# Gender Gap in FinTech – How to Expand the Boundaries of Women's Representation and Leadership in the FinTech Ecosystem

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**ABSTRACT** 

This study provides a comprehensive and systematic review of financial technology (FinTech), with

a specific focus on the representation of women and women leadership in the emerging FinTech

sector. Through a thorough examination of the current state of FinTech inclusion, the research

identifies and analyzes the existing gender gap, shedding light on the factors contributing to the

underrepresentation of women and suggesting ways to bridge this gap.

Utilizing a systematic research framework, the review synthesizes findings from selected studies,

pinpointing key areas in the literature that underscore the persistent gender gap. While

acknowledging recent efforts to address this disparity, the study critically explores the positive

impact of FinTech innovation on the finance industry. Simultaneously, it addresses the shortcomings

and challenges hindering equitable representation.

The review additionally delves into the potential of FinTech as a catalyst for closing the gender

gap, enhancing entrepreneurial skills, and improving women's access to finance. It advocates for

more in-depth research, particularly focusing on the often-unobservable aspects, such as gender

discrimination within the FinTech landscape.

In conclusion, by identifying gaps in the current literature, this review serves as a foundation for

future research endeavors aimed at fostering inclusivity and gender equity in the evolving realm

of FinTech.

**Keywords:** FinTech, gender gap, financial inclusion, gender discrimination

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#### **CHAPTER 1**

#### 1.0 INTRODUCTION

In eons past, women as front-line professionals were a never-before-seen phenomenon; as a matter of fact, it was a taboo, no thanks to the prevailing social barriers of that time and a repressive socio-cultural regime. This tide of public opinion began to turn against this repressive socio-cultural regime as societies and cultures began to enthrone the ideals of equity and fairness. Thus, it cannot be gainsaid that women have aggressively pushed to shatter glass ceilings in different spheres of human endeavor, breaking barriers and stepping into diverse professional roles. In the United States, for instance, the participation of women in the labor force has displayed significant growth since the early 20th century. However, this progress experienced a slowdown after 1990, a trend noted by Nobel laureate Claudia Goldin in her 2006 study. Meanwhile, in Canada, recent data from a 2023 report by Statistics Canada revealed remarkable achievements for women. The participation rate of core-aged women (aged 25 to 54) reached an all-time high at 85.1%, accompanied by an employment rate of 81.6%, marking unprecedented milestones in the workforce (Statistics Canada, 2023).

Despite this notable progress in women's labor force participation, persistent challenges remain, notably the enduring gender gap and the limited representation in leadership roles. This discrepancy is particularly pronounced in sectors like finance and technology. The representation of women in FinTech, in particular, appears alarmingly low, indicating a substantial gender disparity within this innovative and rapidly growing industry. Addressing these disparities is not just a matter of equality; it's imperative for fostering a diverse, inclusive, and thriving workforce that leverages the full spectrum of talent and creativity.

To say that the glass ceiling is very much present in the FinTech industry would be an understatement, as the gender problem is well-documented in the media. Moreover, systematic research on the absence of women in this forward-looking industry is largely lacking, leaving the magnitude of this challenge unexplored. Through a systematic literature review, this research aims to identify the features of the FinTech ecosystem and the barriers faced by woman-led FinTech companies. Additionally, the study will explore potential strategies to enhance women's representation in this industry sector.

My study is important for the following reasons. First, it addresses a critical issue in contemporary society: the gender disparity in the workplace, particularly in sectors like finance and technology. By illuminating the challenges faced by women in these fields, my research can act as a catalyst for change, sparking conversations and actions aimed at fostering inclusivity. Second, the economic implications of my research are significant. Promoting gender diversity in pivotal industries such as FinTech can drive innovation and enhance overall productivity, contributing to economic growth (Saima et al., 2022; Teruel & Segarra, 2017). Moreover, my findings offer valuable insights for policymakers for crafting targeted interventions and policies to promote gender equality. Additionally, my research will contribute to social progress by challenging societal norms and inspiring awareness. It will encourage a collective effort to dismantle barriers and create workplaces where opportunities are not limited by gender.

Businesses can leverage my findings and conclusion to implement more inclusive practices, fostering environments where women are not only welcomed but also empowered to excel professionally. In essence, my research illuminates the path toward a more equitable and prosperous future for women in the workforce.

#### 1.1 Research Problem

The world of finance and technology has witnessed rapid growth in the last decade, in which women have played a pivotal role, especially in countries of the Global South. FinTech (financial technology) is a fast-growing and innovation-driven industry poised to change the way consumers of financial services make decisions and interact with their financial institutions. This anticipated paradigm shift, together with the growing integration of financial markets across the globe, has prompted institutions to think more globally in order to address the needs of an increasingly diverse consumer base.

A considerable amount of evidence demonstrates that diversity and inclusiveness drastically improve creativity and innovation in a business operating in a highly competitive market (Teruel & Segarra, 2017). To develop financial services susceptible to appeal and be accessible to a broader market, businesses are facing the urgent need to hire more diverse staff at all levels.

In 2019, the FinTech industry attracted \$215.4 billion in investments globally, up from \$4 billion in 2012 (Statista, 2021), with the Americas attracting most of these investments. The global FinTech adoption rate reached 64% in 2019, with China and India leading the market in terms of FinTech adoption at an 87% rate (EYGM, 2019). In Canada, the FinTech adoption rate has increased from 8% in 2015 to 50% in 2019, and the pandemic has further strengthened this trend.

For an industry widely touted as revolutionary and disruptive with the potential to significantly increase financial inclusion, it still fails to deliver when it comes to the representation of women, multiple statistics pointing to a severe gender gap. According to a report by the FinTech Diversity Radar, women are underrepresented in top business and technical roles at global FinTech organizations and only "1.5% (16) of 1,032 best funded private FinTech firms globally are founded solely by

women and receive just 1% of total FinTech venture funding" (Kenyon, 2021). This is not surprising, given that woman-led startups received just 2.3% of global venture capital funding in 2020 (Bittner & Lau, 2021). Women represent only 14% of FinTech boards compared to 23% in the banking sector in 2019. In Atlantic Canada, women-headed companies represented only 14% of all innovation-driven startups and attracted just 3% of the equity investment in 2020 (Moreira, 2021).

Globally, only 12% of the FinTech workplace is represented by women, and 75% of them are in HR and compliance, not in engineering or product development roles (Luthra et al., n.d.). While in the U.K., a country that has one of the most developed FinTech sectors in the world, almost half of the workforce is female, women represent only 29% of the FinTech workforce and 17% of senior FinTech roles (Brett, 2021).

Factors that contribute to this gender gap include the difficulty of getting females into STEM-related studies, the underrepresentation of women in financial services and the tech sectors, barriers in obtaining venture funding, the wage gap, and a toxic male-dominated culture (Clempner et al., 2020).

An equally worrisome gap exists in the FinTech customer base despite the sector's potential to increase financial inclusion. 1.1 billion women in the developing world have no access to financial services (MetLife Foundation, 2015). The International Telecommunication Union has reported that, on average, 12% fewer women than men worldwide are digitally connected, and this figure increases to 31% in developing economies (Teigland, 2017). According to the GSMA (2019), women in low- and middle-income countries are 10% less likely than men to own a mobile phone, and 23% less likely to use mobile internet, which has an impact on their access to FinTech services

and their financial independence. The pandemic has further accentuated the negative consequences of the digital gender gap. While there are many organizations working to increase women's representation in FinTech, these startling statistics indicate that there is still a lot of room to grow until the industry achieves a level playing field.

#### 1.2 Research Question

This research study seeks to answer a number of questions: In particular, the following research questions form the heart of this thesis: what the major features of the FinTech ecosystem are; what the gender gap looks like considering multiple dimensions of the industry such as the workforce, entrepreneurs, and investors; what barriers women face in accessing leadership roles; what possible ways exist for increasing inclusion of women in FinTech.

## 1.3 Research Methodology

The research methodology employed in this study is grounded in a systematic research approach, aiming to delve into the intricate dynamics of women's representation within the FinTech sector. Specifically, the research will concentrate on investigating FinTech and women's representation and leadership, scrutinizing the historical evolution of the FinTech industry with a keen focus on the significant contributions and challenges faced by women leaders. Furthermore, this study will conduct extensive literature reviews, encompassing the works of notable authors and researchers who have explored the multifaceted aspects of this topic.

This study will also embark on a comprehensive exploration of potential solutions. It will seek to bridge the gender gap in FinTech by identifying strategies, initiatives, and best practices implemented globally. The objective is not only to illuminate the existing disparities but also to propose actionable recommendations that can foster an environment where women can thrive as leaders within the FinTech industry.

#### 1.4 Structure of the Thesis

This thesis is meticulously organized into five chapters, each dedicated to addressing the profound research questions posed.

#### **Chapter 1: Introduction and Research Framework**

Chapter 1 lays the foundation for the study by presenting a comprehensive background, delineating the problem's context, and articulating the research questions that drive the inquiry. This section provides an essential overview of the thesis, outlining the research problem, research questions, motivation and a detailed research methodology adopted to explore the intricacies of the FinTech gender gap.

#### **Chapter 2: Literature Review**

Chapter 2 provides an extensive exploration of the existing body of knowledge on the subject. This chapter critically reviews literature concerning FinTech, and women representation in the FinTech industry. It scrutinizes the composition of women in leadership roles within FinTech companies. Furthermore, it analyzes the performance differences between women leaders and their male counterparts in FinTech startups.

#### **Chapter 3: Methodology**

Chapter 3 delineates the research methodology employed in this study. It provides an in-depth account of the systematic research approach undertaken by researchers and authors.

#### **Chapter 4&5: Conclusion and Future Recommendations**

The final chapter serves as the conclusion of the thesis. It synthesizes the key findings from the research, offering insightful analyses of literature reviewed. This chapter also critically reflects on the limitations of the study and proposes areas for future research. It concludes with comprehensive recommendations, offering practical insights for bridging the gender gap in FinTech and fostering

a more inclusive environment within the industry.

#### **CHAPTER 2**

#### 2.0 LITERATURE REVIEW

Digital transformation and emerging technologies have significantly impacted most industries. In financial services, the FinTech phenomenon that started following the economic turmoil worldwide in 2008 with the entry of new players (i.e., FinTech startups), which challenged banks by providing better and cheaper options for consumers, led to the birth of an entire industry rapidly expanding both in terms of size and impact (Moro-Visconti & Moro-Visconti, 2021). FinTech is known for offering customer-centric, innovative solutions to financial problems. Given that FinTech is a portmanteau of "finance" and "technology"—two traditionally male-dominated industries, it is perhaps not surprising that it suffers from a gender diversity issue. Women are underrepresented at all levels in the FinTech workforce, among FinTech entrepreneurs and investors, and in the FinTech user base, which led Brett (2021) to describe FinTech as "an industry founded for men, run by men, making products for men."

While media reports of the gender gap abound, studies on this gender gap in the FinTech industry are lacking in academic literature. Thus, a deeper understanding of women representation in the FinTech industry and the barriers they face is key to leveling things up.

#### 2.1 What Is FinTech?

FinTech can be understood as the "use of technology to provide new and improved financial services" Thakor (2020, p. 1), an umbrella term for technologies powering innovation in financial services (BI Intelligence, 2018). The Financial Stability Board (2017) defines FinTech as "technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial

services." FinTech is characterized by an integration of finance, technology management, and innovation management (Leong & Sung, 2018), which is similar to the definition provided by Arner (2015). A broad typology of FinTech consists of cybersecurity, mobile transactions, data analytics, blockchain, peer-to-peer, robo-advising, and the Internet of Things (Chen et al., 2019). Based on the lack of consensus on the definition of FinTech, Schueffel (2016) was concerned and decided to carry out research on finding a scientific definition of FinTech. He argues that even after more than 40 years of its use in practice and literature, there is no single agreed-upon definition of FinTech. He exclaimed that the process of establishing a shared language for business phenomena has always been challenging, and FinTech is no exception. According to Google, the term FinTech receives monthly, on average, approximately 201,000 Google searches worldwide (Google, 2016). To address this issue, Schueffel reviewed over 200 scholarly articles spanning in excess of 40 years in order to craft a distinct and succinct definition of FinTech with broad applicability. Using semantic analysis and analyzing 13 peer-reviewed definitions, Schueffel concludes that FinTech is a new financial industry that utilizes technology to enhance financial activities.

From disrupting services typically offered by incumbents such as car insurance or foreign exchange trading to creating new services such as peer-to-peer lending, and mobile-phone payments made possible by new technologies, the FinTech industry is among the fastest-growing worldwide (EYGM, 2019; Statista, 2021).

#### 2.2 Evolution of FinTech

Lee and Shin (2018, p. 36) draw a connection between the origins of FinTech and the diffusion of the internet since the 1990s. They highlighted the crucial role played by the expansion of the

smartphone user base in the mid-2000s, which facilitated the expansion of mobile finance, encompassing services like mobile payment and mobile banking as an extension of e-finance. Financial institutions allowed customers not only to access bank account information but also to conduct transactions, such as bill payments and money transfers, via their mobile devices. The combination of e-finance, internet technologies, social networking services, social media, artificial intelligence, and big data analytics gave rise to FinTech innovation after the global financial crisis in 2008. FinTech startups distinguished themselves from traditional financial firms by offering personalized niche services, data-driven solutions, fostering an innovative culture, and maintaining a nimble organizational structure. While FinTech is often perceived as a threat to traditional financial firms, it also presents substantial opportunities for these firms to gain a competitive edge over their rivals.

Moreover, Lee and Shin (2018) further emphasize that major financial firms have recognized the significance of FinTech and are formulating strategies to compete, coexist, and collaborate with FinTech startups. The FinTech ecosystem comprises five essential components: FinTech startups (encompassing payment, wealth management, lending, crowdfunding, capital market, and insurance FinTech companies); technology developers (including big data analytics, cloud computing, cryptocurrency, and social media developers); the government (involving financial regulators and legislature); financial customers, (consisting of individuals and organizations); and traditional financial institutions (encompassing traditional banks, insurance companies, stock brokerage firms, and venture capitalists).

Similarly, Arner et al. (2015) found that the term "FinTech" gained widespread prominence and made the transformation of the financial industry apparent to the public only in 2014, as indicated by a basic search on Google Trends. They argue that FinTech is not a novel development for the

financial services industry. Instead, its roots trace back to the late 19th century with the introduction of the telegraph and successful transatlantic cables, laying the groundwork for financial globalization. The modern evolution of FinTech started with Barclays Bank introduction of the Automatic Teller Machine (ATM) in the UK in 1967, revolutionizing banking by providing convenience and reducing the need for in-person visits.

Furthermore, the financial services industry has long been a significant purchaser of information technology (IT) products and services worldwide, spending over US\$197 billion in 2014. This trend dates back to the mid-1990s when the financial services industry became the largest purchaser of IT, a position it continues to hold today. This enduring relationship between finance and IT is expected to continue, with the industry projected to double its IT spending, partially due to the modern evolution of FinTech.

Additionally, FinTech encompasses the entire range of services and products traditionally provided by the financial services industry, extending beyond specific sectors or business models like peer-to-peer (P2P) lending. It covers a broad spectrum of financial services and products that leverage technology to enhance efficiency and accessibility for consumers and businesses. Arner and his colleagues (2015) further identify three distinct eras of FinTech evolution: FinTech 1.0 (1866-1967) when finance remained primarily analog; FinTech 2.0 (1967-2008) marked by the transformation of finance into a digital industry through advancements in digital technology for communications and transactions; and FinTech 3.0 (post-2008) characterized by the rise of startups and technology companies directly delivering financial products and services to businesses and consumers. Additionally, they highlight FinTech 3.5, driven by the need for development, addressing inefficiencies in the existing financial system, and the rapid expansion of mobile technology. Their research concludes by noting that regulators are adapting their approaches to support market

developments while ensuring stability and consumer protection. Although they briefly mention the possibility of international standardization in FinTech regulation, it is considered premature, as more experimentation and innovation are required to optimize benefits and manage risks effectively.

Similarly, Alt et al. (2018) share a similar viewpoint in their discussion on the evolution of FinTech with Arner and his colleagues, but their main contribution lies in structuring the FinTech-induced transformation of the financial industry. They present a framework that categorizes FinTech into subdomains: banking (BankTech), insurance (InsurTech), and regulations (RegTech) at three transformation levels: internal, network, and external. They emphasize that RegTech startups focus not only on compliance but also on identity management, risk management, regulatory reporting, and transaction monitoring.

#### 2.3 Gender Gap In FinTech and Leadership

It has been established that the FinTech industry faces a significant gender diversity challenge. The study by Brett in 2021 further substantiates this claim. The research identifies three interconnected challenges related to gender diversity within the sector. First, there is a notable lack of female representation within FinTech companies. This issue is further compounded by a related concern: the scarcity of female founders or leaders in FinTech. Together, these challenges clearly depict an industry predominantly founded and led by and tailored for men.

This trend was further corroborated by a study conducted by Startup Genome, an independent research group assessing female founders globally. The study spanned various regions, including Asia, North America, Europe, and Africa, among others, and involved 5,469 respondents across 67 global ecosystems from September 2016 to November 2022. The findings reveal a stark

gender disparity, with only 31% reporting the presence of at least one female founder. Calculating the average proportion of female founders within these ecosystems yields a mere 15% (Stefanuto, 2023). Furthermore, actors contributing to this gender gap include the difficulty of getting females into STEM-related studies, the underrepresentation of women in financial services and the tech sectors, barriers in obtaining venture funding, the wage gap, and a toxic male-dominated culture (Clempner et al., 2020). Equally worrisome, a similar gap exists in the FinTech customer base despite the sector's potential to increase financial inclusion.

While there are many organizations working to increase women's representation in FinTech, these startling statistics indicate that there is still a lot of room to grow until a level playing field is reached. A study conducted by Čihák and Sahay (2018) reveals that women hold less than 2 percent of chief executive officer positions in financial institutions and make up less than 20 percent of executive board members. The representation of women on the boards of banking-supervision agencies is similarly low, averaging just 17 percent in 2015. Additionally, regional variations in the presence of women in banking leadership roles were considerable, with Sub-Saharan African countries displaying the highest shares of female banking executives and Latin America and the Caribbean showing the lowest, while advanced economies fell in between.

Further substantiating their point, a recent industry-specific analysis at the beginning of 2021 showed that women in North America continue to be significantly underrepresented in the financial services workforce, particularly at the senior management level and above. An analysis of data from the Women in the Workplace report by McKinsey in collaboration with LeanIn.Org indicates a "broken rung" in the career ladder, where women face significant barriers at the first step from entry-level to manager (Ellingrud et al., 2021). This disparity results in considerable inequality at the top. The leaky pipeline for women's progression in financial services remains a critical issue.

In a similar study, Bittner and Hallock (2001) investigate gender differences among top executives in a substantial dataset of U.S. public corporations. They used the ExecuComp dataset, which provided information on the five highest-paid executives in numerous U.S. firms for the years 1992–97, to analyze the gender compensation gap at the executive level. Out of the sample, women constituted approximately 2.5% and earned around 45% less than their male counterparts. However, up to 75% of this compensation gap could be attributed to the fact that women were more likely to manage smaller companies and held fewer CEO, chair, or company president positions. The unexplained portion of the gap was reduced to less than 5% when factoring in factors such as the younger average age and lower average seniority of female executives. These findings do not eliminate the possibility of gender discrimination through factors like gender segregation or unequal promotion.

All of this, according to Čihák and Sahay (2018), reveals that women are underrepresented at all levels of the global financial system, encompassing positions as depositors, borrowers, bank board members, and regulators. Interestingly, Čihák and Sahay's research highlights that greater inclusion of women in using, providing, and regulating financial services would extend beyond addressing gender inequality. It would also foster greater stability in the banking system, enhance economic growth, and potentially contribute to more effective monetary and fiscal policies.

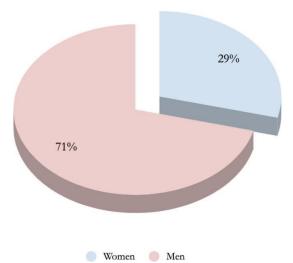


Figure 1 The pie chart shows the percentage of women employed in the FinTech industry compared to the percentage of men [Source: NS Tech; retrieved from Tokar (2021)]

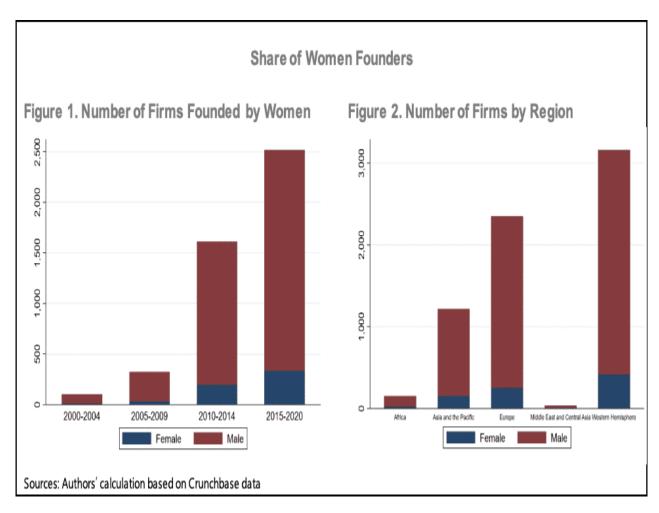


Figure 2 Share of women founders- IMF Women in FinTech report 2022 [Source: IMF Women in FinTech report 2022]

#### 2.4 Factors Affecting Women Leadership and Representation

The gender gap is influenced by a range of personal, institutional, and structural factors. Due to limited information on factors causing underrepresentation of women in FinTech, this review explores the likely factor that affects women representation in the financial industry and in general. In their article exploring the realm of corporate business and the concept of the glass ceiling, Berry and Franks (2010) thoroughly examined the experiences of contemporary women who have lived and reflected on corporate leadership. It becomes evident that women have made modest progress in attaining positions of power and influence. Utilizing a review method, their findings emphasize that the most significant deterioration of the corporate structure is attributable to certain factors. These include the failure to include and promote women into leadership ranks, the lack of real policy-making power for women, the absence of a female-friendly environment, the lack of legitimate and ongoing mentoring systems for women, and the failure to recognize the unique and valuable perspectives that women bring to the table.

#### Less access to funds

Access to capital is crucial for starting and growing businesses, and in the finance industry, it plays a significant role in career advancement. The underrepresentation of women in FinTech, particularly in leadership roles and high-level positions, can indeed be linked to a lack of access to funds. For instance, according to Forbes, female entrepreneurs have a tough time raising funds. Women-led startups received just 2.3% of venture capital funding in 2020. Singh and Dash (2021) also conducted a comprehensive study focused on accessing credit for women-owned ventures. To gain a comprehensive understanding, they reviewed and analyzed approximately 125 articles, aiming to provide an overview of the extent to which financial availability influences woman-owned businesses. Their analysis covered existing and relevant studies that examined gender biases, deep-

rooted prejudices, and differences in cost and conditions observed by women-owned enterprises when seeking credit, which plays a vital role in the success of their businesses. The research revealed that woman-owned firms face certain constraints similar to their male counterparts; however, they also encounter numerous challenges due solely to their gender.

These gender-specific challenges in accessing credit could contribute to the underrepresentation of women both in the FinTech industry and in top-level management positions. By addressing these challenges and ensuring equitable access to financial resources, the finance industry can foster greater gender diversity and inclusivity, leading to a more thriving and dynamic sector.

#### **Gender discrimination**

Heilman (2001) posited that the underrepresentation of women in higher positions within organizations can be attributed to gender bias in performance evaluations. According to this explanation, gender stereotypes and the resulting expectations regarding women's traits (descriptive) and behavior (prescriptive) can lead to their performance being undervalued, lack of credit for their achievements, or even penalization for displaying competence, all contributing to the scarcity of women in the industry. The impact of gender bias on evaluations in work settings, she argues, means that a woman's competence alone may not guarantee her advancement to the same organizational level as a man with equivalent performance. Moreover, STEM-related programs being perceived as more suitable for men may further exacerbate this gender disparity.

#### Lack of mentor

The belief in the attainability of one's dreams is often strengthened by witnessing others who have achieved similar goals. Perera et al. (2021) conducted a comprehensive study to explore the barriers hindering women's representation in private sector finance organizations in Sri Lanka. To analyze this issue, the researchers applied Ragins and Sundstrom's (1989) four levels of analysis

as a theoretical framework. Employing thematic analysis, they examined how individual, interpersonal, organizational, and social factors influence the participation and advancement of women in the workforce.

Among the factors discovered to contribute to the underrepresentation of women in top leadership roles, the study identified a lack of mentors and role models as a significant obstacle. Additionally, other factors encompassed the perceived glass ceiling, individual role choices, limited access to role models and mentoring, restricted networking opportunities, and socio-cultural norms. In addition, factors like work-life balance, occupational segregation, and family commitments may cause this gap. Furthermore, it is important to better acknowledge the potential presence of unobserved factors, such as discrimination, which could further contribute to the gender disparity in FinTech.

# 2.5 Research Studies Demonstrating the Correlation Between Gender Diversity and Financial Performance

Despite sustained efforts to increase female representation in executive roles, the lingering gender disparity in leadership remains a formidable challenge, as highlighted by Koland (2015). The possession of necessary qualifications and the expression of similar aspirations, women face a slow trajectory in ascending to executive roles, with projections suggesting it may take up to 70 years to narrow the leadership gender gap.

Research underscores that businesses initiated or co-initiated by women excel on various fronts, outperforming those started by men. Forbes (2023) emphasizes that female founders often establish enterprises with higher revenues, greater job growth, larger goals, and superior execution, despite encountering fundraising challenges. This observation aligns with the positive effects of

women in top management, as revealed by Smith et al. (2006)'s study, which persists even after accounting for various firm characteristics and causality direction, with the qualifications of female top managers playing a crucial role.

Shifting the focus to innovation, Lipovka et al. (2021)'s study in Asia indicates that women and men managers share a positive attitude toward innovations. While both genders express optimism, women outperform men in adopting innovations and fostering employee innovation. This implies that involving more women managers in innovation can have a lasting impact on subordinate satisfaction, dedication to the organization, and performance.

When applying these insights to the dynamic and innovative FinTech sector, the scarcity of women in technology reveals some profound consequences. Stefanelli et al. (2023)'s study on female CEO and FinTech performance, using Italian FinTech companies from 2017–2019, indicates that FinTech firms benefit from good practices in board composition favoring gender inclusion and diversity.

Addressing the gender gap in leadership, recognizing the strengths of women in business, and promoting gender diversity in innovation are crucial steps toward fostering a more inclusive and successful business environment, especially in dynamic sectors like FinTech. These findings underscore the necessity for organizations to adopt practices that promote gender equality and diversity, not just for social reasons but also for the tangible benefits they bring to performance and innovation.

# 2.6 Can FinTech Reduce Gender Gap Gender Inequality?

A limited number of studies have investigated the issue of the underrepresentation of women in the FinTech industry. Most of these studies have focused primarily on examining how both traditional

financial institutions (known as incumbents) and emerging FinTech companies (referred to as FinTech entrants) aspire to provide innovative products that better align with consumer needs, all while reducing costs by harnessing new technology (Arner et al., 2015; Thakor, 2020). However, these studies have not sufficiently emphasized the potential of FinTech to enhance financial inclusion and narrow the gender gap in accessing financial services. Nevertheless, only a handful of studies have delved into the potential of FinTech to bridge the gender gap and address the underrepresentation of women in the FinTech industry.

One notable study conducted by Loko and Yang (2022) focused on the relationship between FinTech, female employment, and gender inequality. Their findings indicate that FinTech adoption could have a positive impact on female employment and contribute to reducing gender inequality. Specifically, they observed that a 1% increase in FinTech usage was associated with a substantial 1.4 percentage points increase in the number of female workers and a 0.4% increase in the ratio of female to total employees in the sample firms. Given that the average percentage of female employees in the sample was only 32%, these results hold significant economic importance.

Furthermore, the study highlighted that the positive effects of FinTech on female employment were more pronounced in countries with good governance, sound laws, and robust regulations. In contrast, the benefits were relatively weaker in countries with lower institutional quality.

#### 2.7 Theoretical Framework

One theoretical framework to explain the barriers, enablers, and benefits of women's representation and leadership in FinTech is **Social Identity Theory (SIT)** proposed by Tajfel et al. (1979). According to SIT, individuals derive their self-concept from the social groups to which they belong, and group membership influences their attitudes, behaviors, and interactions with others.

Women in FinTech may face barriers and challenges due to their social identity as women, which is often seen as incongruent with the masculine norms and values that dominate the industry.

Another theory that could explain the challenges faced by women in FinTech is the **Glass Ceiling Theory**, which proposes that there are invisible barriers preventing women and underrepresented groups from reaching higher levels of leadership in organizations. In the context of FinTech, the Glass Ceiling Theory suggests that women may encounter obstacles such as gender bias and discrimination, limited access to networking opportunities, and a lack of mentorship and support (Grout & Sonderegger 2009).

#### **CHAPTER 3**

#### 3.0 METHODOLOGY

#### 3.1 Literature Collection

The research methodology adopted for this study is a Systematic Literature Review (SLR), a choice increasingly favored in management research for its structured and replicable nature (Tranfield et al., 2003). To comprehensively explore the underrepresentation of women in leadership within the FinTech sector, we identified relevant articles through three primary methods: first, we systematically searched article collections on Scopus; second, we systematically tracked references cited in relevant articles for additional insights; and third we used the search engine Google Scholar.

We drew on keywords established in prior comprehensive literature reviews on FinTech and women underrepresentation in leadership (Giglio, 2021); the selected terms included "FinTech," "Financial technology," "women," "female," 'gender," and "leadership." The SLR encompassed articles from all dates up to January 2024. The outcomes of this extensive search, coupled with articles and journals retrieved, form the foundation for this study.

The search outcomes highlight a scarcity of peer-reviewed work directly addressing the research topic or question. To ensure the quality of the selected sources, we considered only peer-reviewed articles during the initial screening process. After a thorough evaluation, we included 70 articles from Scopus, following the elimination of duplicates, non-English publications, and materials outside the scope of business, economics, finance, technology and management. Subsequently, a refined selection process identified 23 articles that closely align with the research topic. The detailed information is presented in Table 1 below.

Table 1 Articles generated from Scopus

Authors	Title	Year	Cited by
Chen, X.; Chen, W.; Lu, K.	Does an imbalance in the population gender ratio affect FinTech innovation?		38
Bala, S.& Singhal, P.	Digital financial inclusion through FinTech	2022	1
Al Shehab, N.; Hamdan, A.	Artificial intelligence and women empowerment in Bahrain	2021	10
Varkey, J.	Financial literacy in the FinTech era: A study of scheduled tribes in Kerala		2
Nguyen, T.A.N.	Does Financial Knowledge Matter in Using FinTech Services? Evidence from an Emerging Economy		15
Imam, T.; McInnes, A.; Colombage, S.; Grose, R.	Opportunities and Barriers for FinTech in SAARC and ASEAN Countries	2022	13
Adbi, A.; Natarajan, S.	FinTech and banks as complements in micro entrepreneurship	2023	0
Khaki, A.R.; Messaadia, M.; Jreisat, A.; Al-Mohammad, S.	FinTech Adoption for Poverty Alleviation in African Countries: Application of Supervised Machine Learning Approach	2022	0
Makhija, P.; Chacko, E.; Sinha, M.	Transforming Financial Sector Through Financial Literacy and FinTech Revolution	2021	2
Adeola, O.	Gendered Perspectives on Covid-19 Recovery in Africa: Towards Sustainable Development	2022	2
Chen, S.; Doerr, S.; Frost, J.; Gambacorta, L.; Shin, H.S.	The FinTech gender gap	2023	5
Wani, I.A.; Agarwal, M.	The trilogy of micro-finance, FinTech and women- empowerment: an empirical investigation based in rural Himalayas	2023	0
Guo, Q.; Chen, S.; Zeng, X.	Does FinTech Narrow the Gender Wage Gap? Evidence from China	2021	11
Edwards-Dashti, N.	FinTech Women Walk the Talk: Moving the Needle for Workplace Gender Equality in Financial Services and Beyond	2022	0
Wahyuni, S.	Implementation of confidentiality and data security in the execution of the lending and borrowing money service based on information technology in Indonesia		0
Kedir, A.; Kouame, E.	FinTech and women's entrepreneurship in Africa: the case of Burkina Faso and Cameroon	2022	8
Odinet, C.K.	The new data of student debt	2019	7
Sidana, A.; Goel, R.; Rehman, M.	A study of stimulating sustainable women empowerment through FinTech applications	2023	0

Mohamed, H.Y.; Hamdan, A.; Karolak, M.; Razzaque, A.; Alareeni, B.	FinTech in Bahrain: The Role of FinTech in Empowering Women	2021	11
Arena, C.; Catuogno, S.; Naciti, V.	Governing FinTech for performance: the monitoring role of female independent directors	2020	2
Young, D.; Young, J.	Technology adoption: impact of FinTech on financial inclusion of low-income households	2022	5
Setiawan, B.; Phan, T.D.; Medina, J.; Wieriks, M.; Nathan, R.J.; Fekete-Farkas, M.  Quest for financial inclusion via digital financial services (FinTech) during COVID-19 pandemic: case study of women in Indonesia		2023	3

# Table 2 SLR process of research

Research Phase	Details
Selection of databases	Scopus
Selection of document types	Scholarly peer-reviewed Journals
Terms used with Boolean operator	"FinTech", "Financial Technology " FinTech AND
	"Women" AND "Underrepresentation" AND
	"Leadership"
Elements	Subject Area: Business/Management/Accounting
	Economics/Econometrics/Finance, Computer
	science and social science
	Document type: Article Publication stage:
	Final Language: English
Outcomes	Selection of 70 papers; The final sample is then
	composed of 23 papers

### 3.2 Descriptive Statistics

Graph 3 below depicts the trend in the number of articles published annually about the intersection of FinTech and women. The graph illustrates a noticeable upward trajectory in the publication of articles on FinTech and gender over the years, indicating a growing interest in, and focus on this research landscape.

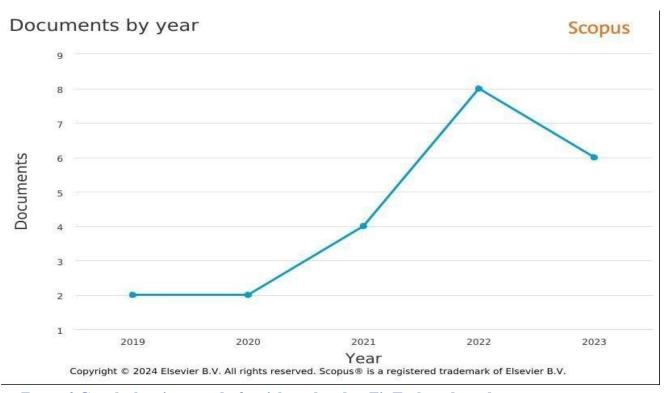


Figure 3 Graph showing trend of articles related to FinTech and gender

#### **CHAPTER 4**

#### 4.0 FINDINGS

Through a systematic literature review, it becomes evident that the FinTech sector has experienced a substantial gender gap in both representation and leadership roles. Several key insights emerge from this. First, the FinTech (financial technology) ecosystem encompasses a dynamic and rapidly evolving landscape where technology intersects with financial services. It includes a diverse range of companies and startups leveraging innovative technologies to enhance and revolutionize various aspects of finance. In other words, this ecosystem is integral to the ongoing transition towards digitalization, representing a fundamental transformation in the socioeconomic fabric of society (Bala & Singhal, 2022; Chen et al., 2023; Vovchenko et al., 2019).

Additionally, specific challenges and catalysts influencing the advancement of women into leadership roles within the FinTech industry involves elements such as the perspectives held by women and female leaders. These elements include factors such as self-confidence and the availability of mentors or sponsors, networking, an inclusive work environment, social dynamics within the workplace, conflicts between work and family commitments, and assertiveness. Notably, the theme of assertiveness, as discussed by Becker in 2018, is a sub-theme falling under the broader theme of self-confidence (Becker, 2018).

#### **Measures to Take**

In a compelling article, Conchie (2023) emphasizes the importance of fostering a greater presence and visibility of current and aspiring female leaders in the FinTech. Conchie argues that firms and their leaders need to take more proactive steps to address the gender disparity within the sector. To support this claim, Conchie (2023) references a survey conducted among members of

the Women in FinTech Powerlist, an esteemed group of 120 female leaders convened by Innovate Finance. The survey findings revealed that more than a quarter of these accomplished women attributed the lack of progress in the sector to a dearth of recognition and opaque access to promotion opportunities. This lack of visibility and recognition appears to be a significant barrier hindering the advancement of women within the industry.

Interestingly, the survey also highlights another crucial factor in boosting female progress: regulation of the pay gap. Approximately 17 percent of the respondents cited this as a potential avenue to address the gender disparity and promote greater opportunities for women within the FinTech domain. Furthermore, according to the Canadian Lenders Association, supporting women in finance and FinTech can be significantly enhanced through the following (Canadian Lenders Association, n.d.).

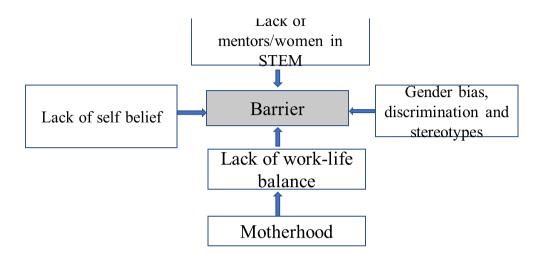
#### • Mentorship and Sponsorship Initiatives

Pairing female professionals with experienced leaders in the industry can provide valuable guidance and backing, promoting their advancement within their respective organizations. Such relationships offer access to crucial insights, networking opportunities, and skill-building experiences that contribute to their success. Building strong networks and communities is another influential strategy for women in finance and FinTech. Engaging with peers in the field allows them to connect with mentors and sponsors, explore new prospects, and establish a positive reputation.

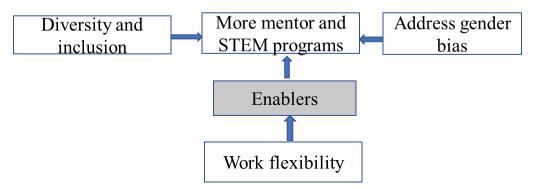
#### Offering Education and Training Programs

Education and training programs tailored to the specific challenges faced by women in finance and FinTech can prove invaluable. Seminars, workshops, and online courses addressing topics like negotiation, risk assessment, and financial analysis can empower women, boosting their skills and confidence while providing deeper insights into their obstacles.

Table 3 Summary of barriers and ways to expand boundaries of female representation



# FRAMEWORK 2- Expanding the boundaries



#### 4.1 Discussion

FinTech has positively influenced the financial sector, driving innovation, efficiency, and accessibility. It has opened new avenues for financial services and enabled greater financial inclusion. However, despite its benefits, FinTech is not without challenges. Studies have identified potential risks, such as biases in algorithmic decision-making, data privacy concerns, and the exacerbation of existing gender disparities in access to technology and digital financial services.

The literature consistently highlights the gender gap in the corporate financial industry, characterized by the underrepresentation of women in executive and leadership positions. Studies

reveal the persistence of gender stereotypes and biases that contribute to this imbalance. It is encouraging that recent years have witnessed increased efforts to narrow the gender gap in finance. Organizations should therefore implement diversity and inclusion initiatives, mentoring programs, and policies to promote gender equality.

On a positive note, FinTech presents opportunities to empower women economically. Its user-friendly interfaces and flexible solutions can enable more women to participate in entrepreneurial activities, access financial services, and improve financial literacy.

#### **4.2** Future Research Direction

Future research should delve deeper into less apparent aspects of FinTech's influence, particularly concerning gender discrimination. In-depth studies are needed to identify and evaluate effective strategies that organizations and policymakers can adopt to accelerate the progress in closing the gender gap within the FinTech Industry. Research should focus on quantifying the impact of FinTech initiatives aimed at gender equality. This includes assessing the effectiveness of FinTech tools in empowering women financially and driving gender-balanced leadership.

#### **CHAPTER 5**

#### 5.0 CONCLUSION

This comprehensive literature review emphasizes the continuing significance of gender inclusivity in the corporate financial technology industry and underscores FinTech's potential to act as a positive catalyst in promoting gender equality. Despite the sector's transformative impact on finance and technology, persistent barriers continue to hinder the full participation and progress of women.

The slow advance of women in taking on executive roles signals the need for comprehensive and proactive measures. Fostering visibility, recognition, and implementing strategies to close the gap emerge as crucial steps toward achieving gender equality in FinTech. Industry-wide initiatives, particularly in mentorship and education, are essential to equip women with the necessary skills and networks for career advancement.

Achieving gender equality in FinTech will require a collective commitment from industry leaders, policymakers, and stakeholders. By dismantling barriers and fostering an inclusive environment, the industry can fully embrace the diverse talents and perspectives of women, ensuring a more equitable and robust future for FinTech.

#### References

- Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. Electronic markets, 28(3), 235-243.
- Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of FinTech: A new post-crisis paradigm. Georgetown Journal of International Law, 47(4), 1271.
- Bala, S., & Singhal, P. (2022). Digital Financial Inclusion Through FinTech. In Bala. S. & Singhal, P. (Eds.), Gender Perspectives on Industry 4.0 and the Impact of Technology on Mainstreaming Female Employment (pp. 77-90). IGI Global.
- Berry, P., & Franks, T. J. (2010). Women in the world of corporate business: Looking at the glass ceiling. Contemporary Issues in Education Research (CIER), 3(2), 1-10.
- Bertrand, M., & Hallock, K. F. (2001). The gender gap in top corporate jobs. Industrial and Labor Relations Review, 55(1), 3-21.
- Bittner A, & Lau, B. (2021, February 25). Women-led startups received just 2.3% of VC funding in 2020. Harvard Business Review Digital Articles. 1–4.
- Brett, L. (2021, May 16). FinTech has a bigger gender problem than it realizes. FinTech Magazine:

  Venture Capital. <a href="https://www2.deloitte.com/uk/en/pages/financial-services/articles/FinTech-has-bigger-gender-problem-than-it-realises.html">https://www2.deloitte.com/uk/en/pages/financial-services/articles/FinTech-has-bigger-gender-problem-than-it-realises.html</a>

- BI Intelligence (2018, August 31). The future of FinTech. Business Insider Australia. <a href="https://web.archive.org/web/20180831113601/https://www.businessinsider.com.au/bi-intelligence-the-future-of-FinTech-2018-8">https://web.archive.org/web/20180831113601/https://www.businessinsider.com.au/bi-intelligence-the-future-of-FinTech-2018-8</a>.
- Canadian Lenders Association. (n.d.). Why representation of women in Finance and Fintech matters. Op. Ed. https://www.canadianlenders.org/blog\_post/why-representation-in-finance-and-fintech-matters.
- Chen, M.A., Wu, Q., & Yang, B. (2019). How valuable is FinTech innovation? The Review of Financial Studies, 32 (5), 2062–2106.
- Chen, S., Doerr, S., Frost, J., Gambacorta, L., & Shin, H. S. (2023). The FinTech gender gap. Journal of Financial Mediation, 54, 10126. doi.org/10.1016/j.jfi.2023.101026.
- Chen, X., Chen, W., & Lu, K. (2023). Does an imbalance in the population gender ratio affect FinTech innovation? Technological Forecasting and Social Change, 188(5), 122164.
- Čihák, M. & Sahay, R. (2018, April 24). Why the world needs more female bankers. World Economic Forum. <a href="https://www.weforum.org/agenda/2018/09/women-in-finance-an-economic-case-for-gender-equality">https://www.weforum.org/agenda/2018/09/women-in-finance-an-economic-case-for-gender-equality</a>
- Clempner, J., Chavez, R., & Ramenason, T. (2020). How to shift gender balance in FinTech. FinTech Futures. <a href="https://www.FinTechfutures.com/2020/04/how-to-shift-gender-balance-in-FinTech/">https://www.FinTechfutures.com/2020/04/how-to-shift-gender-balance-in-FinTech/</a>
- Conchie, C. (2023). How can FinTech close its gender pay gap? Top chiefs say regulation could be key.

  City A.M. https://www.cityam.com/how-can-FinTech-close-its-gender-pay-gap/
- Ellingrud, K., Krivkovich, A., Nadeau, M.-C., & Zucker, J. (2021). Closing the Gender and Race Gaps in

  North American Financial Services. Report. McKinsey & Company.

  36

- https://www.mckinsey.com/industries/financial-services/our-insights/closing-the-gender-and-race-gaps-in-north-american-financial-services.
- Elsesser, K. (2022, June 6). Female entrepreneurs funded by female VCs face difficulties obtaining future funds. Forbes. <a href="https://www.forbes.com/sites/kimelsesser/2022/06/06/female-entrepreneurs-funded-by-female-vcs-face-difficulties-obtaining-future-funds">https://www.forbes.com/sites/kimelsesser/2022/06/06/female-entrepreneurs-funded-by-female-vcs-face-difficulties-obtaining-future-funds</a>
- EYGM (2019). EY Global FinTech Adoption Index 2019. <a href="https://www.ey.com/en\_ca/ey-global-FinTech-adoption-index">https://www.ey.com/en\_ca/ey-global-FinTech-adoption-index</a>
- Financial Stability Board (2017). Financial Stability Implications from FinTech: Regulatory and Supervisory Issues that Merit Authorities' Attention. FSB Report R27016. Financial Stability Board. <a href="https://www.fsb.org/wp-content/uploads/R270617.pdf">https://www.fsb.org/wp-content/uploads/R270617.pdf</a>
- Giglio, F. (2021). FinTech: A literature review. European Research Studies Journal, 24(2B), 600-627.
- Goldin, C. (2006), The quiet revolution that transformed women's employment, education, and family.

  American Economic Review, 96(2), 1-21.
- Google. (2016). Google AdWords: Keywords. Accessed October 17, 2016. <a href="https://www.google.com/adwords">https://www.google.com/adwords</a>
- Grout, P. A., Park, I. U., & Sonderegger, S. (2009, March 30). An Economic Theory of Glass Ceiling.

  Available at SSRN: <a href="http://dx.doi.org/10.2139/ssrn.1392776">http://dx.doi.org/10.2139/ssrn.1392776</a>.
- GSMA (2019). The Mobile Gender Gap Report. https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf

- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. Journal of social issues, 57(4), 657-674.
- Kenyon, T. (2021). Women are underrepresented in global FinTech industry. FinTech Magazine. https://FinTechmagazine.com/banking/study-women-are-underrepresented-global-FinTech-industry
- Koland, D. F. (2015). A new game: Shifting the leadership culture to close the gender gap in corporate America. Doctoral Dissertation, St. Thomas University, St. Paul, Minnesota. https://researchonline.stthomas.edu/esploro/outputs/991015130965603691
- Lee, I., & Shin, Y. J. (2018). FinTech: Ecosystem, business models, investment decisions, and challenges.

  Business horizons, 61(1), 35-46.
- Leong, K. & Sung, A. (2018). FinTech (financial technology): What is it and how to use technologies to create business value in FinTech way? International Journal of Innovation, Management and Technology 9(2), 74–78.
- Lipovka, A., Islamgaleyev, A., & Badjanova, J. (2021). Innovation capability of women and men managers: Evidence from Kazakhstan. Access to Science, Business, Innovation in Digital Economy, 2(1), 91-102.
- Loko, M. B., & Yang, Y. (2022). FinTech, Female Employment, and Gender Inequality. IMF Working Paper No. 2022/108.
- Luthra, P., Jensen, T. K., & Millerton, S. (n.d.). What are we missing when discussing sustainability in FinTech? Women! https://talented.dk/blog/women-in-FinTech# ftn1

- MetLife Foundation. (2015). Women Around the World Face Hurdles to Financial Inclusion. The Wall Street Journal. <a href="https://partners.wsj.com/metlife/multipliers/articles/women-around-world-face-hurdles-financial-inclusion/">https://partners.wsj.com/metlife/multipliers/articles/women-around-world-face-hurdles-financial-inclusion/</a>
- Moreira, P. (2021, December 21). Innovation ecosystem continues to grow for female entrepreneurs in Halifax. Halifax Innovation District. <a href="https://halifaxinnovationdistrict.com/news/article/women-in-entrepreneurship/">https://halifaxinnovationdistrict.com/news/article/women-in-entrepreneurship/</a>
- Moro-Visconti, R., & Moro-Visconti, R. (2021). FinTech valuation. Startup Valuation: From Strategic Business Planning to Digital Networking, 245-279.
- Perera, I. S., Ganeshan, J., & Belitski, M. (2021). Underrepresentation of women managers in the boardroom: evidence from the Sri Lankan financial sector. Colombo Business Journal, 12(2), 23-52.
- Phan, D. H. B., Narayan, P. K., Rahman, R. E., & Hutabarat, A. R. (2020). Do financial technology firms influence bank performance? Pacific-Basin Finance Journal, 62, 101210.
- Saima, F. N., Rahman, M. H. A., & Ghosh, R. (2022). Gender Diversity in FinTech: An Effort Towards Creating an Inclusive and Sustainable Industry. In Kaus, G. & Kautish, S. (Eds.), AI-Enabled Agile Internet of Things for Sustainable FinTech Ecosystems (pp. 66-92). IGI Global.
- Schueffel, P. (2016). Taming the beast: A scientific definition of FinTech. Journal of Innovation Management, 4(4), 32-54.
- Singh, S., & Dash, B. M. (2021). Gender discrimination in accessing finance by women-owned businesses:

  A review. Journal of International Women's Studies, 22(9), 381-399.

- Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. International Journal of productivity and Performance management, 55(7), 569-593.
- Statista (2021) Value and Number of Investments in FinTech Worldwide from 2010 to 2023. Report no. 719385. https://www.statista.com/statistics/719385/investments-into-FinTech-companies-globally/
- Statistics Canada. (2023). Labour Force Survey, September 2023. Retrieved from <a href="https://www150.statcan.gc.ca/:https://www150.statcan.gc.ca/n1/daily-quotidien/231006/dq231006a-eng.htm">https://www150.statcan.gc.ca/:https://www150.statcan.gc.ca/n1/daily-quotidien/231006/dq231006a-eng.htm</a>
- Stefanelli, V., Manta, F., & D'Amato, A. (2023). Female CEO and FinTech performance: Are senior directors more inclusive? Corporate Governance: The International Journal of Business in Society, 24(2), 327-345. doi.org/10.1108/CG-01-2023-0004
- Stefanuto, L. (2023). Only 15% of Tech Startup Founders Are Female. Startup Genome. https://startupgenome.com/articles/only-15-percent-of-tech-startup-founders-are-female
- Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An integrative theory of intergroup conflict.

  In Hatch, M. J. & Schulz, M. (Eds.). Organizational identity: A reader (pp. 56-65). Oxford UP.
- Teigland, J. (2017). It's on us: How to curb the digital gender divide. <a href="https://www.linkedin.com/pulse/its-us-how-curb-digital-gender-divide-julie-teigland/">https://www.linkedin.com/pulse/its-us-how-curb-digital-gender-divide-julie-teigland/</a>
- Teruel, M., & Segarra, A. (2017). The link between gender diversity and innovation: What is the role of firm size. International Review of Entrepreneurship, 15(3), 319-340.

- Thakor, A. V. (2020). FinTech and banking: What do we know? Journal of Financial Intermediation, 41, 100833: doi.org/10.1016/j.fi.2019.100823
- Tokar, A. (2021). FinTech suffers from gender gap. Business Today Online: <a href="https://journal.businesstoday.org/bt-online/2021/FinTech-suffers-from-gender-gap">https://journal.businesstoday.org/bt-online/2021/FinTech-suffers-from-gender-gap</a>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence- informed management knowledge by means of systematic review. British journal of management, 14(3), 207-222.
- Vovchenko, N. G., Galazova, S. S., Sopchenko, A. A., & Dzhu, O. S. (2019). FinTech ecosystem as an instrument of sustainable development provision. International Journal of Economics & Business Administration (IJEBA), Special Issue, 7(2). <a href="https://www.um.edu.mt/library/oar/handle/123456789/51269">https://www.um.edu.mt/library/oar/handle/123456789/51269</a>