for its user-friendliness and its ability to meet specific consumer needs that have remained unaddressed by traditional banking institutions. This trend presents a substantial opportunity for fintech innovations to expand and evolve within the Egyptian market, catering to a diverse and dynamic consumer base with varied preferences.

The study's findings provide a detailed understanding of consumer financial behavior, which is strongly influenced by the variables within the conceptual framework. The majority of the sample has used consumer financing, with the highest usage among individuals in the business and finance sector. This aligns with the 'Consumer Needs' and 'Trust & Security' aspects, indicating sector-specific financial literacy and a willingness to take risks influenced by exposure to 'Market' driven 'Technological Innovations'. The widespread adoption of financing options across different ages and incomes indicates a broad appeal and ease of use. However, higher education levels suggest a deeper understanding and engagement with financial services, reflecting the influence of demographic variables. Fintech solutions are widely adopted for their efficiency and personalized offerings, which are in line with consumer satisfaction and perceptions of innovation. However, traditional banks still hold an advantage in terms of trust and security, emphasizing the importance of the regulatory environment that's further explored by expert opinions. The increasing adoption rates and strong satisfaction with fintech services among younger, educated demographics highlight a growing market trend towards technology-driven financial solutions that prioritize ease of use and accessibility. Nevertheless, the consumer perceptions of fintech's security shortcomings in comparison to traditional banks indicate a potential area for strategic development. It is crucial to consider the regulatory environment and technological innovations as key factors in building consumer trust. The interplay between market innovations, consumer preferences, and regulatory conditions creates a multifaceted ecosystem in which the future of financial solutions and consumer engagement will constantly develop.

Now that we have explored the quantitative data and understood the general trends and preferences among consumers, it is imperative to delve deeper to gain a more nuanced understanding. To this end, let's move towards the qualitative section of our study. Here, we will seek to gain a different insight on similar topics, but through the lens of finance experts in Egypt. Their professional perspectives and experiences will undoubtedly shed further light on the intricacies of fintech adoption and usage, providing a richer, more rounded view of the fintech landscape in Egypt. This qualitative analysis aims to complement our quantitative findings, offering a holistic view of the current state and future potential of fintech in this rapidly evolving market.

6.2 Qualitative Expert Interviews

This chapter explores the insights and conclusions from 10 interviews with seasoned experts in Egypt's financial sector, covering the perspective of both sides and focusing on their views regarding the fintech revolution in Egypt. The interviews took place over the span of 5 months, from August 2023 till December 2023.

The results of these interviews are categorized into five primary themes: (i) Transformation of Egypt's Financial Landscape; (ii) Navigating Policy and Practical Challenges in Egypt's FinTech Ecosystem; (iii) Policy-Driven Transformation – Confronting Traditional Banking with Fintech; (iv) Fintech Market Risks and Policy Considerations; and (v) Policy-Driven Approaches in Shaping the Future of the Market.

6.2.1 Transformation of Egypt's Financial Landscape

The fintech landscape in Egypt is experiencing a profound transformation, primarily driven by the adoption of digital payment methods and innovations in digital banking. This change is not just a technological shift but a cultural one, reshaping how consumers interact with their finances and how financial institutions respond to these evolving needs. In this section, we examine the profound transformation occurring in Egypt's fintech sector, driven by digital payment innovations and advancements in consumer financing.

6.2.1.1 Fintech Adoption and Growth

The agreement among respondents in the interviews was undisputed in recognizing that fintech has emerged as a compelling option to fulfill a persistent need – the simplification and optimization of daily financial activities. The statement has significant resonance in the wider framework of Egypt's strategic dedication to promoting financial inclusion, where fintech is a key facilitator of revolutionary transformation. Additionally, it is important to acknowledge that fintech has had a significant and widespread impact, not only by improving the convenience of financial activities but also by introducing a new era of financial accessibility and efficiency. All 10 experts unanimously emphasized that there has been a substantial increase in the number of fintech companies in Egypt, leading to a thriving sector.

- *"The Financial Regulatory Authority, which regulates the non-banking financial services company, issued the license requirements, and a lot of companies went and obtained the license. And since that, we've seen the consumer finance market expanding exponentially"*

- Department Lead, Corporate Venturing,

Diversified Financial Services Conglomerate, September 2023

As per a seasoned financial expert who assesses potential investments for one of Egypt's largest financial conglomerates, the fintech market in Egypt is indeed seeing growth. The rise might be attributed to the entry of new participants in the industry following the implementation of favorable criteria for fintech companies by the Egyptian Financial Regulatory Authority (FRA).

To put it another way, the financial technology business in Egypt is seeing explosive growth as a direct result of the new lenient legislation.

- *"Basically, we're trying to remove every barrier to digitizing people, any barrier to financial inclusion, we want to remove it, Money transfer is the bread and butter of mobile wallets. No one's doing anything better than money transfer with mobile wallets. It's the best thing, you make money easily, super cheap for the customer, it grows exponentially."*

- Executive Director of Product,

Arab Fintech currently in the process of launching in Egypt, August 2023

As emphasized by a highly experienced fintech professional , a key goal in the fintech sector has been the digitalization of individuals' financial transactions. Companies that provide fintech services have worked hard to eliminate any barriers that prevented users from using these services. Those hindrances were viewed as barriers to attaining widespread financial inclusion. The interviews revealed a unanimous agreement that enhancing simplicity of use is crucial for promoting financial inclusion in the Egyptian market.

- "We're dealing with an unsophisticated customer. For them, they will need the service that could handle their transaction in the least amount of time possible, with the least complications possible"

- Manager, Investor Relations

One of Egypt's largest Fintech Companies, November 2023

Moreover, the perspective of an Investor Relations Manager, well-versed in serving multiple financial institutions, lends further weight to this narrative. Fintech companies are strongly dedicated to expanding access, especially among a client base typified by its limited knowledge in financial concerns. The primary goal is to provide efficient services that facilitate transactions with minimal difficulties, addressing the customer's desire for quick and trouble-free financial interactions.

6.2.1.2 Target Demographics and Consumer Behavior

Delving deeper into the matter allows us to gain a more profound understanding of how the targeted demographic is perceived. Multiple references underscore the youthfulness of this segment and shed light on their lifestyle preferences. Specifically, their inclination towards simplicity and enhanced accessibility for their desired purchases is evident. This perspective is exemplified in the insights provided by a growth manager from a start-up currently in the process of introducing a new pre-paid card and digital banking solution.

- *"Gen Z are known to be more frugal with their spending. And at the same time they are the generation to spend most on luxury goods on branded consumer goods than any other generation."*

- Growth Manager,

Egyptian tech-intensive start-up, August 2023

The sentiment expressed by the interviewee resonates with the consensus among the majority of experts consulted. He elucidated the company's keen interest in Gen Z, highlighting them as the focal demographic with a pronounced emphasis on their proclivity for branded and luxury products, surpassing the preferences of all other generational cohorts.

- *"If you go online to pay, you'll only find young people doing this. Not everyone has a website or a certain document to upload and see. Not everyone in Egypt uses applications. Like… It won't work very well. Some people will stay in the banks."*

- Senior Assessment Analyst, Credit Risk

Egyptian Bank, December 2023

Furthermore, an intriguing perspective emerged from a seasoned banking expert who possesses extensive experience within the confines of a traditional Egyptian bank. In alignment with the prevailing viewpoint, this expert was in agreement with the fact that fintech companies indeed prioritize young individuals as their primary target demographic and focal segment. However, he introduced an insightful stipulation to this discussion, underscoring that this demographic inclination inevitably implies the existence of a differentiated segment. This segment, he noted, continually prefers engaging directly with bank personnel, perceiving the digital and online nature of fintech applications as potentially disadvantageous.

6.2.1.3 Economic Dynamics and Fintech Adoption

Moving on to an exploration of the market dynamics driving the surge in consumer financing and the influx of fintech players into the Egyptian market, it's important to acknowledge a less optimistic aspect. All interviewees were in unanimous agreement that the economic circumstances in Egypt, coupled with the devaluation of the Egyptian pound and the subsequent reduction in purchasing power, have collectively served as significant catalysts. These factors have spurred a heightened interest among individuals to embrace rapid, convenient, and accessible avenues for fulfilling their financial needs and desires.

- *"Let's say there's a market need in general due to the macroeconomic situations and people really want to be able to afford more. Even the things that they already used to afford, they sometimes no longer can afford. They want maybe financial services to help them, to help them keep up with their previous or their current lifestyles."*

- Principal Product Manager, BNPL

One of Egypt's largest Fintech Companies, November 2023

This concept is revealed in the above-mentioned quotation, where it becomes evident that a pressing market demand revolves around the attempt to maintain and sustain one's existing lifestyle. Escalating inflationary pressures have compelled individuals to exert extra effort in order for people to be able to afford items that were previously within their reach. Fintech solutions have sharply recognized this necessity and tailored their products accordingly. Consequently, consumers are now actively seeking the simplest and most convenient pathways to secure financing for their needs.

- *"We can still see the trajectory due to the increased adoption from the customers, as well as the inflation, as well as a lot of other factors that people who used to afford to pay for something in cash cannot do it now, and they cannot buy that. So, if we go back to the question, I believe that customers are starting to perceive that purchasing a certain product or installment from one of the consumer finance companies is definitely more convenient than working with a traditional financial institution."*

- Department Lead, Corporate Venturing,

Diversified Financial Services Conglomerate, September 2023

That can be further highlighted by the quote above, affirming that individuals have continuously pursued avenues to finance their desired purchases, a trend that remains unchanged. It was mentioned by all experts interviewed that in light of the escalating difficulty in affording these same products, it becomes imperative for consumers to discover more streamlined approaches to secure financing. However, as one more field expert explains, there are drawbacks to this quest of ease that will be covered in more detail below.

- *"The economic situation in Egypt is starting to make people very aware, I don't want to get into details but the amount of frauds that are happening astonishes me, my jaw drops and I get shocked. I couldn't imagine this scenario with such use cases exist or that it could even happen. People circumvent anything! They'll find a way to get the extreme benefit out of any financial tool"*

- Product Manager,

Emerging Fintech company with international presence, December 2023

With the growing need for accessible financing solutions, there emerges a concomitant risk of misuse and even fraudulent activities, as exemplified by cases that have been brought to light by experts. The convergence of ease of use and convenience, exacerbated by the prevailing market demands and inflationary pressures, has provided fertile ground for improper utilization of these financial facilities. Instances abound where customers have harnessed multiple sources of financing in an inappropriate manner, a matter that will be explored more comprehensively in the forthcoming section of this research, delving into the potential pitfalls associated with these developments. This phenomenon aligns with the sentiment expressed in the quote: "The economic situation in Egypt is starting to make people very aware... They'll find a way to get the extreme benefit out of any financial tool."

The rapid expansion of the fintech sector is a result of the changing consumer needs and market dynamics, as emphasized by the conceptual framework. The regulatory environment has evolved to support growth, driven by the rise of digital payment methods and the focus on financial inclusion. This is evident in the extensive use of fintech services, especially by younger consumers who value convenience and accessibility, which are fundamental aspects of technological advancements. At the same time, the economic difficulties, such as currency devaluation, have increased the need for fintech solutions to protect consumer lifestyles. This aligns with consumer perceptions and demographic variables. However, the rapid growth of this phenomenon also raises concerns regarding security and the potential for misuse. This highlights the crucial role of trust and security within the framework, which in turn requires careful regulatory oversight.

6.2.2 Navigating Policy and Practical Challenges in Egypt's FinTech Ecosystem

This section has revealed intriguing trends, with varying opinions among interviewees, the section aims to present a comprehensive examination of the multifaceted challenges encountered within the fintech sphere, encompassing both the obstacles faced by companies launching their products in this market and the challenges experienced by consumers exploring various fintech options.

6.2.2.1 Challenges for FinTech Companies – Regulatory Landscape

As we delve into the Egyptian regulatory landscape, it is important to note that unlike banks that are mainly under the supervision and ruling of the rigid frameworks of the central bank of Egypt (CBE), fintech companies are all under the reign of the Financial regulatory authority (FRA). Both institutions have different guidelines. It is evident that some interviewees emphasized the importance of having comprehensible regulatory processes in place, despite acknowledging the inherent complexities of the system. Conversely, others expressed their frustration with the potential sluggishness and arduousness of these regulatory procedures.

- *"Personally I think that the regulatory stuff in Egypt is difficult and takes time but they must be there. I don't think we can go without regulatory processes in place. Because not all players are honest and not all players are honest especially in the consumer finance field"*

- Product Manager, Investment and Saving,

One of Egypt's largest Fintech Companies, November 2023

The majority of the interviews clearly indicate that regulatory processes in Egypt, while deemed essential by some, are perceived as complex and time-consuming. The sentiment expressed by one expert underscores the necessity of having regulatory frameworks in place, especially in the consumer finance sector, where honesty among players can be a concern. *"Not all players are honest especially in the field of consumer finance"* This sentiment implies that consumer finance is a domain where trust may not be easily granted. Several factors mentioned in the interviews can contribute to this perception, one of which is the absence of regulations on the debt-burden ratio, a matter that will be explored in greater detail later in this discussion.

Moreover, a recurring theme in the interviews relates to the regulatory challenges faced by new fintech entrants in the Egyptian market. One significant challenge pertains to the inconsistency in the time taken to obtain the necessary practicing license. It appears that the speed of licensing approval is highly dependent on the backing and affiliations of the company, potentially favoring those with influential connections. Experts have reported experiencing lengthy delays in obtaining licenses, with some cases suggesting deliberate hindrances for companies lacking strong institutional support.

- *"I honestly think that the regulatory landscape for Egypt is open to learning. Telda didn't follow the rules and then got like their license delayed for like two years. Follow the rules and make proposals and the navigation usually comes with your partner bank, to be honest. If you're a consumer fintech, your navigation comes with your partner and who has the license and what their position is with the regulatory authorities."*

- Executive Director of Product,

Arab Fintech currently in the process of launching in Egypt, August 2023

As emphasized earlier, the quoted statement sheds light on the persistent challenges faced by a particular company in obtaining their practicing license. Nonetheless, it becomes evident that the key to expediting this process lies in forging partnerships with traditional banks. The strength and influence of the partner institution play a pivotal role, significantly increasing the likelihood of a fintech company gaining attention and securing the necessary practicing licenses.

Another illustration of regulatory inefficiency and a lack of cooperation becomes evident when considering another emerging trend in the fintech landscape, namely digital banking. Drawing from the experiences shared by the same expert quoted below, it is noteworthy that they were able to obtain their fintech license within a timeframe slightly less than a year. However, the interviewee went on to emphasize that despite the introduction of criteria for a digital banking scheme, the regulatory framework remains sluggish and uncooperative. This raises concerns that it may still take several years for any company to successfully acquire the necessary licenses and commence operations in this field.

- *"They announced that we will have regulations for digital banking in Egypt, and banks now can start to be completely digital and reduce the number of physical on-ground stores. It's an amazing opportunity. But this will take at least three years or maybe two years for the first bank to be actually live with this model. Because the infrastructure is not very advanced or on the same level that they're talking about."*

- Product Manager,

Established Egyptian Fintech, November 2023

The predominant themes consistently raised by all interviewees revolved around the extended nature of the licensing process and the apparent preferential treatment given to select companies or institution when it came to applications for new companies seeking to operate or provide fintech solutions within the Egyptian market. It has become evident that many existing market participants have endured considerable hardships and invested extensive time and effort in securing the required licensing, a fact that may not have been widely recognized until now.

6.2.2.2 Challenges for Consumers

Turning our attention to the difficulties experienced by Egyptian consumers, the prominent themes centered on the tough obstacles posed by the regulations enforced by the CBE, which invariably slowed down various processes. Among the most substantial challenges identified was the necessity for physical presence when signing documents or verifying one's identity, a notable hindrance observed within the market.

- *"The process for getting access to one of those FinTech players is the offline KYC process, where I have to go somewhere and upload and sign a piece of paper and give them my ID. And it's a really long step. Now there are players who are doing online KYC."*

- Growth Manager,

Egyptian tech-intensive start-up, August 2023

Despite only being mentioned by one expert, what's intriguing is the eagerly anticipated shift toward digitizing the entire know your customer process, with the intention of offering most of these procedures online. KYC, short for "Know Your Customer," is a crucial regulatory requirement in the financial industry. It involves a series of procedures and measures implemented by financial institutions to verify and validate the identity of their customers. The KYC process ensures that financial institutions have comprehensive information about their customers, including their identity, address, and financial activities. By digitizing the KYC process, financial institutions can streamline customer onboarding, enhance security, and improve the overall efficiency of their operations.

Another intriguing observation, articulated by the majority of interviewees, highlights an additional challenge encountered by the typical Egyptian consumer when attempting to embrace fintech solutions. This challenge revolves around the dual issues of limited financial literacy and a lack of comprehensive, user-friendly explanations within fintech applications. This deficiency often leads people to misinterpret certain financial products or solutions as deceptive, when in reality, the problem stems from inadequate financial knowledge. Bridging this knowledge gap by educating individuals on interest rates and the intricacies of consumer financing emerges as a common challenge faced by both fintech companies and the average Egyptian consumer..

- *"We see people are financially illiterate. In the region, I don't know if it's in the region but at least in Egypt, people are not financially literate at all. One of the challenges FinTech would face is educating the people."*

- Product Manager, Investment and Saving,

One of Egypt's largest Fintech Companies, November 2023

Navigating the complexities of Egypt's fintech ecosystem reveals a delicate interplay between 'Regulatory Environment' challenges and consumer hurdles as outlined in the conceptual framework. Fintech companies, in contrast to traditional banks, encounter a complex set of procedures imposed by the Financial Regulatory Authority. These procedures, although essential for ensuring trust and security, are frequently regarded as burdensome and sluggish, potentially impeding innovation and technological advancements. The importance of strong regulatory frameworks is highlighted by the need to ensure honesty in the consumer finance industry, which aligns with the viewpoint of experts who emphasize the importance of maintaining integrity in the market.

6.2.3 Policy-Driven Transformation - Confronting Traditional Banking with Fintech

- *"They were still extremely inefficient in how they would target or penetrate the unbanked retail or the unbanked consumer markets in Egypt. So even with their best efforts, still 70% unbanked, right? And that was because the CBE regulations were so stringent, so inflexible"*

- Manager, Investor Relations ,

One of Egypt's largest Investment Banks, December 2023

Commencing with the most prominent challenge encountered within the Egyptian market, the Central Bank of Egypt (CBE) imposes highly rigorous regulations regarding the allocation of loans and the associated criteria. 10 out of 10 interview participants agreed that this regulatory framework represents a substantial difference between fintech players and traditional banking institutions. A considerable segment of the population has been adversely affected by financial exclusion due to the limited services and products accessible to them. Traditional banks are constrained by an extensive set of rules that have considerably hindered individuals' ability to access financing on their terms and within the desired timeframes. All the quotes featured in this section were a direct response to questions regarding the distinctions between fintech and traditional banking.

6.2.3.1 Streamlining Financial Services

When we delve into the finer details of KPIs for comparing fintech consumer financing and traditional banking solutions, it becomes evident that expert opinions align with the perceptions of consumers who participated in the quantitative segment of this research. Notably, fintech solutions have received significantly higher scores in terms of ease of use and reliability.

- *“The thing I like the most is that a person told me that he couldn't believe his eyes when he withdrew his money and put it on his card and went to the ATM. All of this in less than half an hour.”*

- Product Manager, Investment and Saving,

One of Egypt’s largest Fintech Companies, November 2023

One intriguing aspect that emerged from our discussions was the clear distinction between traditional banking and fintech, particularly in terms of ease of use. This observation was underscored by an expert who shared a user's perspective, noting that a person couldn't believe their eyes when they withdrew their money, transferred it to their card, and accessed it at an ATM, all within less than half an hour. This exemplifies the user-centric approach of fintech and reinforces the data gathered from their own internal focus groups, highlighting the remarkable ease and convenience offered by fintech solutions in performing financial transactions.

- *“If I want to shop from a store and I do not have the cash, I can simply get my mobile application out, do three or four clicks, and I can walk away from the store with my product and pay on installments up to maybe three years or something.”*

- Department Lead, Corporate Venturing,

Diversified Financial Services Conglomerate, September 2023

Furthermore, another perspective emphasized the convenience offered by fintech solutions. As one expert articulated, when faced with the need to make a purchase at a store without immediate access to cash, a simple mobile application can be the solution. With just a few clicks, users can walk away from the store with their desired product and opt for installment payments spanning up to three years, eliminating the need for immediate bulk cash payments. This highlights the transformation in payment options, allowing consumers greater flexibility and ease in managing their finances.

6.2.3.2 User-Centric Approach

Moreover, another critical distinction highlighted is that fintech services prioritize addressing the pain point of enhancing the user experience above all else. Traditional banks are often perceived as conventional bureaucratic financial institutions, while fintech is viewed as a technology-driven entity that places a strong emphasis on user experience through a more user-friendly interface. As expressed by one expert,

- *"This is exactly the pain point that we're trying to serve. And they really focus on the user experience side more than banking services. Because at the end of the day, banking services they operate, or banks they operate as a financial institution. Whereas FinTech services, they operate as a technology-based institution. So, the focus on user experience, interface is way more, there's a way stronger zoom and focus on that than on banks."*

- Growth Manager,

Egyptian tech-intensive start-up, August 2023

Furthermore, delving deeper into the discussion, some individuals have characterized the process of obtaining financing or loans/credit cards from traditional banks as "terrible." They contrast this experience with the ease of securing financial assistance from traditional banks in neighboring emerging economies. Considering these factors, fintech solutions are inherently more appealing due to the streamlined nature of the process. As one respondent articulated,

- *"The fact that it's easier to get. The fact that banks are just terrible, terrible, terrible people to deal with. It's so hard to get a loan. Like I live in the UAE. I can get a credit card tomorrow. I got a car loan in two days. I went there and they didn't make me sign a billion checks for the monthly installment. It's not the case in Egypt. With consumer finance, it's not that difficult. You pay when you remember. A loan is instantaneous, 15 minutes. You go and buy a nice hot dog in Ikea, and come back."*

- Manager, Investor Relations,

One of Egypt's largest Investment Banks, December 2023

Traditional banking's strict regulatory limits and fintech's agile, consumer-centric approaches contrast in Egypt's policy-driven financial sector transformation. Fintech's accessible services aim to overcome the gap created by Central Bank of Egypt (CBE) loan allocation laws. Industry experts agree that fintech's 'Ease of Use' and reliability are preferable to traditional banking, with user experiences that execute financial transactions quickly. Fintech prioritizes smooth interactions above banks' bureaucratic processes by offering financial services and improving user experience with technology. This user-focused mentality and accessibility of financial assistance position fintech as a disruptive force in Egypt's growing financial landscape, integrating with the conceptual framework's 'Market' and 'Consumer Needs' elements.

6.2.4 Fintech Market Risks and Policy Considerations

- *"It's just a huge potential, right? Everyone wanted money and there was inflation at the time and everything was getting more expensive. Most importantly, the FRA had a much more fluid risk appetite... you can cheat the system if you want, in my opinion"*

- Manager, Investor Relations,

One of Egypt's largest Investment Banks, December 2023

Transitioning to the most captivating section of the research findings, characterized by substantial influence and input. The dawn of new technologies is invariably accompanied by risks, and the adoption of innovative ideas often involves initial mistakes before a sustainable and stable framework is eventually established. It is a consensus among 9 out of 10 interviewed experts that the immense potential of fintech in the Egyptian market also entails certain market risks that could potentially impact the sector adversely. One of the most prominent themes to emerge from these interviews is the Financial Regulatory Authority (FRA) and its 'fluid' risk appetite.

To further dissect the risk factors outlined by the interviewees, this section divides the risks associated with consumer financing into those related to the debt-burden ratio (DBR) and those linked to the default or delinquency rate.

6.2.4.1 Debt-Burden Challenges

The initial concern highlighted by the majority of participants relates to the absence of regulations regarding the Debt-Burden Ratio (DBR), which is essentially the maximum portion of an individual's income that they are permitted to allocate for loan payments per month. It appears that companies do not establish a limit on the amount they lend to consumers concerning their monthly financial burden. To clarify, an established credit limit is extended to the average client without taking into account their existing income or their actual capacity to timely repay the specified monthly amount.

- *“I don't know what other companies are doing. In the back end. But we are one of the few who actually tells the user that there is a DBR. And you can't take more than that per month. Because this represents like 40 to 50% of your salary. To be able to live. ValU... They're giving me a limit. And I can use it to pay whatever in maybe two installments or three. I can choose. I might not have this amount to pay in the next month. But they don't check the DBR.”*

- Product Manager,

Established Egyptian Fintech, November 2023

This notion is supported by one of the interviewed experts, who pointed out that the company he represents is one of the rare exceptions that educates its clients about the concept of a Debt-Burden Ratio (DBR). Furthermore, he went on to elaborate that unlike traditional banks, the majority of competitors in the market do not verify the consumer's ability to meet specific installment obligations before extending credit.

- *"I don't know if I should call this a fraud or not, but you'll find that the individual signs up with 3 or 4 companies, and he maxes out his limit, and pays for the installment and withdraws it. There are people who take the installment from here and pay for it here, so it's exponential, especially that all of this accumulates interest, some of these people, their source of income does not match, or is not compatible with the size of the purchases they make"*

- Department Lead, Corporate Venturing,

Diversified Financial Services Conglomerate, September 2023

As previously discussed regarding the potential for individuals to manipulate the system, this point is underscored by an expert's personal encounter with an acquaintance who registered with multiple fintech companies with the intention of maximizing his credit limit, without considering whether he could actually repay the borrowed amounts. This practice raises questions of whether it should be considered fraudulent. Additionally, there are cases where individuals use funds from one source to pay for installments elsewhere, resulting in exponential debt accumulation, especially considering the interest charges. Some of these individuals may have income sources that are not corresponding with the size of the purchases they make.

- *"They don't request a bank statement from you at all. So, they don't know your salary, before they open the wallet for you.. It's a disaster. It's a big disaster. And now, some companies make a lot of offers, in a lot of places. You got me into PlayStation, and you got me into a new phone, and you got me into AirPods, and you got me into an Apple Watch, and you got me into a lot of installments, and these installments are more than my salary. Even if my salary is less than 20,000* *pounds, they don't have a problem giving me facilities with more than 20,000 pounds per month"*

- Senior Assessment Analyst, Credit Risk,

Egyptian Bank, December 2023

Emerging from a participant with extensive experience in the risk department of one of Egypt's established traditional banks, where they specialize in assessing lending risks and determining the allocation of loans based on an individual's likelihood of default, the evaluation of lending practices within some fintech companies is characterized as nothing short of a 'disaster.' This expert underlines the dangerous situation created by fintech firms. He emphasizes that these companies entice consumers with highly tempting offers, which can lead individuals to take on more financial burdens than they can handle.

The gravity of the situation lies in the fact that fintech companies extend credit and loans to consumers without any thorough assessment of their ability to meet the required installment payments. In the expert's view, this lack of consideration for an individual's financial capacity is a disaster waiting to happen. Fintech firms, in their pursuit of rapid growth and market share, risk overextending credit to individuals without due diligence, potentially pushing them into financial distress a situation that segues into our upcoming discussion on default and delinquency risk.

6.2.4.2 Default & Delinquency Risks

This leads us to one of the potential outcomes of the aforementioned risk factors, many people may find themselves unable to meet their installment obligations, resulting in an inevitable risk of default.

- *"If you would have asked me two months ago, I would have said it's not as risky, because any company starting at first, developing a product, they know they have a contingency rate that they know they're going to lose for some time until they start making profit. But given the current circumstances, yes, it is risky."*

- Principal Product Manager, BNPL

One of Egypt's largest Fintech Companies, November 2023

When examining the current market conditions, a prevailing theme highlighted by experts is the heightened level of risk. As mentioned earlier, the Egyptian market has experienced some instability in recent years. In the context of increased demand, this lack of constraints and regulations regarding the extent of financial burden individuals can assume, or in simpler terms, the maximum monthly installment amount, is indeed perceived as risky.

- *"People are borrowing more. They will borrow much more and they will get stuck. They will borrow to pay back and then borrow to be able to get their groceries. And borrow to be able to go out or do whatever."*

- Product Manager,

Established Egyptian Fintech, November 2023

Expanding upon the risk highlighted elsewhere, it becomes evident that the risk materializes when individuals resort to continuous borrowing to address their debt obligations. This cycle of borrowing to repay existing debts, obtaining funds for daily expenses, and meeting other financial needs can lead to a situation where individuals become trapped in a perpetual cycle of debt. In simpler terms, the expert's insight underscores the potential risk of borrowers becoming ensnared in a cycle of borrowing without the means to break free.

- *“I’m delaying the default ratio. Because when the company board asks you what your default ratio is, you reply saying it's 2% or 3%. Which means the company’s policy is great and everything is going well.”*

- Senior Assessment Analyst, Credit Risk,

Egyptian Bank, December 2023

In the context of banking, such a strategy could be interpreted as a method for delaying the default rate. Facilitating additional financing for individuals to address their existing debt merely serves as a means for companies to postpone the inevitable, all the while disregarding the well-being of users and the long-term consequences of increasing their financial burden. This practice may create an illusion of sound financial policies and successful operations, but it ultimately neglects the welfare of users and the potential long-term repercussions of escalating their financial obligations.

6.2.5 Policy-Driven Approaches in Shaping the Future of the Market

In this section, we delve into the insights and recommendations provided by fintech experts regarding the future. They offer suggestions aimed at fostering a more secure and stable market environment that ensures the well-being of both financial institutions and the average user.

- *"I think the banks need to shift their focus towards an all-digital experience towards making the user more engaged to target users at a younger age"*

- Principal Product Manager, BNPL

One of Egypt's largest Fintech Companies, November 2023

Regarding improvements suggested for traditional banks, 9 out of 10 interviewees emphasized the importance of banks shifting their focus toward adopting a fully digital approach and enhancing the user experience. This transformation is seen as crucial to ensure the expansion and retention of the younger user segment. Fintech experts have highlighted simplification and a more user-centric approach as key strategies for traditional banks to remain competitive in a market increasingly dominated by emerging technologies.

- *"It is crucial that ValU and similar companies would calm down a little, banks are currently suspending their products because of the extremely unstable market situation. They should either apply a strong policy to be firmer than this, or the delinquency will increase a lot."*

- Senior Assessment Analyst, Credit Risk,

Egyptian Bank, December 2023

On the flip side, when discussing recommendations for fintech consumer banking platforms in the current economic environment, the prevailing sentiment can be summarized as a call for companies to exercise restraint and reduce their product offerings. Despite the challenging economic conditions, these companies do not view it as a reason to scale back or limit their lending activities due to potential risks. Instead, they perceive it as an opportunity to extend more loans and promote additional products. The rising cost of living has led people to be more willing to borrow to maintain their lifestyle or even enhance it. This raises ethical considerations about whether it is appropriate for businesses to further involve individuals in increasing levels of debt during such times.

- *"I think that with the current inflationary pressure that people are going through, I think if the FRA starts to apply more stringent regulation, it's going to make it harder for Egyptians to live, to buy products, to buy food even, and in my opinion, I think they know that it's too loose, and I think they know that it's, to some extent, a bubble."*

- Manager, Investor Relations,

One of Egypt's largest Investment Banks, December 2023

With that said, it wasn't long before one of the participants shared a perspective likening the situation to a potential bubble. When asked to elaborate on this comparison, they explained that companies continue to expand their consumer financing portfolios, increasing the volume of users. However, there is no assurance that this growth can be sustained or that these users will be able to meet their payment deadlines. What makes this observation even more intriguing is the suggestion that it may not necessarily be happening without the knowledge of the Financial Regulatory Authority (FRA). Rather, the FRA might be constrained from imposing further restrictions during a period of significant inflationary pressures. This discussion underscores the need for responsible lending practices, user-centric approaches, and ethical considerations as the industry continues to grow and adapt to changing economic conditions.

The conceptual framework's 'Market' and 'Regulatory Environment' components highlight Egypt's fintech market's promise and risk. Due to consumer demand and insufficient regulatory monitoring, fintech companies are growing rapidly, raising debt-burden and default problems. Fintech practices without strict checks on consumers' repayment capacities might lead to a spiral of debt with people borrowing beyond their means, say experts. Like a bubble, the Financial Regulatory Authority's (FRA) laxity and current economic difficulties may be fueling an unsustainable market growth. The warnings recommend a policy-driven recalibration focused on responsible lending and consumer protection to prevent financial crises and stabilize fintech.

Chapter 7: Conclusion

A significant shift in the global financial landscape is represented by the development of financial technology, or Fintech. Fintech has had a profound impact on the accessibility and provision of financial services, transforming the way financial services are utilized. Global events like the COVID-19 pandemic and the financial crisis of 2008 have spurred the emergence of Fintech and shown its promise as a flexible and robust alternative to conventional banking, thus accelerating this transformation. Government programs and tactical alliances have accelerated Fintech's development in nations like India, showcasing its potential to improve financial inclusion and revolutionize banking procedures. The availability of venture capital and the economic foundations of fintech are closely related, especially in developed economies with strong technology infrastructures, which have contributed to its emergence. Nevertheless, the rapid progress in technological fields presents regulatory obstacles and necessitates flexible policy adjustments. Nations across the globe have implemented a range of legislative actions, such as regulatory sandboxes and RegTech, to address the specific needs of the Fintech industry. These measures aim to strike a balance between consumer protection and promoting innovation. These legislative initiatives are a response to a global trend toward flexible and innovative business practices, which are crucial for handling the intricacies brought about by Fintech, including concerns about data security and financial stability.

The advent of fintech has brought about a transformative shift in consumer finance, making it more accessible to a wider audience. In addition, it disrupted traditional financial institutions and sparked substantial regulatory changes. The incorporation of consumer financing has provided opportunities for individuals and small businesses who were previously marginalized to gain access to financial services, thereby making a positive impact on economic development and poverty alleviation. The dynamic between banks and Fintech startups involves a mix of competition and collaboration, mutually pushing one another towards innovation and enhanced customer service. The rise of BigTech in the Fintech industry adds another layer of complexity to the current landscape, as it introduces a variety of financial products and heightens competition. This quick expansion does, however, come with hazards, especially in the consumer lending sector where low borrowing restrictions can result in debt accumulation. This emphasizes the necessity of ethical lending practices and well-balanced regulatory frameworks.

Thanks to developments in digital wallets, digital banking, and mobile banking, the Fintech industry is growing significantly in Egypt. The growth observed is in line with Egypt's overall objectives of digital transformation, which encompass financial inclusion and the establishment of a knowledge-driven economy. The policy landscape in Egypt has played a crucial role in shaping the trajectory of the Fintech sector, as it becomes more receptive to innovation. The interest rate policies, debt-burden, and credit management strategies implemented by the Central Bank of Egypt have had a notable impact on digital lending and savings platforms. In light of recent developments in the investment landscape, particularly the increase in private equity investments and international funding, Egypt is emerging as a prominent Fintech hub in the MENA region. The growth in the sector is bolstered by the success of Egyptian Fintech startups, which are being acknowledged for their innovative solutions and playing a significant role in the sector's rapid expansion.

Through a thorough examination of the Fintech industry on a global scale and specifically in Egypt, it becomes evident that this sector is not only flourishing but also significantly transforming the landscape of financial services and the way consumers interact with the banking system. The interplay between technological progress, economic stability, and regulatory flexibility is crucial for the success of Fintech. Egypt's adoption of Fintech reflects the worldwide movement towards technological advancement and financial inclusivity. The country's policy adaptations, investment in digital infrastructure, and support for innovative startups are crucial measures in achieving its Vision 2030 objectives. The ongoing evolution of the Fintech sector brings forth a range of opportunities and challenges. It presents the potential for enhanced financial inclusion, efficiency, and customer-centric services. Additionally, it highlights the intricate nature of data security, ethical lending practices, and the importance of strong regulatory frameworks. The complex interaction of these factors will determine the future direction of Fintech, both in Egypt and on a global scale.

With a market undergoing a rapid development, the research provides a thorough account of Egypt's fintech scene. The rise of fintech has been propelled by the widespread use of digital payment methods and the growing presence of fintech companies. The growth we are witnessing is not just a result of technological advancements, but also a significant cultural transformation that is reshaping how consumers engage with their finances. Fintech has gained significant traction among the younger generation, especially those who are well-versed in technology. It places a strong emphasis on the easy, fast, and convenient execution of financial transactions. Nevertheless, the rapid increase of fintech usage and its attractiveness present certain difficulties. Fintech companies must navigate the intricate regulatory environment, while consumers face the challenges of limited financial knowledge and the complexities of digital finance.

Upon careful consideration, I have observed a landscape characterized by constant and impactful transformation, yet requiring careful monitoring and supervision. The advancement of financial technology has unquestionably made financial services more accessible to a wider range of people, marking the beginning of a new period characterized by inclusiveness and convenience. However, this swift rise is not devoid of its difficulties. The contrast between the flexibility of fintech and the inflexibility of the traditional banking industry has revealed opportunities for innovation, but has also exposed deficiencies in safeguarding consumers, promoting financial knowledge, and maintaining ethical lending standards.

Egypt's deliberate adoption of fintech, in line with its Vision 2030, demonstrates a wider dedication to digital modernization and the promotion of financial access for everyone. Nevertheless, as this thesis has examined, the course of fintech's expansion is closely connected to the strength of legislative frameworks that regulate it. The results obtained from comprehensive interviews and statistical analysis emphasize the crucial significance of regulation in maintaining a harmonious ecosystem where innovation flourishes while safeguarding consumer well-being and financial stability.

Egypt's fintech scene is undoubtedly at a turning point when one considers the conclusions drawn from this study. Technology has the potential to greatly benefit consumers and stimulate economic growth. However, there is a looming threat of uncontrolled growth, which carries potential concerns that could threaten the long-term viability of the business. The concept of duality forms the core of my final reflections.

As a scholar specializing in policy, I am compelled by the necessity of creating regulatory frameworks that are both responsive and forward-thinking. The fintech narrative in Egypt goes beyond the simple adoption of technology. It serves as evidence of how policy may influence the development of the economy and promote social fairness. The suggestions described in this thesis, which encompass financial literacy, ethical lending, cybersecurity, and digital banking, provide a detailed plan for effectively navigating the intricacies of the fintech ecosystem.

To summarize, the exploration of Egypt's fintech development has been enlightening. It has provided a perspective to examine the wider consequences of fintech on society, governance, and the economy. The delicate balance between promoting innovation and guaranteeing consumer protection is a critical concern of our time. As Egypt progresses in the field of fintech, the findings of this research highlight the importance of flexible, inclusive, and future-oriented policies. Fundamentally, the future of fintech in Egypt, as well as on a worldwide scale, is not solely about technology progress, but rather a manifestation of intelligent policymaking, ethical deliberation, and societal benefit.

7.1 Policy Recommendations

1. **Implement Educational Programs on Financial Literacy:**

   Given the issues of financial literacy highlighted in the thesis, there is a need for policies focused on educational programs. These programs should aim at enhancing the understanding of fintech services, especially regarding the terms of use, risk of over-indebtedness, and the importance of maintaining a healthy Debt-Burden Ratio (DBR). Such educational initiatives could prevent consumers from engaging in financial practices that lead to unsustainable debt levels, as indicated by the concerns of professionals in the study.

2. **Regulate and Monitor Fintech Lending Practices:**

   The data points to the lack of stringent regulations on the DBR and the potential misuse of fintech lending services. Policymakers should introduce regulations that require fintech companies to assess a borrower's ability to repay before extending credit, through means such as validating income, similar to the practices of traditional banking. This could help mitigate the risk of default and protect consumers from falling into a debt trap.

3. **Strengthen Cybersecurity and Trust in Fintech Services:**

   The trust and security of fintech services were areas where traditional banks still had an advantage. Policies should focus on strengthening the cybersecurity infrastructure of fintech services and building trust among users, particularly the younger demographic who are keen on adopting these services but may hold reservations about their security.

4. **Encourage Ethical Lending During Economic Instability:**

   As inflation and economic instability have made fintech solutions more appealing for maintaining lifestyles, policy recommendations should encourage ethical lending practices. This means fintech companies should be discouraged from taking advantage of consumers' financial needs during economic hardships, as this can lead to a bubble, as suggested by some experts in the interviews.

5. **Promote Digitization and Ease of Access in Banking:**

   Reflecting on the insights that suggest traditional banking is perceived as bureaucratic and less user-friendly, policies should encourage banks to digitize their services and streamline processes. This approach aligns with the preference for ease of use and rapid transactions that fintech solutions offer, as highlighted by the positive experiences of consumers with fintech compared to traditional banking.

   -

These policy recommendations relate directly to the findings of the study and the insights from expert interviews, addressing the main concerns and preferences expressed by consumers and professionals within the Egyptian financial landscape. They aim to enhance consumer protection, promote financial stability, and foster a more inclusive and trustworthy fintech ecosystem.

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Annex 1 – Qualitative Semi-Structured Interviews

English	Arabic
How do you think customers perceive the ease of use and reliability of fintech services compared to traditional banking services?	برأيك كيف يدرك العملاء سهولة استخدام وموثوقية خدمات التكنولوجيا المالية مقارنة بالخدمات المصرفية التقليدية؟
What are the most valued features of fintech applications among Egyptian consumers, and why?	ما هي أهم ميزات تطبيقات التكنولوجيا المالية بين المستهلكين المصريين ولماذا؟
How does the experience of using fintech services differ from traditional banking?	كيف تختلف تجربة استخدام خدمات التكنولوجيا المالية عن الخدمات المصرفية التقليدية؟
What barriers or challenges do consumers face when adopting fintech services?	ما هي العوائق أو التحديات التي يواجهها المستهلكون عند اعتماد خدمات التكنولوجيا المالية؟
Can you share experiences where fintech services provided financial solutions that traditional banks did not adequately meet?	هل يمكنك تبادل الخبرات حيث قدمت خدمات التكنولوجيا المالية حلولاً مالية لم تلبيها البنوك التقليدية بشكل كافٍ؟
How do fintech companies navigate the regulatory landscape in Egypt, and what challenges do they face?	كيف تتنقل شركات التكنولوجيا المالية في المشهد التنظيمي في مصر، وما هي التحديات التي تواجهها؟
What are your suggestions for policy changes regarding the debt-burden ratio?	ما هي اقتراحاتك لتغييرات السياسة فيما يتعلق بنسبة عبء الديون؟
What lessons do you think can be learned or adapted by traditional banks?	ما هي الدروس التي تعتقد أنه يمكن تعلمها أو تكييفها من قبل البنوك التقليدية؟

Annex 2 – Quantitative Questionnaires

English	Arabic
Have you used fintech consumer financing facilities before?	هل استخدمت تسهيلات تمويل المستهلك عن طريق التكنولوجيا المالية من قبل؟
Which fintech consumer financing apps/platforms have you previously used?	ما هي تطبيقات التكنولوجيا المالية التي استخدمتها سابقا؟
How satisfied are you with fintech applications compared to traditional banking services? (Scale of 1 -5)	ما مدى رضاك عن تطبيقات التكنولوجيا المالية مقارنة بالخدمات المصرفية التقليدية؟ (مقياس من 1-5)
How much do you trust the security and privacy measures in fintech applications compared to traditional banking? (Scale of 1 -5)	ما مدى ثقتك في إجراءات الأمان والخصوصية في تطبيقات التكنولوجيا المالية مقارنة بالخدمات المصرفية التقليدية؟ (مقياس من 1-5)
Did you find that fintech applications addressed a financial need that traditional banks did not meet? If yes, could you specify?	هل وجدت أن تطبيقات التكنولوجيا المالية عالجت حاجة مالية لم تلبيها البنوك التقليدية؟ إذا كانت الإجابة بنعم ، هل يمكنك التحديد؟
How easy or difficult do you find using fintech applications compared to traditional banking services? (Scale of 1 -5)	ما مدى سهولة أو صعوبة استخدام تطبيقات التكنولوجيا المالية مقارنة بالخدمات المصرفية التقليدية؟ (مقياس من 1-5)
What's the likelihood of you using consumer finance facilities now vs. if I had asked you 5 years ago?	ما هو احتمال استخدامك للتسهيلات المالية الاستهلاكية الآن مقابل ما إذا كنت سألتك قبل 5 سنوات؟
What's the maximum percentage of income you're comfortable paying for financing?	ما هي النسبة المئوية القصوى من دخلك الذي تفضل دفعها للتمويل؟
What are the categories of items you'd normally choose to be financed?	ما هي المنتجات التي عادة ما تختار أن يتم تمويلها؟
Demographics: Age, Gender, Occupation, Monthly Family Income, Cars owned, Highest Education Degree	التركيبة السكانية: العمر ، الجنس ، المهنة ، دخل الأسرة الشهري ، السيارات المملوكة ، أعلى درجة تعليمية