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Abstract

This research investigates the factors contributing to the traditional and digital financial inclusion (FI) gender gap in Palestine and how it was shaped by the ramifications of the COVID-19 pandemic. Using secondary data from two nationwide FI surveys conducted in 2016 and 2022, the study employs an Oaxaca-Blinder decomposition and an intertemporal decomposition to analyze the changes in gender discrimination in financial literacy and access to financial services over time. Our results show a persistently high FI gender gap in 2016 and 2022. There is a worsening or unchanged FI gender gap in most aspects, including access to bank accounts, formal borrowing, and the adoption of digital financial services. Only the gender gap in access to private insurance decreased between 2016 and 2022, which is generally low in Palestine. The widening FI gender gap is driven by discrimination against women in economic participation (explained by changes in the coefficients gap), followed by changes in men's returns. The deterioration of women's socioeconomic conditions during the COVID-19 pandemic, particularly in terms of labor market participation, was the greatest contributor to the growth of intertemporal FI gender discrimination. Another contributor to the widening FI gender gap was the drop in income and employment during the pandemic, compounded by Israeli restrictions and rising political tension. Nonetheless, the gap narrows slightly over time among older individuals, indicating a positive trend for women’s FI across different age brackets. We find that household composition is pivotal in shaping the gender gap in FI, as the gap shrinks among households with a higher proportion of female members. Finally, adopting modern financial technologies may be slower among women facing barriers related to technology literacy or access to digital financial services; meanwhile, financial technology has a significant influence on the likelihood of FI, particularly favoring women.

Keywords: digital financial inclusion, COVID-19, gender gap, Palestine
JEL Classifications: G2, G5

ملخص

نبحث في هذه الورقة في العوامل المساهمة في فجوة الشمول المالي التقليدي والرقمي بين الجنسين في فلسطين وكيف تشكلت من خلال تداعيات جائحة كورونا. وباستخدام البيانات الثانوية من اثنين من استطلاعات الشمول المالي على مستوى البلاد التي أجريت في عامي 2016 و 2022، تستخدم الدراسة تحليل Oaxaca-Blinder والتحلل بين الأزمنة لتحليل التغيرات في التمييز بين الجنسين في محو الأمية المالية والوصول إلى الخدمات المالية بمرور الوقت. تظهر نتائجنا فجوة عالية باستمرار بين الجنسين في الشمول المالي في عامي 2016 و 2022. هناك فجوة نوعيةمتفاقمة أو لم تتغير في الشمول المالي في معظم الجوانب، بما في ذلك الوصول إلى الحسابات المصرفية، والاقتراض الرسمي، واعتماد الخدمات المالية الرقمية. فقط الفجوة بين الجنسين في الوصول إلى التأمين الخاص انخفضت بين عامي 2016 و 2022، وهي منخفضة بشكل عام في فلسطين. والفجوة النوعية الآخذة في الاتساع بين الجنسين مدفوعة بالتمييز ضد المرأة في المشاركة الاقتصادية (تفسرها التغيرات في فجوة المعاملات)، تليها التغيرات في عائدات الرجال. كان تدهور الظروف الاجتماعية والاقتصادية للمرأة خلال جائحة الكورونا، لا سيما من حيث المشاركة في سوق العمل، أكبر مساهم في نمو التمييز بين الجنسين في الشمول المالي بين الأزمنة. ومن العوامل الأخرى التي ساهمت في اتساع الفجوة بين الجنسين في الاستثمار الأجنبي انخفاض الدخل والعمالة أثناء الوباء، الذي تفاقم بفعل القيود الإسرائيلية وتزايد التوتر السياسي. ومع ذلك، تضيق الفجوة قليلاً بمرور الوقت بين كبار السن، مما يشير إلى اتجاه إيجابي لمؤسسة الشمول المالي النسائية عبر فئات عمرية مختلفة. نجد أن تكوين الأسرة أمر محوري في تشكيل الفجوة بين الجنسين في الشمول المالي، حيث تتقلص الفجوة بين الأسر التي تضم نسبة أعلى من الإناث. وأخيرا، قد يكون اعتماد التكنولوجيات المالية الحديثة أبطأ بين النساء اللواتي يواجهن عقبات تتعلق بمحو الأمية التكنولوجية أو الحصول على الخدمات المالية الرقمية؛ وفي الوقت نفسه، فإن للتكنولوجيا المالية تأثيرًا كبيرًا على احتمالية وجود شمول مالي، ولا سيما لصالح النساء.

1. Introduction

Financial inclusion (FI), generally understood as access to and usage of formal financial services (Allen et al., 2016), is considered a key driver of economic development and poverty reduction by global development agencies (World Bank, 2018; Sahay et al., 2015). FI encompasses a broad range of services, including bank accounts, credit, insurance, and digital payment systems. Inclusive finance has emerged as a recent policy focus in several MENA countries, including Palestine. Despite global efforts to promote FI, gender disparities persist, reflecting limited economic empowerment and participation. Global data highlights significant gender gaps in FI, particularly in developing nations (Fareed et al., 2017). Women continue to face barriers such as limited access to formal financial institutions, restricted ownership of assets, and social and cultural biases that limit their economic agency (Ghosh and Vinod, 2017). It is imperative to ensure that the most vulnerable, especially women, have equal and sustainable access to job opportunities and formal financial services for inclusive economic growth.

The 2022 FI survey in Palestine shows that the gender gap in bank account ownership stands at 28.2 percent, more than double the gap recorded in the MENA region and almost five-fold that of developing countries (Harker et al., 2023). Social norms, limited control of money, and low participation in the labor force are among the key drivers of women's financial exclusion in Palestine (Harker et al., 2023). With low or no income and limited control over financial resources, women may not need financial services or they might view the fees and costs of financial services as unnecessary expenses at a high opportunity cost. Women's low engagement with financial services has also resulted in weaker financial knowledge compared to men, further limiting their ability to use such services (Qubbaj, 2019). Additionally, weak law enforcement exacerbates women's socioeconomic deprivation and leads to financial exclusion in Palestine (MAS, 2021a).

Women’s financial exclusion in Palestine is shaped by the complex socioeconomic and political environment. The country's political and economic instability limits opportunities for women; hence, it is a main obstacle to their economic and financial inclusion. This is not to mention the many obstacles put in place by the Israeli occupation, which suppresses both persons and enterprises and restrains the economy and financial sector. Women are additionally discouraged from financial participation by cultural and societal norms, particularly gendered ones like mobility restrictions. However, without straying from its fundamental values and objectives, there is room for the financial industry to achieve significant and long-lasting change toward more equitable FI for women.

In addition to existing challenges, the COVID-19 pandemic has led to far-reaching economic and social consequences, disrupted livelihoods, and exacerbated existing inequalities. In Palestine, the pandemic had a severe negative impact on women's businesses, with 27 percent of women-owned businesses forced to shut down and 95 percent reporting that the COVID-19 pandemic negatively affected their businesses (UN Women, 2020). Palestinian authorities implemented measures to support workers, including social aid programs and funds, and the Palestine Monetary Authority (PMA) issued instructions to banks to provide temporary financial relief for affected borrowers (PMA, 2020). Since a large percentage of working women were employed in the informal sector, they faced challenges as they lacked compensation or flexibility in payment schedules, limiting their access to financial relief programs (Harker et al., 2023). Nonetheless, while the pandemic has presented new challenges, it has also accelerated technology adoption, particularly in digital financial services. After the COVID-19 pandemic, an expansion of electronic payment options has been observed in many countries in sectors that normally wouldn't have offered those services (Sahay et al., 2020). The PMA also worked toward accelerating the adoption of digital payments and financial services, but the extent to which women benefited from such efforts remains unclear.

This study aims to investigate the factors (economic, social, and political) that contribute to the gender gap in FI in Palestine. Limited research exists on FI in the Palestinian context, particularly with a gender lens. This study aims to fill this gap and provide valuable insights into the factors specific to Palestine that contribute to the FI gender gap. By using contextualized micro-FI data from 2016 (pre-COVID-19) and 2022 (post-COVID-19), this study indirectly investigates the impact of the pandemic on women's FI in Palestine. The pandemic's widespread effects on the global economy necessitate the need to assess its specific implications for gender disparities in financial access. Though it accelerated the widespread adoption of digital technologies, including access to digital financial services and digital payment options, there is still a need to understand and analyze the pandemic's impact on access to financial services from a gender perspective.

This analysis encompasses both traditional financial services, such as bank accounts and credit facilities, as well as digital financial services, including electronic payments and digital banking platforms. It analyzes how the adoption of financial technology has influenced women's FI. By promoting gender-responsive financial systems and leveraging technology, policymakers and stakeholders can work toward closing the gender gap in FI, leading to more inclusive and equitable economic development in Palestine. In addition, understanding these dynamics enables policymakers and stakeholders to formulate targeted interventions that promote inclusive and gender-responsive financial systems.

In the next section, we present a brief review of the literature on the FI gender gap and digital FI. Section three discusses the research methodology and data used, while section four outlines the results of the study's econometric analysis. The final section presents the conclusion and policy implications.

2. Literature review

Recently, FI gained recognition as a tool for achieving various Sustainable Development Goals (SDGs) and contributing to economic growth (World Bank, 2018; Arner et al., 2020; Sahay et al., 2020; Kuada, 2019). International development agencies like the World Bank Group see it as a tool for poverty reduction and income equality (Demirgüç-Kunt and Singer, 2017). Scholars have emphasized its economic and social components, influencing overall well-being, societal development, and economic growth (Yanina, 2023). Nevertheless, persistent FI gender gaps, particularly in developing nations, continue to pose significant barriers to economic development, innovation, and entrepreneurial activities (Fareed et al., 2017). Women exhibit lower access to and effective use of formal financial services, with a widening gender gap in usage compared to access (Fanta and Mutsonziwa, 2016).

Financial exclusion negatively impacts women's entrepreneurial pursuits, impeding active participation in market economies (Aterido et al., 2013). Providing women with equal access to financial services can enhance their economic empowerment, bolster economic growth, enhance the development of society, and support overall well-being (Sholevar and Harris, 2020; Holloway et al., 2017). Women's FI can also help improve the management of household income, increase resilience to economic shocks, and enable investment in the well-being and education of their children (Arnold and Gammage, 2019). Furthermore, it enables women to gain a certain level of autonomy in making economic and social decisions, such as marriage, employment, expenditures, education, and leisure activities (Arnold and Gammage, 2019). The challenge of reducing the gender gap in FI is prominent on a global scale, necessitating a closer examination of the factors contributing to the FI gender gap. Understanding the socioeconomic drivers of exclusion is crucial for designing interventions that address poverty and discrimination, including the lack of proper employment opportunities.

The literature on FI identifies various factors contributing to gender disparities in accessing financial services, including economic conditions, sociocultural norms, legal frameworks, and institutional settings. Empirical evidence shows that socioeconomic conditions largely explain the gender gap in FI (Ghosh and Chaudhury, 2019). Factors such as education, employment, and income enhance the likelihood of FI and partially explain the gender gap (Abdu, 2015). Özşuca (2019) echoes these findings, attributing a substantial portion of the FI disparity to employment, younger age, and higher education. Using three FI indicators (account penetration, formal saving, and formal borrowing), Özşuca (2019) shows a larger gender gap among higher-income groups than lower-income groups. Aterido et al. (2013) highlight that the unconditional gender disparity in formal banking services diminishes when considering individual characteristics such as education, income, work status, and geographic location. Women, particularly those who are very young, very old, poorer, from ethnic minorities, or with disabilities, are among the groups that are disproportionately excluded from financial systems (Shihadeh, 2018).

Gendered social norms play a significant role in shaping women's participation in economic activities and limiting their financial empowerment (Koning et al., 2021). Societal pressures and gender roles in underdeveloped countries often result in involuntary financial exclusion for women as they are forced out of the labor market (Shihadeh and Hannon, 2017; ILO, 2022). Beck, Behr, and Madestam (2018) provide behavioral explanations, showing how male-dominated financial institutions discriminate against women in accessing credit services. Restricted mobility, influenced by social and cultural factors, further hamper women's access to traditional financial services (Koning et al., 2021). Thus, it is unsurprising that proximity to financial institutions contributes to the gender gap in FI (Mukong et al., 2020).

Legal discrimination, protection issues, and unequal resource allocation have also been identified as important factors contributing to the gender gap in FI (Delechat et al., 2018; Benería et al., 2015). Factors such as the lack of tangible assets for collateral and lower human and social capital add to the challenges faced by women in accessing formal credit (Hundie and Tulu, 2023). This is why women are more likely to use informal financial services as alternative strategies. Women's reliance on informal employment (hence their inability to use their income as collateral) limits their access to formal banking methods (IMF, 2020). Fareed et al. (2017) note a weaker impact of FI on entrepreneurship for women in the informal sector due to lower entry barriers and financial literacy challenges, hindering their empowerment. Financial literacy, or differences in financial knowledge between men and women, is also important in explaining the FI gender gap (Ndoya and Tsalan, 2021; Mukong et al., 2020; Grohmann et al., 2018). These, along with other factors such as lack of documentation and restrictive legal frameworks, collectively contribute to the persistence of the gender gap in FI (Demirgüc-Kunt et al., 2013). In essence, addressing gender disparities in FI requires multifaceted interventions, encompassing education, income, employment, and awareness programs tailored to the unique challenges faced by women at the local level.

The Global Findex datasets have long documented the gender gap in FI, showing that the largest gap in bank account ownership between men and women is in the MENA region (Demirgüç-Kunt et al., 2022). In 2021, the gender gap in bank account ownership in developing countries was six percent, while it was 13 percent in the MENA region (Demirgüç-Kunt et al., 2022). Özşuca (2019) identifies several factors that contribute to the large gender gap in the MENA region, highlighting legal discrimination against women, gender norms, and socio-cultural barriers as key determinants. Women’s lower employment levels also play a key role in this gender gap (Özşuca, 2019). While such results are observed at a global level (Demirgüc-Kunt et al., 2013) and in specific regions such as India (Ghosh and Vinod, 2017), they are more pronounced in the MENA region due to political instability, limited economic opportunities, and patriarchic systems.

The 2022 FI survey in Palestine shows that the gender gap in bank account ownership stands at 28.2 percent, more than double the gap recorded in the MENA region and almost five-fold that of developing countries (Harker et al., 2023). Through descriptive analysis and reasoning, Harker et al. (2023) show that social norms, limited control over money, and low participation in the labor force are among the key drivers of women's financial exclusion. Men often control money (e.g., husband, father, or son), and women with low or no income do not have a reason to use financial services and cannot afford them (Harker et al., 2023). Also, while men build experience from their engagement with financial services, contributing to their financial literacy, women do not have such a privilege, restricting their usage of such services. Moreover, in investigating the expansion of credit in Palestine, Harker et al. (2019) observe that women carry the weight of men's financial practices despite being financially excluded. Women bear the responsibility of reducing household expenses due to reduced disposable income after deducting loan installments and providing emotional support for their financially distressed husbands (Harker et al., 2019).

2.1. Digital FI and COVID-19

Recent evidence shows a noticeable impact of financial technology in promoting welfare and helping achieve development goals, conditional on having features that align with users' needs and abilities (Sahay et al., 2020; Gomber et al., 2017). Digital finance can overcome geographical and socioeconomic barriers, thereby offering easier access to financial services and promoting inclusion. Digitization reduces costs, streamlines adoption, reaches underserved communities, and enhances customer experiences (Pazarbasioglu et al., 2022). Digital financial services can also reach markets that conventional financial channels cannot access due to different barriers, such as the high costs of reaching and serving individuals in rural areas or the absence of traditional credit histories (Sahay et al., 2020).

Digital financial services underscore positive outcomes on gender wage gaps, entrepreneurship, and social status (Loko and Yang, 2022; Fareed et al., 2017). However, financial technology is still characterized by persistent gender barriers and gaps (Kulkarni and Ghosh, 2021). Literacy gaps, awareness challenges, and cultural norms impede women's access to digital financial services. Ediagbonya and Tioluwani (2022) show that the FI gap has expanded despite introducing various digital platforms, citing poor infrastructure, unnecessary charges, information asymmetry and data privacy breaches as possible reasons. Chen et al. (2023) reveal a notable disparity in fintech adoption between women and men, attributing it to country characteristics, individual controls, attitudes, preferences, product suitability, and willingness to embrace fintech. Positive impacts are observed in countries with lower gender discrimination levels, emphasizing the pivotal role of gender equality in fostering women's financial independence through fintech (Esmaeilpour et al., 2023). This challenges the assumption that fintech alone can bridge the gender gap in financial services, suggesting that technological advancements should be coupled with strategic interventions and a supportive regulatory and legal environment to address socioeconomic and cultural challenges. Prusak and Wacławek (2023) uncover gender discrimination in fintech usage, shedding light on the necessity of policy interventions explicitly addressing gender disparities. Economic development is insufficient in eradicating gender disparities, showing a need for a specially tailored and gender-sensitive approach in the wake of digitalization. The growing wave of ‘financial disintermediation’ requires an enabling ecosystem, policy formulation advancements, and new consumer protection forms.

Research on the potential benefits of digital FI, its potential role in overcoming the deficiencies in informal offerings, and how digitalization is linked to the notion of social exclusion is still scarce (Fernández-Olit et al., 2019). It is vital to analyze how digitization can help integrate specific financially excluded communities in a way that serves their needs and what such a process means for those who are digitally excluded. It is also necessary to expand the discussion to include the new types of risk that might arise from digital FI and what alternatives are available for digitally excluded segments. Kear (2017) stresses that caution is necessary when analyzing the FI effects of digital finance, highlighting the importance of understanding the challenges of digitizing financial services, avoiding negative externalities (e.g., risk of over-indebtedness), and proposing valuable solutions that would not deepen the exclusion of certain groups (e.g., women, the elderly, the illiterate, immigrants, and other disadvantaged groups). Kim et al. (2018) note that the literature on digital FI is biased toward its institutional and individual prerequisites and less toward the needs of the citizens and how it would impact them.

Digital finance alternatives are promising in Palestine, particularly since it has a well-developed technology sector with a high Internet penetration (80.2 percent) and smart mobile phones (81.3 percent), which are fundamental prerequisites for operating sophisticated financial services applications (Tikam and Hinn, 2023). The same research concludes that Palestinian men increased the use of electronic and mobile banking channels during the COVID-19 pandemic more than women. Tikam and Hinn (2023) do not explain this phenomenon, as their research does not touch on the gender disparities in digital FI. However, Palestine's complex political and economic situation—characterized by lower labor force participation, higher unemployment, greater job informality, limited financial independence, and lower income among women—might help explain their weaker adoption of electronic and mobile banking channels during the pandemic. The larger negative impacts of COVID-19 on women's employment and increased vulnerability during the pandemic might be another explanation. Around 27 percent of businesses owned by Palestinian women were forced to shut down during the pandemic, and 95 percent reported that the COVID-19 pandemic negatively affected their businesses (UN Women, 2020). As a large percentage of Palestinian working women are employed in the informal sector, they faced greater challenges during the pandemic as they lacked compensation or flexibility in payment schedules (Harker et al., 2023).

While the pandemic has presented new challenges and caused far-reaching economic and social consequences that disrupted livelihoods and exacerbated existing inequalities, it has also accelerated technology adoption with strict social distancing requirements, particularly in digital financial services (Tukim and Hinn, 2023). After COVID-19, there was an expansion of electronic payment options in many countries in sectors that would not have normally offered those services (Sahay et al., 2020). Further, as highlighted by Collins et al. (2021) and Carli (2020), the pandemic significantly altered gender roles and employment dynamics. School and daycare closures disproportionately increased caregiving responsibilities for mothers, leading to reduced work hours, job losses, and a widening gender gap. Dang and Nguyen (2021) find that women are more likely to lose their jobs permanently and expect larger decreases in labor income due to the COVID-19 outbreak. Since employment is an important factor in enhancing FI, such outcomes could outpace the positive contribution of increased technology adoption and widen the gender gap in FI. As a result of the negative consequences of the pandemic, it became increasingly important to ensure that the most vulnerable, especially women, have access to formal financial services for inclusive economic recovery.

3. Methodology and Data

3.1. Methodology

This study employs decomposition methods combined with distributional regressions to achieve the research objectives. We start with the Kitagawa-Oaxaca-Blinder (KOB) decomposition approach for the decomposition analysis. This approach allows us to explore if the differences in characteristics explain changes in gender gaps or if the differences in market factors (coefficients) are the most important in explaining the observed gender gaps. We start by estimating four different models with the financial access index as the dependent variable:

$$y_{k,t} = \beta_{k,t} X_i + e_{k,t}$$

Where k and t represent the group (gender) and time indicators, $y_{k,t}$ is the financial access index for a particular group, and $\underline{X}_{k,t}$ are the average characteristics of a particular group k in a particular year. The financial access index is a composite index equal to one if the respondent owns or uses at least one financial service and zero otherwise. For a given point in time t, we estimate the OB decomposition as follows:

$$\begin{aligned} \Delta_k y_t = y_{m,t} - y_{w,t} &= \left(\beta_{m,t} - \beta_{w,t}\right) \underline{X}_{w,t} + \beta_{m,t} \left(\underline{X}_{m,t} - \underline{X}_{w,t}\right) \\ &= \Delta\beta_t \underline{X}_{w,t} + \beta_{m,t}\, \Delta \underline{X}_t \end{aligned}$$

Where the gap in the variable y between men and women is explained by differences in characteristics reflecting the advantages that men may have over women in terms of sociodemographic characteristics ($\beta_{m,t}\, \Delta \underline{X}_t$), and the market structure disadvantage (usually related to discrimination) that women face ($\Delta\beta_t \underline{X}_{w,t}$).

To analyze the changes across time, we conduct a double difference decomposition such that:

$$\begin{aligned} \Delta_k^t y_t &= \left(y_{m,1} - y_{w,1}\right) - \left(y_{m,0} - y_{w,0}\right) \\ &= \Delta\beta_1 \underline{X}_{w,1} + \beta_{m,1}\, \Delta \underline{X}_1 - \left[\Delta\beta_0 \underline{X}_{w,0} + \beta_{m,0}\, \Delta \underline{X}_0\right] \end{aligned}$$

Similar to Smith and Welch (1989), we rearrange these terms and use them to explain the change in the observed gender gap between 2016 and 2022. In other words, we can decompose the change in the gender gap across time $\Delta_k^t v_t$ as a function of four components:

- $(\Delta\beta_1 - \Delta\beta_0)\ \underline{X}_{w,0}$: Change in the financial market gap (discrimination) toward financial development.
- $\Delta\beta_0(\underline{X}_{w,1} - \underline{X}_{w,0})$: Changes (improvements) women may have seen, assuming discrimination remains fixed.
- $\beta_{m,1}\ (\Delta\underline{X}_1 - \Delta\underline{X}_0)$: Changes in the characteristics gap between 2016 and 2022.
- $(\beta_{m,1} - \beta_{m,0})\ \Delta\underline{X}_0$: Changes in the factors that benefit men's outcomes in the financial market.

Additionally, the study indirectly explores the impact of the pandemic on the gender gap in FI. By comparing the survey data from 2016 (pre-pandemic) and 2022 (post-pandemic), the research assesses the effects of the economic shock caused by COVID-19 on FI. Having access to data from 2016 and 2022 allows us to compare how men and women fare between the pre- and post-COVID-19 periods. While performing this intertemporal decomposition does not allow us to differentiate between the trends and changes caused by COVID-19, we expect the difference to be mostly attributed to the pandemic due to its significance.

Given that only the 2022 survey includes indicators for financial technology, we only assess the impact of financial technology on women's FI for that year. A comparative analysis between the two years is not possible. The logit regression for women's FI in 2016 establishes a baseline understanding of FI for women. With this baseline, the 2022 data is then scrutinized to identify changes in FI indicators alongside the introduction of financial technology. Conducting a logit analysis for women's FI in 2022 with financial technology as an independent variable helps discern potential associations between the adoption of financial technology and improvements in women's FI. While a direct comparison with 2016 may be challenging due to the absence of specific technology indicators, this approach allows for a within-year examination of the relationship between financial technology and women's FI, offering valuable insights into the potential impact of technological advancements over the specified period.

The financial technology index is a composite index equal to one if the respondent owns or uses at least one of the following services: electronic point of sale, mobile banking services, use of online banking, e-wallet, or online bill payment.

3.2. Data

The analysis is based on secondary data from the FI surveys conducted in Palestine in 2016 and 2022 by the Palestinian Central Bureau of Statistics (PCBS) and Palestine Economic Policy Research Institute (MAS) for the benefit of the PMA and the Palestinian Capital Market Authority

(PCMA). In addition to the demographic (locality, region, gender, education, age…etc.) and socioeconomic indicators (job status, expenditure, employment sector…etc.), these two surveys provide comprehensive information on financial access, usage, and quality indicators at the individual level, as well as information about reasons, obstacles, and gaps preventing FI. Surveys cover the formal Palestinian financial sector, both banking (banks, microfinance, and digital payments) and non-banking (e.g., insurance, mortgage, leasing, and capital market), and present some indicators of the proliferation of the informal financial sector. The study employs various indices of FI based on the available data, capturing different dimensions of access, usage, literacy, and quality of financial services. Finally, sex-disaggregated data provide a good chance for perceived barriers to women's FI and policy interventions to address these constraints.

3.3. Variables and Summary Statistics

The bank account variable denotes if the respondent owns at least one type of formal bank account, such as a savings account, current account, or deposit account. Table 1 shows that bank account ownership does not exceed 35 percent for adults (18 years and above) in Palestine in 2022. The overall ownership of bank accounts increased from 27 percent in 2016 to 34.8 percent in 2022, which shows an evolving trend and suggests a dynamic landscape in FI over the specified period, with both genders showing changes in their access to banking services. It also reveals an increase in the gender gap from 23.1 percent in 2016 to 28.2 percent in 2022 (an increase of 5.1 percentage points).

The data in Table 1 also reveals shifts in borrowing patterns and behaviors. In 2016, the proportion of males borrowing from at least one formal source stood at 10.5 percent, experiencing a slight decline to 9.2 percent by 2022. For females, the corresponding figures decreased from 4.4 percent in 2016 to 2.9 percent in 2022. The overall percentage of individuals engaging in borrowing activities exhibited a downward trend, decreasing from 7.5 percent in 2016 to 6.1 percent in 2022. Palestinians normally prefer to borrow from low-cost, non-formal sources, mainly family and friends (MAS, 2023). Many of the adults in Palestine cannot comply with the borrowing requirements from formal sources like banks and microfinance institutions, mainly due to a lack of secure and sustainable sources of income.

The percentage of males holding private insurance (conventional or Islamic/*Takaful* products) significantly increased from 9.5 percent in 2016 to 19.8 percent in 2022. For females, the ownership of private insurance policies rose from three percent in 2016 to 15.9 percent in 2022. The overall prevalence of private insurance among individuals increased from 6.5 percent in 2016 to 17.9 percent in 2022. These trends suggest an uptick in adopting private insurance policies over the specified period, indicative of a broader shift in insurance coverage among both genders. Nonetheless, it is important to note that compulsory insurance, such as automobile or work injuries, is the most prevailing. There is very limited adoption of non-compulsory insurance.

Over the last six years, there has been a notable uptrend in the FI index (defined here as *owning* at least one type of bank account or borrowing or insurance) for both genders. The percentage of financially included males increased from 42.7 percent in 2016 to 56.1 percent in 2022. For females, it rose from 18.8 percent in 2016 to 32.7 percent in 2022. The aggregate percentage of adult individuals who are financially included ascended from 30.9 percent in 2016 to 44.6 percent in 2022. These figures underscore commendable progress toward enhanced financial inclusion for diverse population segments.

The results also show improved financial literacy, measured as knowledge of basic financial accounts, financial terms, and related regulatory authorities. The financial literacy score for males rose from 39.8 points in 2016 to 45.8 points in 2022. Similarly, females experienced an increase in financial literacy from 30 points in 2016 to 35.2 points in 2022. The overall financial literacy score increased from 35 points in 2016 to 40.6 points in 2022. This trend is consistent with improved educational attainment over the same period, although it is less pronounced.

On another note, health insurance, including public and private providers, increased for both genders, with males rising from 77.6 percent in 2016 to 81.4 percent in 2022 and females rising from 80.0 percent in 2016 to 84.5 percent in 2022. While private health insurance is very limited (about five percent), most Palestinian individuals have public health insurance coverage. Interestingly, public health insurance is the only service with higher coverage for females than males. Most individuals in Palestine pay for public health insurance (with some exempts, such as very poor families classified under the social transfer program). However, the fees are relatively small compared to private providers. The coverage is also limited compared to private providers. The FI index used in this study does not account for publicly provided services.

In terms of economic conditions and participation, the percentage of unemployed adult individuals decreased from 11.2 percent in 2016 to 10.2 percent in 2022, while the labor force participation rate increased from 49.4 percent to 49.8 percent. This reflects a modest improvement in economic conditions over the study period. However, these are concerning figures as the unemployment rate among adults is still high, and around half of them are outside the labor force. The situation has since deteriorated rapidly, with the unemployment rate in Palestine surging to 57 percent in the first quarter of 2024 following the war in Gaza (ILO, 2024).

The percentage of individuals facing financial difficulties decreased from 54.9 percent in 2016 to 49.7 percent in 2022. Both males and females experienced a reduction, reflecting potential improvement in economic conditions. The percentage of respondents confident that their families could cover living expenses for less than a week decreased from 34.5 percent in 2016 to 26.2 percent in 2022. The percentage of people who could cover living expenses for a week to less than a month slightly increased from 33.7 percent in 2016 to 35.4 percent in 2022. There was also an increase in the percentage of respondents who could cover living expenses for one month to less than three months and three months to six months. These results indicate improved financial capacity and preparedness over the study period. Nonetheless, as noted earlier, the living conditions in Palestine have witnessed a rapid decline since October 2023, with a large segment of the population losing their main source of income and barely able to cover basic daily expenses.

Table 1. Summary statistics by year and gender

N (Sample Size) **Variables**	**2016 Men**	**2016 Women**	**Total 2016**	**2022 Men**	**2022 Women**	**Total 2020**
	1,868	1,820	3,688	3,706	3,618	7,324
Bank Account (owns at least one type of formal bank account)	38.4%	15.3%	27.0%	48.7%	20.5%	34.8%
Borrowing (borrows from at least one formal source)	10.5%	4.4%	7.5%	9.2%	2.9%	6.1%
Insurance (owns at least one type of private insurance policy)	9.8%	3.0%	6.5%	19.8%	15.9%	17.9%
FI Index (owns at least one type of bank account, or borrowing or insurance)	42.7%	18.8%	30.9%	56.1%	32.7%	44.5%
Financial Literacy (score from 0 to 100)	39.8	30.0	35.0	45.8	35.2	40.6
Age in Full Years (average)	35.62	36.199	35.9	36.930	37.436	37.2
Share of Adult Females	43.7%	57.1%	50.3%	46.7%	51.9%	49.3%
Education Level						
Illiterate	2.0%	6.2%	1.5%	1.5%	2.6%	2.0%
Can Read and Write	5.0%	5.3%	3.6%	3.6%	3.7%	3.6%
Elementary	15.6%	13.3%	10.9%	10.9%	8.9%	9.9%
Preparatory	30.1%	26.7%	30.8%	30.8%	26.1%	28.5%
Secondary	25.3%	27.2%	28.1%	28.1%	30.4%	29.3%
Associate Diploma	6.8%	5.6%	6.2%	6.2%	7.1%	6.7%
BA/BSc	15.1%	15.7%	19.0%	19.0%	21.1%	20.0%
Health Insurance	77.6%	80.0%	78.8%	81.4%	84.5%	82.9%
Poor (some people are unable to cover their daily expenses).	55.5%	54.3%	54.9%	49.5%	49.8%	49.7%
Budget Duration (determines the time in which the family can cover living expenses)						
Less than a Week	30.4%	38.7%	34.5%	25.9%	26.5%	26.2%
From a Week to Less than a Month	37.3%	30.0%	33.7%	34.8%	36.0%	35.4%
From One Month to Less than Three **Months**	16.0%	14.5%	15.3%	19.0%	18.3%	18.6%
From Three Months to Six Months	10.2%	8.6%	9.4%	14.1%	10.6%	12.4%
I Don't Know	6.1%	8.1%	7.1%	6.2%	8.7%	7.5%
Employment						
Unemployed	16.8%	5.5%	11.2%	13.9%	6.4%	10.2%
Not in Labor Force	19.9%	82.2%	50.6%	19.5%	81.5%	50.2%

4. Results and discussion

This section presents the study's main results, addressing the research questions and contributing to existing literature on FI from a gender perspective. It provides insights to inform policymakers, financial institutions, and other stakeholders in designing strategies and interventions to promote gender equality in financial services and bridge existing gaps in Palestine.

4.1. FI determinants

The FI index (adults who own at least one type of formal for-profit savings, borrowing, or insurance products) model is estimated through a logistics regression. The financial literacy index model is estimated using an OLS regression. Using FI data for 2016 and 2022, these regressions are useful for the decomposition explanation if there is something odd in the aggregates (Rios-Avila, 2020). They also lay the groundwork for a more nuanced exploration of gender gaps, helping differentiate between the effects of characteristics and market factors (Fairlie, 2005). This approach allows researchers to discern whether observed gender gaps are primarily due to differences in individual characteristics or disparities in market conditions and coefficients, taking into account any significant contextual factors that may have influenced the gender gap during this period. This could include changes in economic conditions, policies, or social norms that may have affected FI differently for males and females.

The results in Table 2 show that for 2016 and 2022, the likelihood of FI is positively related to age, i.e., as age increases, the likelihood of FI increases for males and females. However, the coefficient of age increased for females between 2016 and 2020, while it decreased for males. It is possible to explain this through the link between FI and labor market conditions. Economic participation and employment opportunities greatly influence FI in Palestine (MAS, 2023). Older individuals have more stable and consistent employment through experience, tenure, and favorable job contracts, and thus have better access to financial services. In comparison, younger individuals face challenges when entering the workforce, with limited job openings and strong competition. Unemployment is highest among younger individuals, with roughly a third of all youth (15-29 years old) unemployed in 2022 (PCBS, 2023a). There are also disparities in youth unemployment according to gender. Among females, youth unemployment (18-29 years old) stood at 59 percent in 2022, compared to 32 percent among males (PCBS, 2022). This helps explain the gap between males and females regarding the estimated coefficient of age in the FI model in Table 2 for both 2016 and 2022. Notably, the Gaza Strip experienced the highest unemployment rates compared to the West Bank, recording 75 percent for females and 30 percent for males. Graduates holding an intermediate diploma or higher are among the highest unemployment rates, reaching 48 percent in 2022 (34 percent for males and 61 percent for females) (PCBS, 2023a).

The family structure, represented by the share of adult females in the household, had a positive and significant impact on women’s FI in 2022. This means that if more adult women are in the household compared to adult men, females are more likely to be financially included. A household with more adult females may indicate a supportive social environment for women's economic activities, contributing to household finances. In such settings, societal norms and support structures may promote women's FI, encouraging them to participate in economic and financial endeavors.

The results in Table 2 show that, generally, the higher the level of education, the more likely both males and females will be financially included in 2016 and 2022. This aligns with the positive association between education and FI at both the national and international levels (Ghosh and Vinod, 2017; Özşuca, 2019; MAS, 2023). However, females with bachelor's degrees (BA/BSc) are less likely (25.4) to be financially included compared to females with associate diplomas (26.77). This is because the women's unemployment rate in Palestine is the highest for women with bachelor's and master's degrees (ESCWA, 2023). It is important to mention that the likelihood of FI is higher for males than females, which might be explained by Palestine's labor market and education dynamics. Education is insufficient for women to secure employment, as women's unemployment rate increases with their educational attainment, in contrast with men (MAS, 2022). Given that FI has a positive and strong association with employment in Palestine (Harker et al., 2019; Harker et al., 2023), we expect that males are more likely to be financially included. This result matches the previous literature (Ghosh and Vinod, 2017; Özşuca, 2019; MAS, 2023).

Health insurance positively impacted the likelihood of being financially included in 2022. Having accessible and affordable health insurance contributes to economic empowerment by mitigating health concerns, which can be a barrier to participating in the labor market. Notably, the unsuccessful pursuit of decent employment opportunities with social protection contributes to disproportionately higher unemployment among women (ILO, 2011). Most unemployed women graduates search for stable jobs in the public sector or the formal private sector (ETF, 2014), providing a social security net, namely health insurance and maternity leave.

Palestinian women are primarily employed in service subsectors other than commerce, hotels, and restaurants. Most female university students study social sciences. Some 73 percent of employed women are in these service subsectors, with employment in education, public administration, and health and social work comprising the largest share of female employment. Teaching remains more conducive to family life (particularly for married female employees), and the public sector offers job security while working in the health sector is generally considered socially acceptable (Morrar, 2021). At equal levels of education, women's average daily wage is about a third lower than their male colleagues in nearly all sectors. At the same time, women's entrepreneurship rates are low (Morrar et al., 2024). Only nine percent of private sector firms are headed by females.

For both men and women, we find that if the adults in the household are actively employed or have stable sources of income, they are more likely to be financially included. This means that employment allows individuals to access formal financial services, such as banking and credit, contributing to their FI. Interestingly, having a job in the public sector increases the likelihood of both sexes being financially included compared to the private sector. This is because all public employees in Palestine are considered formal employees and receive their salary through bank transfers or bank cheques, while informality is widespread in the private sector and among self-employed individuals and those with unpaid jobs. Formal data reveals that more than half of the

Palestinian workers were classified as informal employees in 2022 (56 percent for males and 32 percent for females) (PCBS, 2023b). Both 2016 and 2022 data show that formal sector employees are more likely to receive their salaries through formal banking channels, such as direct transfers (MAS, 2023). This gives them easier access to basic financial services like savings accounts, electronic transactions, and other banking products. In addition, formal employees are generally perceived as more stable and creditworthy by banks and microfinance institutions in Palestine (Morrar and Abdel Razeq, 2022a), which enables them to access credit and loans. However, the likelihood of FI for public employees decreased between 2016 and 2022, which explains the very limited job opportunities in the public sector in Palestine due to the financial crises that the Palestinian government has faced in the last few years owing to the occupation's constraints and the COVID-19 crisis. The government was obligated to rationalize employment in the public sector to a minimum (World Bank, 2019). The Palestinian government has also repeatedly paid partial salaries to public servants since 2019, impacting their perceived risk profile among financial institutions.

Poor men were less likely to be financially included in 2016 and 2022, while this factor was insignificant for women. Patriarchy is prevalent in Palestinian culture, where men are the breadwinners and mainly responsible for the livelihood of their families and dependents. Since most women are either unemployed or out of the labor force, they are more likely to depend on others for their expenditures. Poor men with no stable income are less likely to be financially included. In contrast, poor and non-poor women who depend on their husbands for expenditures are less likely to be financially included since they do not have a secure source of income or an urgency to access financial services.

Among the different properties that adult men and women might have, only owning vehicles increases the likelihood of FI. This is due to the high prevalence of automobile loans in Palestine and the variety of financing options. The loan requirements for land and apartments, which are usually long-term, are stricter.

Table 2. Determinants of FI by gender for the years 2016 and 2022

Variables	(1) 2016 Male	(2) 2016 Female	(3) 2022 Male	(4) 2022 Female
Age	0.572***	0.326***	0.473***	0.385***
Share of Adult Females	-0.0928	0.0680	0.0159	0.109*
Education Level (illiterate is the reference group)				
Can Read and Write	21.94**	7.616*	12.48	6.942
Elementary	24.24***	10.70***	7.239	15.36***
Preparatory	32.07***	14.02***	13.50	10.03*
Secondary	37.71***	17.06***	19.93**	16.67***
Associate Diploma	35.07***	29.02***	19.86**	26.77***
BA/BSc	49.55***	31.82***	33.73***	25.42***
Own Health Insurance	0.922	1.177	12.33***	11.72***
Poor	-5.673**	-0.101	-4.325*	2.022
Budget Duration (less than one week is the reference group)				
From a Week to Less Than a Month	3.508	0.905	4.992*	-0.204
From One Month to Less Than Three Months	8.029**	7.603**	5.059	3.203
From Three Months to Six Months	15.53***	18.19***	4.453	0.209
I Don't Know	1.714	1.374	-9.356**	-17.8***
Employment Sector (private sector is the reference group				
Public Sector	45.77***	52.19***	17.59***	20.9***
Other Sectors	8.890**	27.57**	28.45***	-14.64*
Unemployed	-16.9***	-4.092	-11.1***	-48.9***
Not in Labor Force	-7.973**	-7.300	-6.723*	-43.2***
Own Lands	1.201	3.611	4.384	-0.118
Own Vehicles	18.84***	17.18***	17.07***	18.09***
Own Apartment	4.079	8.420**	-0.419	-0.744
Own Precious Metals	2.649	-0.809	1.894	2.315
Constant	-18.16	-16.44**	-2.610	23.11**
Observations	1818	1872	3665	3659

** p<0.1; ** p<0.05; *** p<0.01.*

Financial literacy in Palestine is critical in empowering individuals to make informed and effective financial decisions (Harker et al., 2013; Tikam and Hinn, 2023). Financial literacy gives individuals the knowledge and skills to manage their finances, understand banking services, and make sound investment choices. The financial literacy score increased for men and women between 2016 and 2022. However, it is still low at around 46 points for males and 35 points for females, with a nine-point gender gap. Low financial literacy among women may hinder their ability to engage with banking services and make sound economic choices and financial decisions. It can also impact their capacity to manage personal finances, save for the future, and participate confidently in economic activities (Bucher-Koenen et al., 2017).

The results in Table 3 show that the likelihood of financial literacy is higher for younger women, mainly explained by the high enrollment of young women in higher education (ESCWA, 2023), which reached 62 percent out of the total number of students enrolled in higher education institutions in 2021-22 (MOHE, 2022). A positive and robust association exists between education level and financial literacy, as shown in Table 2, for both men and women in 2016 and 2022. Education equips individuals with the tools to understand financial concepts and make informed decisions about budgeting, investing, and managing personal finances.

Employability is important for financial knowledge. Both men and women with higher rates of employment achieved a higher score of financial literacy. This analysis indicates that the primary development of financial knowledge occurs through practical experience, specifically through the regular use of financial products and services (Harker et al., 2023). Having a stable source of income also positively impacts financial literacy. This confirms the link between decent employment and financial literacy since decent jobs are more likely to provide a sustainable source of income and avoid falling into poverty.

Table 3. Determinants of financial literacy by gender for the years 2016 and 2022

	(1) 2016 Male	**(2) 2016 Female**	**(3) 2022 Male**	**(4) 2022 Female**
Age	-0.0110	-0.0912*	-0.0104	-0.086**
Share of Adult Female	-0.0779*	0.0182	0.0251	-0.0446*
Education Level (illiterate is the reference group)				
Can Read and Write	3.609	8.364***	2.624	2.884
Elementary	12.71***	13.54***	10.72**	5.130**
Preparatory	16.28***	14.30***	11.89***	8.461***
Secondary	20.21***	22.37***	19.49***	16.26***
Associate Diploma	28.71***	28.59***	22.26***	19.83***
BA/BSc	29.63***	25.79***	26.84***	20.90***
Own Health Insurance	3.164**	-2.883*	1.294	-1.566
Poor	-2.873**	-1.737	2.101**	-1.314
Budget Duration (less than one week is the reference group)				
From a Week to Less Than a Month	-1.853	2.452*	4.581***	4.143***
From One Month to Less Than Three Months	1.884	6.077***	6.865***	5.573***
From Three Months to Six Months	6.005***	9.185***	10.57***	10.23***
I Don't Know	-0.650	-2.578	-6.803***	-9.385***
Employment Sector (private sector is the reference group)				
Public Sector	1.235	18.90***	2.512*	-6.284**
Other Sectors	-0.532	-1.584	1.828	-0.347
Unemployed	-12.62***	8.768**	-3.546**	-6.189*
Not in Labor Force	-1.911	1.881	0.762	-10.14***
Own Lands	1.426	3.909**	-0.293	4.337***
Own Vehicles	0.0510	0.848	3.170***	0.264
Own Apartment	1.246	-3.812**	-2.317*	-3.631*
Own Precious Metals	-6.946***	0.346	5.426***	2.190
Constant	25.87***	13.06***	20.66***	35.02***
Observations	1818	1872	3665	3659

** p<0.1; ** p<0.05; *** p<0.01.*

4.2. Decomposition of FI gender gap

In this section, we explore what factors contributed to the FI gender gaps in 2016 and 2022, namely the factors explained by differences in characteristics (reflecting the advantages men may have over women in terms of variations in individual attributes such as socioeconomic and demographic characteristics) and the factors explaining the market structure disadvantage (usually related to discrimination) that women face. A coefficient analysis is important to understand the factors contributing to disparities before and after 2022, providing a detailed understanding of the evolving dynamics shaping FI trends.

In the last decade, regulatory authorities in Palestine have focused their efforts on FI. Palestine was one of the first Arab countries to develop a comprehensive national strategy to tackle financial exclusion (2018-25), focusing on low-income individuals, women, and youth. Both the PMA and PCMA have dedicated programs to promote gender-based FI, including workshops, training, and the introduction of specially tailored financial services. Despite the efforts of the regulatory authorities to bridge the gender gap in FI after 2016, the results of the KOB decomposition approach combined with the RIF regression in Table 4 show that the FI gender gap has preserved its high level in both 2016 and 2022. The same is true of the gender gap in financial literacy.

In general, 41 percent (9.8/23.9) of the disparity in FI in 2016 is due to the difference in the coefficients or the market structure disadvantages (usually related to discrimination) that women face. These market structure disadvantages expanded in 2022 to around 46 percent, meaning that women still face cultural and social obstacles that hinder their access to FI. The remaining 59 percent of the gap is due to the differences in characteristics reflecting the advantages men may have over women regarding sociodemographic characteristics (explained variation or endowments effect). This decreased to around 54 percent in 2022.

The financial literacy gender gap is also primarily explained by the difference in the coefficients or the market structure disadvantages, which increased from 66.5 percent in 2016 to 100 percent in 2022. This means that the financial literacy gender gap in 2022 is fully explained by the differential effect of the covariate entered in the model, including the general effect of unknown factors (constant).

In Palestine, women often find themselves economically reliant on men, perpetuated by societal expectations and the influence of parents or spouses over financial matters, employment decisions, and the ability to engage in work (Roald, 2013). These dynamics arise from deeply ingrained gender norms. Women's financial dependence on men extends beyond their capacity to work, encompassing their ability to manage their finances independently. Statistics from the 2022 FI survey (MAS, 2023) show that only between 51 percent and 63 percent of women in Palestine exert full control over their income. This means that male relatives often control females' income, hindering their financial independence (Harker et al., 2023). The shift toward increased female participation in the labor market does not necessarily translate into an enhancement of women's autonomy in regard to FI and financial literacy.

The differential effects of the employment sector contributed the most to unexplained variations in both FI and financial literacy, mainly in 2022. This might be explained by the market structure disadvantage (usually related to discrimination) that women face in the labor market (ESCWA, 2013). Working in the public and private sectors and having a stable source of income are responsible for the main explanatory power of FI differentials. In other words, reducing the difference of these factors between women and men would reduce most of the explained disparity.

The analysis explores the influence of education levels on discrimination. In 2016, higher discrimination against educated women regarding FI was revealed. However, the discrimination against educated women disappeared in 2022. The more women in higher education, the less discrimination they might face in accessing FI. Results also show that, on average, older men tended to have higher FI levels than women of the same age in 2016. Over the years, the gender gap has narrowed slightly among older individuals, indicating a positive trend for women in FI across different age brackets.

Table 4. Decomposition of FI gender gap decomposition in 2016, 2022

	(2016) FI Index	**(2016) Financial Literacy**	**(2022) FI Index**	**(2022) Financial Literacy**
Aggregate				
Total Difference	23.943***	9.803***	23.445***	10.594***
Difference in Coefficients (discrimination)	9.833***	6.514***	10.744***	10.742***
Difference in Characteristics	14.110***	3.289**	12.702***	-0.148
N	11014	11014	11014	11014
Difference in Coefficient				
Age	8.906*	2.903	3.307	2.839
Share of Adult Female	-9.187	-5.491*	-4.855	3.615
Education Level				
Can Read and Write	0.762	-0.253	0.207	-0.010
Elementary	1.795	-0.110	-0.723	0.498
Preparatory	4.812**	0.527	0.906	0.895
Secondary	5.621**	-0.588	0.992	0.982
Associate Diploma	0.339	0.007	-0.491	0.172
BA/BSc	2.785*	0.603	1.756	1.255
Health Insurance	-0.204	4.840***	0.512	2.416
Poor	-3.029*	-0.617	-3.163**	1.702**
Budget Duration				
From a Week to Less Than a Month	0.782	-1.293**	1.869	0.158
From One Month to Less Than Three Months	0.062	-0.609*	0.339	0.236
From Three Months to Six Months	-0.230	-0.274	0.448	0.036
I Don't Know	0.028	0.156	0.738*	0.225
Employment Sector (other sector is the reference group)				
Public Sector	-0.207	-0.570***	1.155***	0.574**
Private Sector	-0.329	0.019	1.067***	0.054
Unemployed	-0.697	-1.164***	2.435***	0.170
Not in Labor Force	-0.554	-3.117	29.720***	8.894***
Own Land	-0.193	-0.198	0.368	-0.379**
Own Vehicles	0.130	-0.063	-0.081	0.230
Own Apartment	-0.694	0.808**	0.018	0.074
Own Precious Metals	0.859	-1.812***	-0.060	0.460
Constant	-1.726	12.812*	-25.721*	-14.352**
Difference in Characteristics				
Age	-0.326	0.006	-0.239	0.005
Share of Adult Female	1.251	1.050*	-0.084	-0.132
Education Level				
Can Read and Write	-0.062	-0.010	-0.021	-0.004
Elementary	0.569	0.298	0.142	0.210
Preparatory	1.114	0.565	0.624	0.550*
Secondary	-0.732	-0.392	-0.464	-0.454
Associate Diploma	0.428	0.350	-0.174	-0.195
BA/BSc	-0.295	-0.177	-0.727	-0.578
Health Insurance	-0.022	-0.076	-0.380*	-0.040
Poor	-0.065	-0.033	0.013	-0.007
Budget Duration				
From a Week to Less Than a Month	0.256	-0.135	-0.061	-0.056
From One Month to Less Than Three	0.119	0.028	0.039	0.053
From Three Months to Six Months	0.239	0.093	0.157	0.374***
I Don't Know	-0.035	0.013	0.232*	0.169*

Table 4. Decomposition of FI gender gap decomposition in 2016, 2022 (continued)

	(2016) FI Index	(2016) Financial Literacy	(2022) FI Index	(2022) Financial Literacy
Employment Sector (other sector is the reference group)				
Public Sector	4.708***	0.127	3.653***	0.522*
Private Sector	1.100**	-0.066	3.784***	0.243
Unemployed	-1.915***	-1.430***	-0.832**	-0.266**
Not in Labor Force	4.969**	1.191	4.168*	-0.473
Own Land	0.140	0.166	0.325	-0.022
Own Apartment	2.101***	0.006	-0.026	-0.144*
Own Precious Metals	1.096	0.335	-0.142	-0.407***
Constant	-0.526	1.380***	0.000	0.000
Observations	0.000	0.000	11014	11014

4.3. Decomposition of intertemporal FI gender gap

The intertemporal decomposition allows us to differentiate between trends and changes in the gender gap regarding FI and financial literacy. Given the significance of the pandemic, the difference we expect to find could be mainly attributed to the pandemic.

Table 5 shows the Oaxaca-Blinder intertemporal decomposition between men and women regarding FI and financial literacy (see Table 5.1 in the Appendix). The results reveal that the financial gap seems to have worsened or not changed in most aspects. Only in terms of "having private insurance" did the gap decline (2.95 percent). There is a growth in the disparity of owning bank accounts between men and women in favor of men. We find no change in the gender gap regarding borrowing, overall, FI, and financial literacy.

Many of the changes between 2016 and 2022 seem to be driven by changes in discrimination (explained by changes in the coefficients gap), followed by changes in men's returns. The negative contribution of change in discrimination in regard to having private insurance shows that the decrease in the gender gap concerning private insurance is mainly attributed to the decline in discrimination over time. Meanwhile, the positive contribution of change in discrimination in terms of financial literacy demonstrates that the increasing gender gap in terms of financial literacy is mainly attributed to the rise of discrimination over time.

The deterioration of women's conditions in the Palestinian labor market (high unemployment, low participation rate, and informality) has the greatest contribution to the growth of intertemporal gender discrimination in terms of FI and financial literacy. This cannot be disconnected from the impact of the COVID-19 pandemic on the Palestinian labor market, mainly for women (UN Women, 2021; ESCWA, 2023). Working women are considered one of the groups most affected by the pandemic in Palestine (MAS, 2021c). A large percentage of women, especially in the informal labor market, were forced to leave their jobs. It is estimated that the time spent by women in unpaid work is 7.4 times higher than that spent by men, one of the highest rates in the world (MAS, 2021c). Moreover, Palestinian women encountered different forms of discrimination in both the formal and informal labor markets, which intensified after the onset of COVID-19 (UN

Women, 2021; ESCWA, 2023). In addition to job losses, this was manifested in the gender wage gap, mainly in the private sector, low representation in senior leadership positions, and limited access to social protection like maternity leave, end-of-service payments, sick leave…etc. (Fallah et al., 2023).

Poverty and unstable income sources are also key drivers of the increase of women's financial exclusion. Being poor women (or women in poor households) significantly contributes to the growth in gender discrimination in terms of financial literacy between 2016 and 2022. This can be explained by the negative consequences of COVID-19 on Palestinian women. The challenges faced by women were exacerbated by the COVID-19 pandemic, compounded by the negative effects of restrictions imposed by Israel's occupation of the West Bank and Gaza (UN Women, 2021). This led to a decline in the female participation rate in the national labor market, an increase in women's unemployment rate, and an increase in the poverty rate, mainly for female-headed households. Approximately 29.2 percent of individuals lived below the poverty level in 2017, indicating that around one in three people faced economic hardship. Notably, the Gaza Strip had a significantly higher poverty rate compared to the West Bank, with 53 percent of individuals in Gaza identified as poor in 2017. This stark contrast underscores the considerable disparity, with the poverty rate in the Gaza Strip more than four times higher than the rate in the West Bank, which stood at 13.9 percent (PCBS, 2018).

Poverty is higher among female-headed households; around 20 percent of individuals residing in such households experience severe poverty, struggling to meet the necessities such as food, clothing, and housing, compared with 17 percent of households headed by males. The incidence of poverty grew steadily due to the negative percussions of the pandemic; the widespread impact of COVID-19 significantly increased the number of individuals facing poverty in the West Bank and the Gaza Strip. This has also given rise to a “new impoverished class” directly linked to the circumstances created by the COVID-19 pandemic. More than 100,000 Palestinian families fell into a cycle of poverty due to the impact of the pandemic (MAS, 2021b). The World Bank estimates that poor households increased by 30 percent in the West Bank and 64 percent in the Gaza Strip (World Bank 2020a).

Table 5. Decomposition of intertemporal FI gender gap between 2016 and 2022

	(1)	(2)	(3)	(4)	(5)
	Bank Account	**Borrowing**	**Insurance**	**Total**	**Financial Literacy**
Aggregate					
Total Change in Gap	5.055**	0.171	-2.945*	-0.497	0.791
Change in Discrimination	4.591	1.623	-11.732***	-1.007	4.045**
Change in Women's Endowment	1.832	-0.021	0.840	1.918	0.184
Change in Endowment Gap	2.010	-0.120	1.486	2.391	0.838
Changes in Men's Returns	-3.378	-1.310	6.460**	-3.800	-4.276**
N	11014	11014	11014	11014	11014
Change in Discrimination					
Age	-3.246	0.090	-6.271	-5.903	-0.163
Share of Adult Females	9.292	1.183	2.602	3.495	8.605**
Education Level (illiterate is the reference group)					
Can Read and Write	-0.061	-0.248	-0.545	-0.327	0.168
Elementary	-0.947	-0.948**	-1.178	-1.930	0.572
Preparatory	-3.121	-1.693	-3.482	-3.812	0.379
Secondary	-4.050	-2.614*	-2.211	-5.295	1.639
Associate Diploma	-0.340	-0.423	-0.843	-0.920	0.163
BA/BSc	-1.412	-1.521	-3.566	-1.989	0.444
Health Insurance	6.070	3.002	-4.909*	0.727	-2.692
Poor	0.589	1.412	-2.301	-0.386	2.268**
Budget Duration (less than one week is the reference group)					
From a Week to Less Than a Month	1.929	1.004	-1.185	0.933	1.706*
From One Month to Less Than Three	0.098	0.279	0.574	0.261	1.001*
From Three Months to Six Months	0.399	0.410	-0.516	0.730	0.372
I Don't Know	0.389	0.250	-0.268	0.708	0.057
Employment Sector (other sector is the reference group)					
Public Sector	1.564**	-1.099**	0.918	1.574**	1.728***
Private Sector	1.542***	-0.100	0.555**	1.530***	0.028
Unemployed	3.252***	0.110	1.385**	3.259***	1.545***
Not in Labor Force	33.254***	1.182	5.888	30.269***	11.986***
Own Land	0.518	0.019	0.223	0.566	-0.176
Own Vehicles	-0.416	0.166	0.550	-0.212	0.293
Own Apartment	-0.145	-0.092	0.493*	0.262	-0.210
Own Precious Metals	-0.152	-1.277**	-0.665	-0.551	1.497***
Not in Labor Force	-0.012	-0.004	-0.006	-0.022	0.002
Own Land	-0.065	0.024	-0.122	-0.187	0.012
Own Vehicles	0.791**	0.195*	1.354**	0.809**	0.150*
Own Apartment	-1.480**	-0.943*	0.304	0.087	0.479*
Own Precious Metals	0.620	-0.98***	-1.227***	0.234	0.671***
Constant	0.000	0.000	0.000	0.000	0.000

4.4. Financial technology and gender FI

This paper also aims to analyze how technology adoption for financial transactions has influenced women's FI. In other words, it investigates if promoting gender-responsive financial systems and leveraging technology would lead to more inclusive and equitable economic development in Palestine. By understanding these dynamics, policymakers and stakeholders can formulate targeted interventions to promote inclusive and gender-responsive financial systems. Table 7 shows the determinants of FI and financial literacy for men and women in 2022. For simplicity, only age, the share of adult females in the household, educational level, and poverty are used as explanatory variables. We estimate the impact of financial technology on FI in 2022 only, as the 2016 FI survey does not include indicators about financial technology.

Before discussing the impact of financial technology on the likelihood of both men and women being financially included, a decomposition of the gender gap in financial technology is first performed. This provides a deep understanding of the socioeconomic and demographic factors that can explain the disparities according to gender. As before, the gender gap is either because of differences in characteristics (explained variation or differences in endowment) or market structure disadvantage (unexplained variation or discrimination).

Table 6 shows the Oaxaca-Blinder decomposition between men and women regarding financial technology usage. Results display a notable gender gap (14.76 percent) in favor of men, meaning that men have 14.7 percent better access to FI than women. Adopting modern financial technologies may be slower among women who may face barriers related to technology literacy or access to digital financial services.

In general, 57 percent (8.348/14.76) of the disparity was due to the different distribution of the predictors (endowments). In other words, 57 percent of the gap is explained by differences in characteristics reflecting the advantages men may have over women in terms of sociodemographic characteristics (explained variation). The remaining 43 percent of the gap is explained by the market structure disadvantage (usually related to discrimination) that women face. In other words, 43 percent of the disparity was attributed to the differential effect of the covariate entered in the model (coefficients effect), including the general effect of unknown factors (constant), specifying the disparity's unexplained portion.

Factors such as property ownership, working in the public and private sectors, and having a stable source of income contributed the most to the gender gap. Reducing the difference in these factors between adult women and men could lessen most of the explained disparity. The differential effects of property ownership (cars and real estate), age, and education level (BA/BSc) have the greatest contribution to unexplained variations, which might be explained by the market structure disadvantage (usually related to discrimination) faced by women. The negative contribution of property ownership and age implies that removing the women/men difference in property ownership and age widens the disparity.

The positive sign of education level reveals higher discrimination against educated women. High unemployment rates among women are partially explained by the type of educational specialties they choose (Morrar et al., 2022b). According to PCBS data (PCBS, 2023), teaching and healthcare are among the top specialties for women. This high influx of women into specific sectors ultimately leaves many women unemployed due to the limited number of vacancies in these sectors (Al-Botmeh, 2013). This explains data presented later in the study showing that a low percentage of women with bachelor's degrees have limited access to financial technology.

Table 6. Oaxaca-Blinder decomposition results for the gender gap in financial technology, 2022

Variables	Overall	Explained	Unexplained
Men	22.40***		
Women	7.633***		
Difference	14.76***	8.348***	6.416***
Age		0.0959	-6.839*
Share of Adult Females		-0.218	1.752
Education Level (illiterate is the reference group)			
Can Read and Write		-0.00029	0.029
Elementary		-0.00206	-0.188
Preparatory		0.108	0.0806
Secondary		-0.245	1.764
Associate Diploma		-0.0988	0.371
BA/BSc		-0.529	3.067***
Health Insurance		-0.00223	-0.638
Poor		0.00893	-0.645
Budget Duration (less than one week is the reference group)			
Less Than a Week		-0.0345	0.0000885
From a Week to Less Than a Month		0.0833	0.711
From One Month to Less Than Three Months		0.433*	0.295
From Three Months to Six Months		0.223*	-0.504
Employment Sector			
Public Sector		1.889**	-0.564
Private Sector		1.151*	0.296
Unemployed		-0.694**	0.192
Not in Labor Force		3.091	2.934
Own Land		0.0171	-4.972
Own Cars		2.403***	-7.329*
Own Real Estate		0.931***	-14.26***
Own Precious Metals		-0.264	0.492
Constant		30.37**	
N		**7322**	

Table 7 below discusses the impact of financial technology on the likelihood of both men and women being financially included in 2022, one year after the dangerous repercussions of COVID-19 on socioeconomic conditions in Palestine. The year 2022 witnessed a decline in the negative consequences of the pandemic shock and a recovery in the economic and social indicators.

The results reveal a significant influence of financial technology on the likelihood of FI, particularly favoring women. This implies that women may experience a slightly more pronounced positive effect from financial technology regarding FI. The elevated impact score for women emphasizes the potential of technology-driven financial services to narrow disparities and improve accessibility for female individuals, potentially addressing the specific challenges they encounter within traditional financial systems. These findings underscore the importance of the ongoing exploration and implementation of fintech solutions to continually enhance FI, particularly for women who stand to gain significantly from advancements in financial technology.

While the regression analysis results show a positive impact of financial technology on financial literacy, it varies based on gender, with a slightly higher value for men (9.03) than women (7.6). The sociodemographic factor in Palestine can be addressed through financial literacy, including digital financial literacy (Tikam and Hinn, 2023). Financial literacy levels can be lower for those outside the financial system than those in the formal financial system (Harker et al., 2023).

Internationally, the COVID-19 pandemic has expedited the adoption of digital financial services (World Bank Group, 2021; USAID, 2022), given that social distancing measures hindered people from visiting the physical branches of financial institutions. In Palestine, there has been a modest rise in the utilization of mobile and electronic banking services. The growth rate in using conventional (physical) banking channels, such as bank branches, surpassed that of electronic banking (Tikam and Hinn, 2023).

The pandemic has deteriorated the situation of women in the Palestinian labor market, with around 11 percent losing their jobs (UN Women, 2021). With lockdowns and restrictions in place, remote work and online transactions for women in Palestine becoming more prevalent. In this context, COVID-19 further fueled the expansion of e-commerce-based businesses in Palestine (Morrar, 2024). This effect was mainly for women, which encouraged them to explore and utilize digital financial tools like remote banking, payments, and other financial transactions (Morrar, 2024; UN Women, 2021). In other words, there has been an increased emphasis on reducing and substituting the use of cash with digital payments during the COVID-19 pandemic, and the increase in e-commerce transactions for women has consequently increased digital payments, primarily concerning the use of debit cards (World Bank, 2021).

Regulatory authorities and financial institutions in Palestine introduced measures to facilitate financial transactions and support citizens during the pandemic. For example, the PMA granted licenses to five e-payment companies in early 2020. These companies primarily offer e-wallet and point-of-sale services. Some also facilitated bill payments through point-of-sale channels to certain service providers (Morrar, 2024; USAID, 2022).

Table 7. The Impact of Financial Technology on FI and Financial Literacy Based on Sex, 2022

Variables	(1) FI	(2) FI Male	(3) FI Female	(4) Financial Literacy Male	(5) Financial Literacy Male	(6) Financial Literacy Female
Age	0.0190***	0.0179***	0.0194***	-0.090***	-0.0645***	-0.114***
Share of Adult Females	0.0074***	0.00297	0.009***	-0.00783	0.0355	-0.0326**
Sex (Female=1)	-0.982***			-9.696***		
Use of Financial Technology	2.770***	2.701***	2.867***	8.614***	9.031***	7.671***
Education Level (illiterate is the reference group)						
Can Read and Write	0.705***	0.864***	0.767***	2.076	0.987	2.935
Preparatory	0.920***	0.962***	1.076***	7.030***	8.796***	4.959***
Associate Diploma	1.127***	1.434***	0.959***	11.79***	13.71***	9.318***
Can Read and Write	1.127***	1.381***	1.033***	15.99***	16.79***	14.74***
Preparatory	1.493***	1.438***	1.661***	22.93***	22.99***	22.37***
Associate Diploma	1.786***	2.007***	1.761***	25.17***	25.97***	23.82***
Own Health Insurance	0.759***	0.686***	0.901***	2.636***	2.981***	2.284**
Poor	0.102*	0.203***	-0.000465	0.198	-0.203	0.565
Budget Duration (less than one week is the reference group)						
Less Than a Week	0.0664	0.271***	-0.133	2.791***	3.027***	2.484***
From One Month to Less Than Three Months	0.127	0.213*	0.0368	6.012***	7.300***	4.564***
Less Than a Week	0.231**	0.514***	-0.0518	8.963***	8.833***	9.171***
From One Month to Less Than Three Months	-0.557***	-0.163	-1.055***	-7.640***	-6.592***	-8.664***
Constant	-3.017***	-3.187***	-3.908***	25.81***	21.34***	20.27***
Observations	7,324	3,665	3,659	7,324	3,665	3,659

*Notes: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.*

5. Conclusion and policy implications

Using the results from two nationwide surveys, this study analyzes the factors contributing to the gender gap in accessing financial services and the factors contributing to the widening gender gap in Palestine between 2016 and 2022. The research sheds light on sociocultural norms, financial literacy levels, legal frameworks, and other key factors that hinder women's FI in Palestine.

The regression analysis suggests that older men, on average, tend to have higher FI levels than women of the same age, partially explained by variations in labor market participation. Household composition plays a pivotal role in shaping financial access; our findings indicate that households with a higher proportion of women contribute to the likelihood of women’s FI. Higher levels of education also increase the likelihood of FI. However, females with bachelor's degrees have little tendency to be financially included because of the high unemployment rate among this group. Active employment and stable sources of income are other factors that increase the likelihood of FI and financial literacy. The likelihood of financial literacy is the highest for young women. A positive and strong association between education and financial literacy was found for both men and women.

The paper explores the factors that contributed to the FI gender gaps in 2016 and 2022. Despite interventions by the regulatory authorities in Palestine (PMA and PCMA) to bridge the gender gap in FI, the results show that the FI and financial literacy gender gap remained high in 2016 and 2022. The disadvantages of the market structure’s contribution to the gender gap in FI increased from 41 percent in 2016 to around 46 percent in 2022. This means that women still face cultural and social obstacles that hinder their FI. The financial literacy gender gap is also mainly explained by the difference in the coefficients or the market structure disadvantages, which increased from 66.5 percent in 2016 to 100 percent in 2022.

An intertemporal decomposition was used to differentiate between trends and changes in the gender gap regarding FI and financial literacy. The results reveal that most aspects of the financial gap have worsened or remained unchanged. Only in terms of ‘having private insurance’ did the gap decline (by 2.95 percent). Many of the changes between 2016 and 2022 appear to be driven by changes in discrimination (explained by changes in coefficients), followed by changes in men's returns. The deterioration of women's conditions in the Palestinian labor market during the COVID-19 pandemic has greatly contributed to the growth of intertemporal gender discrimination in terms of FI and financial literacy. Additionally, the negative consequences of COVID-19, compounded by the negative effects of restrictions imposed by Israel's occupation in the West Bank and Gaza, led to a decline in the female participation rate in the national labor market, thereby increasing the unemployment rate and poverty, especially for female-headed households. These factors significantly contributed to the growth in gender discrimination in terms of financial literacy between 2016 and 2022.

Adopting technology for financial transactions can influence women's FI. The results show a significant influence of financial technology on the likelihood of FI, particularly favoring women. This might be explained by the positive impact of COVID-19 on the adoption of digital financial services since the lockdowns and restrictions in place led to remote work and online transactions for women in Palestine to become more prevalent. The pandemic further fueled the expansion of e-commerce-based businesses in Palestine, mainly for women, encouraging them to explore and utilize digital financial tools like remote banking, payments, and other financial transactions. However, adopting modern financial technologies may be slower among women who face barriers related to technology literacy or access to digital financial services.

The creation of innovative digital financial services and better financial literacy has translated into a larger share of the population with access to various types of financial services. However, while women also benefit from some of this progress in financial access, their relative improvement has shown less progress compared to men. The more notable example is the widening gap in access to banking accounts, although with a moderate improvement in access to insurance markets.

To foster gender equality in FI, the Palestinian government should continue its efforts to expand financial services and financial literacy among women. It is necessary to intensify the efforts and create policies that aim to improve access for women and reduce discrimination. Given that some of the main reasons women still lag behind men in terms of FI is the lack of autonomy and jobs, policies that improve the likelihood of women participating in the formal labor market should be pursued. This would increase women's financial independence and allow them to use financial services, improving their inclusion in the financial market.

At the household level, money control is often vested in men. Therefore, implementing public provisions emerges as a potentially effective strategy for increasing the utilization of financial products and services, especially among those with limited or minimal incomes. This can be achieved by introducing innovative gender-specific services, like a public bank or a publicly managed cooperative bank. These institutions could offer essential credit services, manage government transfers (such as benefit payments), and lead educational initiatives. Unemployment or being outside the labor force poses a significant hurdle to closing the gender gap in FI and financial literacy. Addressing this necessitates substantial government interventions to empower women in the economy. This includes initiatives such as providing anti-gender-bias training, reinforcing the social protection system (including ensuring private sector compliance with minimum wage and labor law conditions, introducing flexible working hours, enhancing maternity and paternity leave…etc.), and developing financial products and services tailored for women. The expansion of mobile service centers—resembling mobile libraries—to reach women in rural or conflict-prone areas where a permanent physical presence is not feasible, is also crucial. Additionally, providing financially viable products and delivery systems that cater to the needs of low-income women and women-led micro, small, and medium-sized enterprises is essential.

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Appendix

Table 5.1. Decomposition of intertemporal FI gender gap between 2016 and 2022

	(1) Bank Account	(2) Borrowing	(3) Insurance	(4) Total	(5) Financial Literacy
Aggregate					
Total Change in Gap	5.055**	0.171	-2.945*	-0.497	0.791
Change in Discrimination	4.591	1.623	-11.732***	-1.007	4.045**
Change in Women's Endowment	1.832	-0.021	0.840	1.918	0.184
Change in Endowment Gap	2.010	-0.120	1.486	2.391	0.838
Changes in Men's Returns	-3.378	-1.310	6.460**	-3.800	-4.276**
N	11014	11014	11014	11014	11014
Change in Discrimination					
Age	-3.246	0.090	-6.271	-5.903	-0.163
Share of Adult Females	9.292	1.183	2.602	3.495	8.605**
Education Level (illiterate is the reference group)					
Can Read and Write	-0.061	-0.248	-0.545	-0.327	0.168
Elementary	-0.947	-0.948**	-1.178	-1.930	0.572
Preparatory	-3.121	-1.693	-3.482	-3.812	0.379
Secondary	-4.050	-2.614*	-2.211	-5.295	1.639
Associate Diploma	-0.340	-0.423	-0.843	-0.920	0.163
BA/BSc	-1.412	-1.521	-3.566	-1.989	0.444
Health Insurance	6.070	3.002	-4.909*	0.727	-2.692
Poor	0.589	1.412	-2.301	-0.386	2.268**
Budget Duration (less than one week is the reference group)					
From a Week to Less Than a Month	1.929	1.004	-1.185	0.933	1.706*
From One Month to Less Than Three	0.098	0.279	0.574	0.261	1.001*
From Three Months to Six Months	0.399	0.410	-0.516	0.730	0.372
I Don't Know	0.389	0.250	-0.268	0.708	0.057
Employment Sector (other sector is the reference group)					
Public Sector	1.564**	-1.099**	0.918	1.574**	1.728***
Private Sector	1.542***	-0.100	0.555**	1.530***	0.028
Unemployed	3.252***	0.110	1.385**	3.259***	1.545***
Not in Labor Force	33.254***	1.182	5.888	30.269***	11.986***
Own Land	0.518	0.019	0.223	0.566	-0.176
Own Vehicles	-0.416	0.166	0.550	-0.212	0.293
Own Apartment	-0.145	-0.092	0.493*	0.262	-0.210
Own Precious Metals	-0.152	-1.277**	-0.665	-0.551	1.497***
Constant	-40.413**	2.531	3.021	-23.995	-27.16***
Change in Women's Endowment					
Age	0.214	0.014	0.153	0.304	0.099
Share of Adult Females	1.205*	-0.410	-0.058	0.837	0.500*
Education Level (illiterate is the reference group)					
Can Read and Write	-0.140	-0.106	-0.088	-0.228	0.076
Elementary	-0.298	-0.367*	-0.330	-0.589	0.036
Preparatory	-0.075	-0.034	-0.046	-0.094	-0.010
Secondary	0.521	0.257	0.106	0.665	-0.070
Associate Diploma	0.006	0.144	0.117	0.091	0.002
BA/BSc	0.917	0.456*	0.424	0.960	0.208
Health Insurance	-0.038	0.045	0.082	-0.011	0.269**
Budget Duration (less than one week is the reference group)					
From a Week to Less Than a Month	0.101	-0.136	0.222	0.154	-0.255*
From One Month to Less Than Three	0.053	0.032	0.107	0.016	-0.156
From Three Months to Six Months	-0.000	-0.073	0.139	-0.052	-0.062
I Don't Know	0.013	-0.010	0.034	0.002	0.012

Table 5.1. Decomposition of intertemporal FI gender gap between 2016 and 2022 (continued)

	(1) Bank Account	(2) Borrowing	(3) Insurance	(4) Total	(5) Financial Literacy
Employment Sector (private sector is the reference group)					
Public Sector	-0.253	0.767***	-0.034	-0.212	-0.583***
Private Sector	-0.136	0.012	-0.004	-0.133	0.008
Unemployed	-0.095	-0.001	-0.047	-0.126	-0.211
Not in Labor Force	0.002	-0.008	-0.048	0.004	0.025
Own Land	-0.009	-0.000	0.010	-0.005	-0.005
Own Vehicles	0.001	-0.000	0.002	0.001	-0.000
Own Apartment	-0.162	-0.148	0.007	0.450	-0.524**
Own Precious Metals	-0.198	-0.399	0.179	-0.368	0.775***
Constant	0.000	0.000	0.000	0.000	0.000
Change in Endowment Gap					
Age	0.034	0.008	-0.004	0.031	-0.001
Share of Adult Females	0.692	0.669**	0.794*	0.131	0.206
Education level (illiterate is the reference group)					
Can Read and Write	0.011	-0.001	-0.004	0.014	0.003
Elementary	-0.036	-0.002	0.021	-0.028	-0.041
Preparatory	0.155	0.051	-0.076	0.155	0.137
Secondary	-0.077	-0.013	0.013	-0.078	-0.076
Associate Diploma	-0.478	-0.161	0.081	-0.416	-0.466
BA/BSc	-0.583	-0.135	0.108	-0.526	-0.418
Health Insurance	-0.038	-0.031	-0.085	-0.082	-0.009
Poor	0.110	-0.073	-0.044	0.063	-0.031
Budget Duration (less than one week is the reference group)					
From a Week to Less Than a Month	-0.510*	-0.050	-0.246	-0.425	-0.390**
From One Month to Less Than Three	-0.064	-0.013	-0.033	-0.036	-0.049
From Three Months to Six Months	0.176	0.026	0.014	0.089	0.211
I Don't Know	0.007	-0.004	0.043	0.044	0.032
Employment Sector (private sector is the reference group					
Public Sector	2.072***	1.174***	0.545**	1.844***	0.263*
Private Sector	0.299	0.021	0.006	0.263	0.017
Unemployed	0.385	0.124	0.050	0.426	0.136
Not in Labor Force	-0.012	-0.004	-0.006	-0.022	0.002
Own Land	-0.065	0.024	-0.122	-0.187	0.012
Own Vehicles	0.791**	0.195*	1.354**	0.809**	0.150*
Own Apartment	-1.480**	-0.943*	0.304	0.087	0.479*
Own Precious Metals	0.620	-0.98***	-1.227***	0.234	0.671***
Constant	0.000	0.000	0.000	0.000	0.000
Changes in Men's Returns					
Age	-0.045	-0.058	0.194	0.056	-0.000
Share of Adult Females	-1.901	-0.618	-1.123	-1.466	-1.388*
Education Level (illiterate is the reference group)					
Can Read and Write	0.023	0.022	0.026	0.027	0.003
Elementary	-0.185	-0.227	-0.332	-0.399	-0.047
Preparatory	-0.406	-0.228	-0.645	-0.645	-0.153
Secondary	0.245	0.146	0.212	0.345	0.014
Associate Diploma	-0.116	-0.122	-0.205	-0.185	-0.079
BA/BSc	0.062	0.019	0.125	0.094	0.017
Health Insurance	-0.163	-0.108	-0.227	-0.275	0.045
Poor	-0.032	0.001	0.030	0.015	0.057
Budget Duration (less than one week is the reference group)					
From a Week to Less Than a Month	0.207	0.227	0.078	0.108	0.470**
From One Month to Less Than Three	0.006	0.022	0.031	-0.044	0.074
From Three Months to Six Months	-0.125	0.025	-0.066	-0.171	0.070
I Don't Know	0.101	-0.063	0.257	0.223	0.124

Table 5.1. Decomposition of intertemporal FI gender gap between 2016 and 2022 (continued)

	(1) Bank Account	(2) Borrowing	(3) Insurance	(4) Total	(5) Financial Literacy
Employment Sector (private sector is the reference group)					
Public Sector	-2.750***	-2.17***	0.342	-2.898***	0.131
Private Sector	2.695***	0.324	0.648	2.421***	0.292
Unemployed	0.326	0.215	0.255	0.657	1.028***
Not in Labor Force	-1.880	-1.073	4.835**	-0.779	-1.666
Own Land	0.321	-0.177	-0.323	0.371	-0.200
Own Vehicles	0.415	0.256	0.972**	-0.197	0.348*
Own Apartment	0.142	0.443	-0.324	-1.209	-0.957*
Own Precious Metals	-0.317	1.842**	1.699*	0.150	-2.459***
Constant	0.000	0.000	0.000	0.000	0.000
Observations	11014	11014	11014	11014	11014

** p<0.1; ** p<0.05; *** p<0.01.*