Received: 29 November 2022 | Revised: 13 October 2023 | Accepted: 21 October 2023

DOI: 10.1111/apce.12461

Annals of Public and Cooperative Economics
Annales de l'économie publique, sociale et coopérative

WILEY

ORIGINAL ARTICLE

Gender pay gap in the microfinance industry: A global perspective

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Abstract

We use a database composed of 2,545 Microfinance Institutions (MFIs) worldwide for the period 2008–18 to explore the effect of a larger share of women's workforce on both staff wages and overall monetary compensation within MFIs. MFIs are different from other industries, as they are traditionally women-centered, i.e. they have a significant share of women employees at every level of the corporate hierarchy and mostly serve women clients. Applying both traditional estimation methodology and techniques aimed at accounting for possible endogeneity among the main variables, we find that a higher proportion of women on staff significantly increases the average expense per worker (which also includes the incentive components of remuneration) while the effects are considerably smoothed (or not significant) on the base salary. This leads us to conclude that, unlike what is seen in other sectors of the economy, MFIs do not pay women less. Yet, significant positive effects of women in the workforce, especially on average overall monetary compensation, suggest that women are likely to exploit their superior skills and/or gender affinity advantages with customers of the same gender

to enhance MFIs' efficiency and profitability, thereby achieving higher incentive compensation, mostly in the form of bonuses and other benefits.

KEYWORDS
Bonus, employee compensation, gender pay gap, microfinance, microfinance institutions, salary, wage, women employees

JEL CLASSIFICATION
G21, J31, J33

1 | INTRODUCTION

> "The gender gap in employment, earnings, and occupations has narrowed in various ways during the twentieth century…Whether or not the gap will continue to narrow and eventually disappear is uncertain…" (Claudia Goldin, Nobel Prize in Economics, 2023)

The traditional setting of the workforce asserts that male employees are paid higher salaries because they are more influential, and have higher capabilities as compared to women. For instance, according to Fontenot et al. (2018), the median yearly wage in the United States for permanent employees according to gender was $41,977 for women and $52,146 for men in 2017. Nevertheless, the gender pay gap has been decreasing since the 1960s, reaching the strongest convergence in the 1980s (Blau & Kahn, 2017), and is projected to level by the year 2059.[1] This is in line with the effort by the United Nations to reduce gender pay imbalances in both developed and emerging countries.[2]

However, studies (Francoeur et al., 2008; Julizaerma & Sori, 2012; Nguyen et al., 2021) have shown that the inclusion of women in the staff, particularly at the decision-making level, positively contributes to a firm's performance. This is due to the additional resources and expertise that women managers can bring to the firm.

In this study, we investigate the effect of larger women workforce percentage on both staff wages and overall monetary compensation within Microfinance Institutions (MFIs).[3] Understanding the relationship between gender diversity and gender pay in the area of microfinance is relevant, as it could provide a different outcome on the matter compared to other sectors of the economy, mostly because MFIs are women-oriented (Strom et al., 2014). Also, microfinance represents a particular observatory for other sectors that have not yet reached the same standards of female representation recorded in MFIs.

Hypothetically, in a women-centered business, having both higher shares of women on the staff (see Beck et al., 2013) and women customers could enable improved communication between the institution and its clientele, based on gender affinity principles (Byrne et al., 1971; Solakoglu

[1] https://www.aauw.org/app/uploads/2020/02/AAUW-2018-SimpleTruth-nsa.pdf

[2] https://news.un.org/en/story/2020/09/1072722

[3] Microfinance institutions are bodies specifically established to support business development and community empowerment, especially owners of small businesses. There are various types of MFIs: e.g. credit unions, commercial banks, NGOs (non-governmental organizations), cooperatives, and government banks.

& Demir, 2016; Thomas & Ramaswamy, 1996). This may lead women to achieve better performance than their male counterparts, as well as induce MFIs to pay them higher rewards to attract them as staff. Specifically, we advance the hypothesis that women could obtain greater monetary compensation if MFIs design labor contracts that include forms of incentives which are found to measure performance more objectively than base salaries (Jirjahn & Stephan, 2004). As there are uncertainties regarding this matter, especially with reference to the geographic area where these relationships are observed, this poses an interesting issue to be examined in this study.

As far as we know, the research regarding the gender pay gap in the microfinance ambit is scarce or nonexistent and this is particularly strange for a rapidly expanding and women-centered sector, although it may be justifiable due to the lack of data, which often needs to be collected in poor and poorly digitalized contexts where operators are subject to scarce regulation and accountability.

We use data from 2,545 MFIs worldwide for the period 2008–18 drawn from the World Bank–MIX Market Platform[4] to test our hypotheses. The advantage of this database is that it offers a worldwide view of the operators in the microfinance sector and allows us to investigate not only managers' compensation but the monetary benefits of staff at all layers of the MFIs. Another privilege of our study is that it investigates the effects of the female workforce on both base wages and overall monetary benefits (i.e., wages plus bonuses, provisions for retirement, insurance purposes, etc.) separately, which will be particularly insightful in this line of research.

This paper provides empirical evidence of a strong significant positive relationship between the percentage of women employed by MFI and average employees' compensation, while instead reporting a weak significant (or non-significant) relationship between the percentage of women working on staff and the average base salary paid by MFIs. This outcome passes various tests, including possible endogeneity issues.

On the one hand, our results highlight how microfinance is partially in contrast with the general practice of paying women employees less, recognizing their fundamental role at any layer of the MFIs' ladders. On the other hand, because the observed effects on remuneration concern the incentive component, we infer that women employees tend to outperform their male counterparts, thereby being rewarded with higher performance pay.

Although these aspects need more in-depth analysis, not possible with the data available to us, we believe that our study represents a step forward in the literature that deals with the analysis of gender equality in the paying mechanism, in a rapidly expanding sector, which is focused on fulfilling the social sustainability objectives included in the Sustainable Development Goals that the United Nations has set for 2030.

The paper is arranged as follows. Section 2 discusses the empirical literature in the areas of MFIs and the gender pay gap. Subsequently, the statement of hypotheses is presented. Section 3 describes the data collected and the methodology used. Section 4 reports the results and discusses the findings. Section 5 presents the conclusions with policy implications and directions for future research.

2 | LITERATURE REVIEW

2.1 | Gender diversity in MFIs

Achieving gender equality is an increasingly critical global issue that calls for the participation of everyone (UN-Women, 2016). Germany, for example, requires 20% female representation

[4] https://databank.worldbank.org/source/mix-market

on the board of directors of publicly listed companies (Cavero-Rubio et al., 2019). The European Commission goes further, aiming to achieve 40% female representation in top positions by 2026.[5]

Microfinance is one of the ways to empower women. MFIs have been operating since the 1970s. Consistent with their mission-oriented objectives, entrepreneurial nature, diverse institutional conditions, and a high percentage of women leaders (Strom et al., 2014, p. 60), these institutions strive to decrease poverty.

According to Nourani et al. (2021), gender and microfinance are indistinguishable. Since its inception, microfinance has focused on serving women (Abdullah & Quayes, 2016; Hulme & Mosley, 1996). Partly as a result of these objectives, the presence of women in the organizational ladder of MFIs has been traditionally higher than in other types of firms. This is despite the widely recognized evidence that women (especially in less developed countries) have lower access to education and fewer working opportunities (United Nations, 2020). Nevertheless, many women hold senior positions in MFIs, compared to the general banking sector (Strom et al., 2014).

The microfinance literature (Ghosh & Guha, 2019; Vishwakarma, 2017; Hartarska & Nadolnyak, 2012) contends that women managers in MFIs are associated with better performance, efficiency, social goals, profitability, and take on responsibilities that are valuable to the firm (Augustine et al., 2016). Furthermore, Strom et al. (2014) and Hartarska et al. (2014) show that gender diversity on MFIs' boards results in higher job fulfillment among employees. Similar evidence is found in other sectors (Ahmed et al., 2017; Alves et al., 2015; Gul et al., 2011; Saini, 2006; Smith et al., 2006; Thomas & Ramaswamy, 1996).

There are several possible explanations underlying the mechanisms that drive a positive relationship between the share of women in the staff and MFIs' performance. The most accredited hypothesis in the field of microfinance is based on the gender-affinity theory (Byrne et al., 1971), according to which most people are more congenial towards those with similar traits to themselves. Thus, because the majority of borrowers are women, same-gender employees are likely to better understand the needs of their clients as compared to men. Second, women loan officers and women clients can share the same social circles and interests, therefore they can develop better affinities. Third, the presence of women in the organizational hierarchy of MFIs can help create products and services that better suit their women clientele. Finally, a higher percentage of women staff in various organizational ladders of the MFIs could result in increased coordination, efficiency, and profitability, which in turn may lead to better rewards.

Nonetheless, despite the ample literature on the influence of the women workforce on the overall performance of MFIs, not much effort has been undertaken to understand the impact of larger shares of females in the organizational ladder of the MFIs on employees' compensation. The mechanism through which better performance may translate into higher remuneration of employees can follow different ways that are equally worth investigating. For instance, better financial performance may translate into a benefit for the overall MFI in terms of higher profits or increasing investments, but which is not passed on to the workers. In other circumstances, it may be that all categories of employed workers benefit equally. Another possibility is that the direct authors of the best performances exclusively benefit from it. Conditional on the data available to us in an emerging sector where these phenomena are poorly investigated, our study intends to make some progress in this direction.

[5] https://ec.europa.eu/commission/presscorner/detail/en/statement_22_7074

2.2 | Employee compensation in MFIs

Traditionally, MFIs used to pay a fixed monthly salary to their employees, with little monetary and non-monetary rewards for good performance. However, in recent years, compensation has begun to switch from seniority-based systems towards merit-based mechanisms, also known as staff incentive schemes (SISs). Between 1990 and 2003, the percentage of MFIs using SISs grew from 6% to 63% (McKim & Hughart, 2005). This shift has been consistent with the "commercialization" of the microfinance industry (see for instance Beisland et al., 2019; Hermes et al., 2011).

However, it has been observed that one of the main problems related to the use of incentive schemes is the fact that employees in the lower tier of the organizational layer (i.e., loan officers) attempt to earn higher incomes by extending the greatest possible number of loans. Still, although in many cases it might be desirable for MFIs to expand the size of their assets, this could go beyond the limit set by loan riskiness (Aubert et al., 2009). In the hypothesis that loans are granted primarily to customers deemed more solvent, the desire to expand the volume of loans to maximize incentive-based rewards could push the employees to place them with riskier customers, with a consequent deterioration in the quality of the MFIs' portfolio.

2.3 | Theoretical framework and hypothesis development

In this section, we derive our hypotheses on staff gender and employee compensation, mainly drawing from the literature on labor economics. With the term compensation, we refer to wages, as well as all the ancillary monetary benefits that can be granted to workers, such as bonuses, provisions for retirement, insurance purposes, and other forms of monetary reward. The literature asserts that sources of gender inequalities in the labor market are primarily attributed to national institutions (Madden, 2012), with educational standards playing a crucial role in explaining the gender pay gap. However, there is evidence that since the 1980s in the United States the percentage of women with higher-level education has become higher than that of men (Blau & Kahn, 2017; Blau et al., 2014). A similar pattern has occurred in several LDCs (Goldin et al., 2006; Becker et al., 2010), although a permanent closing of the educational gender gap will take a long time.

The cultural framework also shapes women's self-selection in the labor market (Madden, 2012). It is documented that, due to family duties women are more likely to experience an interruption of working activity or a reduction of working time (Mincer & Polachek, 1974; Goldin, 2014) and this is more evident in some countries than in others, regardless of average per capita wealth. In general, women seem more likely to demand flexibility between work and home affairs, thereby preferring variable pay based on individual performance, such as pace rate contracts (Jirjahn & Stephan, 2004).

At the national level (Petersen & Saporta, 2004), wage differentials are mainly observed both within and across jobs and organizations (Groshen 1991). Some studies find that remuneration disparities are less frequent in firms having a more formalized governance and in unionized sectors (Stainback et al., 2010; Anderson & Tomaskovic-Devey, 1995; Elvira & Graham, 2002; Gunderson, 1975; Blau & Kahn, 2003).

Other reasons behind gender pay gaps could be attributed to glass ceilings and sticky floors. A glass ceiling is a metaphorical barrier that prevents women from being promoted to managerial positions within the organization. This mainly reflects in the earning gap at the top of the distribution (Heywood & Parent, 2017) and typically exists because women start to cut down on their work

for family reasons, especially child-care, self-selecting themselves for tasks or types of work that are less onerous but also less profitable, or choose to work fewer hours than men (Bianchi et al., 2000; Blau et al., 2010; Madden, 2012; Mincer & Polachek, 1974; Goldin, 2014; Ciminelli et al. 2021; Heywood & Parent, 2017). Meanwhile, the sticky floor is the earning gap at the bottom of the distribution, which is mainly related to societal customs, sexism, and discrimination at work which hinders women's increment in salary.

In the literature, there are also concerns about a possible gender bias in the incentive-based compensation earned by employees, although the research investigating this component is very limited (Madden, 2012; Grund, 2015), and basically nonexistent in the field of microfinance. However, a separate investigation of the incentive component of monetary compensation is important to understand the mechanisms driving pay differences between men and women. Specifically, Madden (2012) argues that in non-hierarchical contexts, direct measures of performance like SISs allow limiting the sources of gender pay biases at the individual firm or industry level to either the fact that women are perceived as being less skilled, giving rise to a form of valuative discrimination (Gunderson, 1975; Baker & Fortin, 2004; England, 1992; Madden, 2012) or that they are offered less profitable opportunities, in the form of allocative discrimination (Malkiel & Malkiel, 1973).

In the remainder of this section, we detail our hypotheses in relation to the specificities of the microfinance labor market.

2.3.1 | A higher percentage of women staff in MFIs increases average employee compensation

Several explanations, discussed in the preceding sections, are supportive of the hypothesis that the presence of more women in the workforce in MFIs could increase employees' compensation. The most accredited theories in the microfinance literature are gender affinity and the resource-based view. The first theory claims that women employees could more easily establish connections with women borrowers and anticipate their needs, while also giving key insights to the management regarding where the MFI should focus its resources (Byrne et al., 1971, Solakoglu & Demir, 2016). Instead, according to the resource-based view, women can bring important resources to firms, like prudence (Adams, 2016; Adams & Ferreira, 2009). Women might limit the presence of bad-performing loans in their loan portfolios because they are more risk-averse.[6] Thus, MFIs are expected to offer adequate compensation to women employees to retain them in their workforce (Mia, 2022a).

In particular, SISs are widely used in the microfinance sector nowadays, and performance pay is normally commensurate with the MFIs' output—mainly the size of the loan portfolio. If, based on the above considerations, women are likely to achieve higher loan extensions to MFIs' clientele than men, while maintaining a low-risk profile in the composition of their portfolio, they should receive additional incentives besides the base salary.

However, in the specific case of microfinance, women may be offered less profitable opportunities, like assigning them a riskier or smaller portfolio, customers at the first loan cycle, and uncomfortable locations. Moreover, customer bias may occur in the form of the presumption that women are less able to carry out their job (Sanborn, 1964; Roth, 2004). Furthermore, most of the

[6] The fact that women have a higher degree of risk aversion has been considered by other studies, such as Blau and Kahn (2017).

MFIs operate in LDCs, where equal-pay legislation and unionization are weaker than elsewhere. All these elements may not shield women against allocative and valuative discrimination and other forms of abuse.

Finally, as previously discussed, women loan officers could take advantage of the affinity relationships with women borrowers to extend as many loans as possible as an indicator of productivity/performance (Blanco-Oliver and Irimia-Diéguez, 2021). However, if maximizing the SIS-based component of compensation induces women loan officers to serve riskier customers, there could be detrimental effects on borrowers' repayment rates and MFIs' profitability.

According to the above arguments, we test the following hypothesis:

H1: *There is a positive relationship between the proportion of women in the workforce and average employees' compensation in MFIs (H_0: the relationship is negative or not significant).*

2.3.2 | The gender pay gap and employee monetary compensation: empirical foundation of our hypotheses

To provide an empirical foundation for H_1 and H_0, let's define the initial average compensation of an MFI's staff (regardless of gender)[7] asΨ_0. If that MFI hires additional women workforce (at any organizational rank) offering a compensation Γ, which is less than the average ($\Gamma < \Psi_0$), the new average compensation (Ψ_1) due to the addition of new women will decrease ($\Psi_1 < \Psi_0$). In contrast, if the offered compensation of the new female workforce is higher than the average ($\Gamma > \Psi_0$) the new average compensation (Ψ_2) will be higher ($\Psi_2 > \Psi_0$).

The data available for this study do not distinguish between employees' compensation by gender. Hence, we are not able to identify whether the increase in the female workforce is associated with any significant increase (decrease) in the remuneration of all staff or only in the remuneration of women. Nevertheless, if a significant effect is observed on average employee compensation as a consequence of the share of women's workforce, we deduce that this likely reflects *at least* changes in women's compensation.

3 | METHOD AND DATA

3.1 | Modeling the relationship between women workforce and employee compensation

To test our hypothesis, we propose the following model:

$$\begin{aligned}\mathrm{LNAVGB}_{i,j,t} = {} & \beta_0 + \beta_1\,\mathrm{WOMSTAFF}_{i,j,t} + \beta_2\mathrm{LNBOARD}_{i,j,t} + \beta_3\mathrm{LNBPS}_{i,j,t} + \beta_4\mathrm{OSS}_{i,j,t} \\ & + \beta_5\mathrm{DTE}_{i,j,t} + \beta_6\mathrm{LNSIZE}_{i,j,t} + \beta_7\mathrm{LS}_i + \beta_8\mathrm{PS}_i + \beta_2\mathrm{EDUF}_{j,t} \\ & + \beta_2\mathrm{FDI}_{j,t} + \beta_2\mathrm{RURPOP}_{j,t} + \beta_2\mathrm{UNMP}_{j,t} + \beta_2\mathrm{REALINT}_{j,t} + \varepsilon_{i,j,t} \qquad (1)\end{aligned}$$

[7] These considerations are made under the constraint that most databases do not distinguish between employees' expenses by gender.

where $i = 1, 2, 3\ldots.. 2545$ refers to the cross-sectional units (MFIs); $t = 2008, 2009\ldots 2018$ denotes periods, j is country, and $\varepsilon_{i,j,t}$ is a zero-mean error term.

Initially, we consider the average gross (monetary) benefits (AVGB) measured by the average personal expense per employee as the main dependent variable, which was converted to natural logarithm (LNAVGB) for ease of interpretation and to minimize both skewness and the incidence of outliers. We also consider the natural logarithm of the average annual base salary (LNAVGSAL) as a dependent variable for comparison.

As mentioned by Hartarska et al. (2014), a firm may financially or socially benefit from increased women's involvement through all levels of the MFI workforce. Consistent with the objective of this study, we use the share of women staff over the total workforce (WOMSTAFF, a proxy for gender diversity) as our main explanatory variable.

We also add the natural logarithm of board members (LNBOARD) and the natural logarithm of borrower per staff member (LNBPS) as covariates. The former is motivated by a possible better level of corporate governance, as it usually indicates more independent directors (Mak & Kusnadi, 2005; Ahamed et al., 2019) and a more formalized governance structure (Stainback et al., 2010; Anderson & Tomaskovic-Devey, 1995; Elvira & Graham, 2002). We assume that firms with a higher quality of corporate governance will reduce any discrimination in gender pay, hence we expect a positive relationship between LNBOARD and LNAVGB. Instead, LNBPS can be used as an indicator of employee productivity, where higher LNBPS indicates higher productivity and thus, higher compensation (Nyamsogoro (2010). Therefore, we expect LNBPS to have a positive relationship with LNAVGB.

Furthermore, to account for the possibility that financially sustainable firms can provide employees with higher salaries and incentives (Eccles et al., 2014; Lee & Ha-Brookshire, 2017), we include firms' operational self-sufficiency (OSS) as one of the control variables and expect it to have a positive effect on employees' compensation.

In addition, according to Hanka (1998), we add in a measure of risk (total debt over total equity (DTE)) to account for the fact that highly leveraged firms may have a higher number of temporary employees, who are normally paid a lower salary, and this will give them an incentive to further push down the compensation. For these reasons, we expect DTE to have a negative relationship with LNAVGB.

Moreover, according to Oi and Idson (1999), bigger firms usually have a higher performance target and this will be conveyed to the firms' downline to increase employee productivity. In doing so, these firms need to offer higher compensation as an incentive to increase productivity (Caudill et al., 2021; Oi & Idson, 1999). Scale economies may further ease staff performance, especially in services industries like microfinance (Berlingieri et al., 2018). As noted by Gunderson (1975), larger companies are also subject to greater scrutiny by enforcement agencies and are more frequently equipped with instruments aimed at measuring workers' performance objectively. To capture these effects, the natural logarithm of total assets (LNSIZE) is included as a proxy for firm size.

We also account for the status of the MFI. NGOs, for instance, are known to have a higher social responsibility toward serving the poor, being non-profit seeking (Gutierrez-Nieto et al., 2009), and are often funded by international donors and investors, and sometimes the operational costs are met by limited donations that the MFIs receive from their partner organizations. In addition, the scarcely formalized governance and less stringent regulation for NGOs may not protect workers against unequal pay practices (Stainback et al., 2010; Anderson & Tomaskovic-Devey, 1995;

Elvira & Graham, 2002). MFIs with NGO status (LS) are identified by a dummy equal to 1, and 0 otherwise (Blanco-Oliver & Irimia-Diéguez, 2021).[8]

Finally, we include cross-national economic and institutional characteristics drawn from the World Development Indicators (WDIs) to account for differences in employees' compensation, such as female educational attainment (EDUF), Foreign Direct Investment (FDI), proportion of rural population (RURPOP), unemployment rate (UNMP), and the real interest rate (REALINT) at the country-level. All variables and data sources are taken from the MIX Market and WDI databases are described in Table 1.

3.2 | Data and descriptive statistics

We have collected the data for the MFIs from the World Bank (MIX Market Platform). The duration covers the period 2008–18.[9] Furthermore, we have dropped any countries with less than three observations. To take care of the extreme outliers, we have winsorized all the variables (except dummy) at 1% and 99% levels. After cleaning the data for potential input errors and duplication, our dataset includes a total of 2545 unique MFIs (groups). The dataset is unbalanced since many MFIs did not report their data consistently to the MIX Platform.

The list of countries, frequency of data, and firm-year observations are reported in Online Appendix A and Appendix B, respectively. We further examined the trend of the overall compensation of the staff in the microfinance industry worldwide and found that it has increased throughout the period of interest, occasionally fluctuating (Figure 1).

Descriptive statistics are reported in Table 2. The mean annual average benefits per staff was US$ 8,747 during the study period, whereby it could be as low as US$ 1,938 to as high as US$ 31,868. The women-to-staff ratio (WOMSTAFF) indicates that in MFIs a significant 44.37% of the workforce is female, which reflects gender equality in the field. In terms of the trend, we see that the proportion of women staff in the microfinance industry has slightly declined over the years (Figure 2).

The Pearson pairwise correlation coefficients indicate that though some covariates are significantly correlated and they are not subject to multicollinearity, as the correlation values are below 0.80. Furthermore, variance inflation factors (VIFs) are computed for each covariate to evaluate each covariate's contribution to the standard error in a linear regression. VIFs are all below the standard rule of thumb of 5 or 10 (Table 3).

4 | RESULTS

4.1 | Baseline results: Overall employee compensation

To analyze the impact of the women workforce on employees' compensation (WOMSTAFF), we used both pooled ordinary least squares (POLS) and MFI's fixed and random-effects models (FEM

[8] In our database 11.95%, 16.26%, 35.84%, 30.04%, 1.94%, 3.25%, and 0.72% are banks, credit unions/cooperatives (CUs/Cs), non-bank financial institutions (NBFIs), NGOs, other institutions, rural banks, and unknown, respectively.

[9] Data on the proportion of women staff at the MFI level were not available before 2008. The empirical analysis stopped in 2018 because that was the last year of data provided by the MIX Market (only a handful of observations are available for 2019). The World Bank does not have any plan to further update the database as per their claim in the database.

TABLE 1 Definition of variables

Variable	Definition	Unit
LNAVGB*	Natural logarithm of average annual Gross Benefits (Overall monetary compensation per employee) at MFI's level. Gross Financial benefits (MIX Market Field definition): include wages and salaries, other short-term employee benefits such as bonuses and compensated absences, post-employment benefit expense, termination benefit expense, share-based payment transactions, other long-term benefits, and other employee benefits.	US$
LNAVGSAL*	Natural logarithm of 1+ average annual salary paid by an MFI / per capita Gross National Income (at MFI's level). Salary (MIX Market Field definition): include base wages and salaries.	US$
WOMSTAFF*	Share of women staff (no. women in the staff at any hierarchical level over the total workforce) at MFI's level	Ratio
LNBOARD*	Natural logarithm of the total number of board members at MFI's level	Number
LNBPS*	Natural logarithm of borrowers per staff member at MFI's level	Number
OSS*	Operational self-sufficiency	Ratio
	Total financial revenue as a percentage of. the sum of financial expense, operating expense, and loan loss provision expense at MFI's level	
DTE*	Total debt over total equity at MFI's level	Ratio
LNSIZE*	Natural logarithm of MFI's total assets at MFI's level	Ratio
LS*	If an MFI is registered as an NGO, it gets the value 1, 0 otherwise (time-invariant)	Dummy
PS (for profit = 1)*	If an MFI is registered as profit-oriented, it gets the value 1, 0 otherwise (time-invariant)	Dummy
EDUF**	Educational attainment, at least completed upper secondary, population 25+, female (%) (cumulative)	Ratio
FDI**	Foreign direct investments (country level, time-variant)	US$
	Foreign direct investment, net (BoP, current US$)	
RURPOP**	Share of rural population / total inhabitants (country level, time-variant)	Percentage
UNMP**	Unemployment rate (country level, time-variant)	Percentage
REALINT**	Average annual real Interest rate (country level, time-variant)	Percentage

Source: MIX Market* and World Bank Development Indicators**. FDI has been converted into million US dollars for ease of estimation and explanation. We did not operate a log transformation of FDI due to many negative values (more outflow than inflow).

and REM, respectively).[10] Results are reported in Table 4. Specifically, columns (1)–(3) report the baseline results without covariates, in columns (4)–(9) the covariates are included. In columns (1)–(6) standard errors are clustered at the MFI's level to minimize possible heteroskedasticity, autocorrelation, and within-MFI correlation, whereas in columns (7)–(9) the standard errors are

[10] We also performed regressions with country fixed-effects and year fixed-effects for robustness (see Online Appendix F).

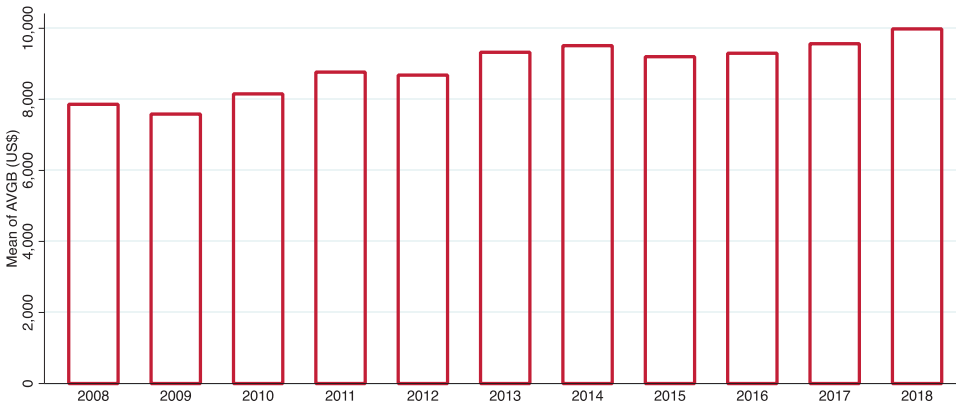

FIGURE 1 Overall average financial compensation trend per-staff in the global microfinance industry. [Colour figure can be viewed at wileyonlinelibrary.com]

Source: Authors. Note: the average per-staff compensation is winsorized at 1% and 99% levels to take care of the extreme outliers.

clustered at the country level. The Breusch and Pagan Lagrangian Multiplier test suggests using the FEM and REM results to discuss the baseline findings.[11]

All regressions indicate a positive and statistically significant relationship between the share of women's workforce and employees' average monetary compensation (LNAVGB). This result is supportive of H1, against H0. As previously discussed, there are at least two lines of arguments in favor of H1. Some studies assess that females may be associated with higher quality management (Alves et al., 2015; Augustine et al., 2016; Ghosh & Guha, 2019; Vishwakarma, 2017; Hartarska & Nadolnyak, 2012), consequently leading MFIs to accord higher compensation to attract them. Other studies find an explanation in the similarity-attraction hypothesis (Byrne et al., 1971; Thomas & Ramaswamy, 1996; Solakoglu & Demir, 2016; Augustine et al., 2016, and the literature therein), which helps expand the MFIs' loan portfolio, thus eventually raising women's incentive-based compensation.

The estimations further show a significant negative association between board size (LNBOARD) and employee compensation, possibly due to free riding and conflicts of interest among the board members as its size increases (Harris and Raviv, 2008). The relationship between staff productivity (LNBPS) and employee compensation is statistically significant and positive, which reiterates that employees who work harder are acknowledged by giving fair compensation.

In contrast to our expectations, the operational self-sufficiency (OSS) of MFIs likely harms employees' compensation. A plausible reason could be due to competition and commercialization of the microfinance sector. Corroborating the findings of Hanka (1998), the estimations show a negative relationship between the debt-to-equity ratio (DTE) and employees' compensation. MFIs' size seems to have a positive impact on employee compensation, as the coefficient of LNSIZE is positive and statistically significant. This can be attributed to economies of scale (Mia, 2022b).

[11] Given the results of the Breusch–Pagan test we do not consider the POLS estimates as a reliable outcome. Additionally, we report both FEM and REM without showing the superiority of one model or the other, as the two are not comparable.

TABLE 2 Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
AVGB	9,798	8747.1200	6722.0720	1938.46	31868.39
LNAVGB	9,798	8.7519	0.8608	6.5953	10.3921
AVGSAL	8,666	4.2430	4.0832	1.0000	24.0000
LNAVGSAL	8,666	1.4588	0.5853	0.6931	3.2189
WOMSTAFF	6,738	0.4437	0.2257	0.0000	1.0000
BOARD	6,395	7.5320	6.9196	0.0000	62.0000
LNBOARD	6,286	1.8541	0.5638	0.0000	4.1271
BPS	10,954	124.3957	100.2560	5.0000	549.0000
LNBPS	10,954	4.4975	0.8813	1.6094	6.3081
OSS	11,097	1.1364	0.3532	0.1762	2.6044
DTE	11,356	4.0807	5.6542	−12.6600	37.2300
LNSIZE	11,907	16.0383	2.1624	11.1939	21.2493
PS (for profit = 1)	12,619	0.4415	0.4966	0.0000	1.0000
LS (NGO = 1)	12,619	0.3009	0.4587	0.0000	1.0000
EDUF	12,619	31.4907	24.9104	0.0000	90.3700
FDI	12,619	−8.6644	22.9043	−176.2505	9.4485
RURPOP	12,619	50.5699	20.4837	9.0100	87.0100
UNMP	12,619	5.9416	4.0844	0.3900	23.1800
REALINT	12,619	5.8851	8.0711	−12.8600	38.1500

Source: Authors from MIX–World Bank databases. The minimum value of LNBOARD is 0 because some MFIs have only one board member. All variables are winsorized at 1% and 99% levels.

Finally, estimations show that both profit-oriented MFIs and those having NGO legal status seem to provide lower employee compensation compared to other types of MFIs. The plausible reason is that profit-oriented MFIs may look towards their cost-cutting to maximize their profits and are less concerned about employees' welfare. Regarding the NGOs, the result can be ascribed to the fact that they are more inclined towards social performance in terms of serving the hardcore poor with more convenient, but less profitable loan terms.

In terms of macroeconomic variables, we found that only the percentage of rural population has significant and univocal negative effects on the employee benefits of MFIs. This could be motivated by the fact that a higher share of the rural population corresponds to the location of the branches of the MFI in rural areas, where the cost of living and salaries are lower than in the cities.

4.2 | Alternative proxy of the gender pay gap: Average base salary

We used a different measure of employee compensation, namely the average salary (AVGSAL). This excludes all the ancillary benefits that can be guaranteed to workers, such as bonuses, provisions for retirement, insurance contributions, and other forms of monetary reward. The average salary has been normalized by GNI per capita to account for the actual cost of living in the various countries considered in our sample.

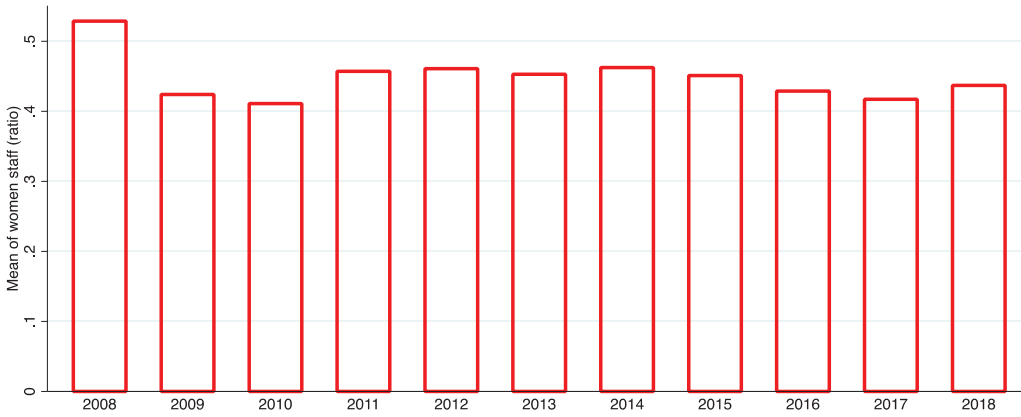

FIGURE 2 Trend of women staff in the global microfinance industry (2008-2018). [Colour figure can be viewed at wileyonlinelibrary.com]
Source: Authors. Note: the mean of women staff ratio is winsorized at 1% and 99% levels to take care of the extreme outliers.

The regression results reported in Table 5 do not provide evidence of any statistically significant effects of the share of women workforce on employees' average salary, except under POLS (columns (1), (4), and (7)). Therefore, a comparison with the results obtained in the previous section suggests that the component of the overall compensation that increases with a higher presence of women in the MFIs' staff is the incentive-based one, and not the base salary.

4.3 | Sub-samples by regions and share of women workforce

To understand whether our overall conclusion remains the same across various sub-samples of MFIs, we have performed a regression analysis based on macro-regions as classified by the MIX Market. The results are reported in Table 6. Estimates using REM[12] suggest that a higher share of women in the workforce has a positive significant effect on the average employee compensation for the sub-sample of Latin America and the Caribbean (LAC) (column (4)). In contrast, a higher proportion of female staff is negatively and significantly associated with the average employee compensation in the Middle East and North African (MENA) region (column (5)). However, the effect is not statistically significant for Africa (where instead there is evidence of a weakly positive effect of the women workforce on the base salary), East Asia and the Pacific (EAP), Eastern Europe and Central Asia (EECA), and South Asia (SA) (respectively columns (1), (2), (3) and (6)). Therefore, we can conclude that our overall results are mostly influenced by MFIs from the LAC region, which have the characteristic of having recently converted from NGO status to a more profit-seeking orientation.

Then, we have created two sub-samples, one including MFIs having over 50% women workforce and the other having less than 50%. The results are reported in Table 7. Interestingly, there is evidence that MFIs pay higher benefits and (to a lesser extent) higher salaries only if the women

[12] We refer to REM as to preserve the time-invariant dummies for MFIs' types, PS and LS. Fixed-effects regressions are available upon request.

TABLE 3 Pearson pairwise correlation and variance inflation factors (VIFs)

	VIF	WOMSTAFF	LNBOARD	LNBPS	OSS	DTE	LNSIZE	PS	LS	EDUF	FDI	RURPOP	UNMP	REALINT
WOMSTAFF	1.23	1												
LNBOARD	1.28	−0.0771***	1											
LNBPS	1.24	−0.1686***	0.1384***	1										
OSS	1.09	−0.0037	−0.0058	0.1492***	1									
DTE	1.08	−0.0763***	0.1151***	0.0409***	−0.0702***	1								
LNSIZE	1.42	−0.1782***	0.2791***	0.1757***	0.1006***	0.1875***	1							
PS	1.64	−0.0998***	−0.1369***	−0.1142***	0.0245**	0.0234**	0.2132***	1						
LS	1.67	−0.0143	−0.0023	0.2479***	0.0000	−0.0487	−0.1886***	−0.5533***	1					
EDUF	1.44	0.1691***	−0.2657***	−0.1992***	0.1614***	−0.0143	0.0663***	0.1134***	−0.1621***	1				
FDI	1.07	0.0105	0.1345***	−0.0382***	−0.0289***	0.0442***	0.0271***	0.0258***	−0.0845***	0.0427***	1			
RURPOP	1.45	−0.3148***	0.0887***	0.1144***	−0.0022	0.0449	−0.1505***	0.0138	−0.0003	−0.3987***	0.1096***	1		
UNMP	1.09	−0.0150	−0.0731***	0.0314	0.0096	0.0065	0.0171*	−0.0035	−0.0232	0.2061***	−0.0122	−0.1092***	1	
REALINT	1.07	0.0677***	−0.1196***	−0.0760***	0.0021	−0.0667***	0.0372***	−0.0265**	0.0356***	0.0874***	−0.044***	−0.0872***	0.0228**	1

Source: Authors.
Note: Variance Inflation Factors (VIF) are computed for each covariate to evaluate each covariate's contribution by using *collin* command in Stata.
*$p < 0.10$,
**$p < 0.05$,
***$p < 0.01$.

TABLE 4 Share of women workforce and overall compensation in MFIs. Dependent variable: LNAVGB

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent Variable: LNAVGB								
	POLS	**FEM**	**REM**	**POLS**	**FEM**	**REM**	**POLS**	**FEM**	**REM**
WOMSTAFF	1.0018***	0.1320*	0.2475***	0.5348***	0.1329*	0.2550***	0.5348***	0.1329**	0.2550***
	(0.1015)	(0.0793)	(0.0668)	(0.0767)	(0.0778)	(0.0589)	(0.1398)	(0.0667)	(0.0754)
LNBOARD				−0.2038***	−0.0402*	−0.0656***	−0.2038***	−0.0402*	−0.0656***
				(0.0255)	(0.0207)	(0.0183)	(0.0347)	(0.0204)	(0.0154)
LNBPS				−0.0663***	0.1329***	0.0592***	−0.0663	0.1329***	0.0592*
				(0.0211)	(0.0302)	(0.0200)	(0.0585)	(0.0317)	(0.0313)
OSS				−0.1686***	−0.1346***	−0.1298***	−0.1686***	−0.1346**	−0.1298***
				(0.0385)	(0.0433)	(0.0381)	(0.0392)	(0.0551)	(0.0486)
DTE				−0.0106***	−0.0038**	−0.0045***	−0.0106***	−0.0038***	−0.0045***
				(0.0025)	(0.0015)	(0.0014)	(0.0026)	(0.0014)	(0.0014)
LNSIZE				0.1519***	0.1233***	0.1512***	0.1519***	0.1233**	0.1512***
				(0.0081)	(0.0177)	(0.0088)	(0.0143)	(0.0522)	(0.0272)
PS (for profit = 1)				−0.1516***	-	−0.1363***	−0.1516*	-	−0.1363*
				(0.0377)		(0.0374)	(0.0841)		(0.0779)
LS (NGO = 1)				−0.2364***	-	−0.2250***	−0.2364**	-	−0.2250**
				(0.0402)		(0.0386)	(0.0941)		(0.0882)
EDUF				−0.0016***	0.0005	0.0001	−0.0016	0.0005	0.0001
				(0.0006)	(0.0016)	(0.0006)	(0.0014)	(0.0040)	(0.0013)
FDI				0.0033***	−0.0017***	−0.0003	0.0033	−0.0017***	−0.0003
				(0.0008)	(0.0005)	(0.0005)	(0.0029)	(0.0004)	(0.0010)
RURPOP				−0.0232***	−0.0454***	−0.0239***	−0.0232***	−0.0454***	−0.0239***
				(0.0009)	(0.0075)	(0.0009)	(0.0027)	(0.0172)	(0.0034)
UNMP				0.0087**	−0.0031	0.0056*	0.0087	−0.0031	0.0056
				(0.0034)	(0.0057)	(0.0033)	(0.0104)	(0.0090)	(0.0083)

(Continues)

TABLE 4 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent Variable: LNAVGB								
	POLS	**FEM**	**REM**	**POLS**	**FEM**	**REM**	**POLS**	**FEM**	**REM**
REALINT				0.0067***	0.0001	0.0025**	0.0067	0.0001	0.0025
				(0.0017)	(0.0013)	(0.0012)	(0.0051)	(0.0024)	(0.0020)
CONS	8.3418***	8.7249***	8.5765***	8.2984***	8.6593***	7.4997***	8.2984***	8.6593***	7.4997***
	(0.0459)	(0.0349)	(0.0353)	(0.1734)	(0.6031)	(0.1801)	(0.3870)	(1.6217)	(0.6366)
Observations	6125	6125	6125	5348	5348	5348	5348	5348	5348
F-Stat	97.4518	2.7682		182.8436	21.7785		55.0287	8.9118	
Chi^2			13.7188			1934.4923			517.2824
BPLM			8672.85			5397.61			5397.61
R^2	0.0745	0.0015	0.0015	0.5886	0.1751	0.1606	0.5886	0.1751	0.1606
# of MFIs		1636	1636		1450	1450		1450	1450

Source: Authors.

Notes: Columns 1–6: Standard errors clustered at the MFI's level in parentheses. Columns 7–9: standard errors clustered at the country level in parentheses. BPLM = Breusch and Pagan Lagrangian Multiplier test.

*$p < 0.10$,

**$p < 0.05$,

***$p < 0.01$.

TABLE 5 Share of women workforce and average base salary in MFIs. Dependent variable: LNAVGSAL

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: LNAVGSAL								
	POLS	**FEM**	**REM**	**POLS**	**FEM**	**REM**	**POLS**	**FEM**	**REM**
WOMSTAFF	0.1637***	0.0056	−0.0600	0.2108***	0.0022	0.0736	0.2108*	0.0022	0.0736
	(0.0621)	(0.0558)	(0.0444)	(0.0629)	(0.0616)	(0.0474)	(0.1242)	(0.0580)	(0.0787)
LNBOARD				−0.0980***	−0.0405**	−0.0444***	−0.0980***	−0.0405***	−0.0444***
				(0.0213)	(0.0183)	(0.0160)	(0.0290)	(0.0152)	(0.0142)
LNBPS				−0.1237***	0.0532**	−0.0226	−0.1237**	0.0532*	−0.0226
				(0.0177)	(0.0263)	(0.0175)	(0.0482)	(0.0282)	(0.0319)
OSS				−0.0452	−0.0343	−0.0254	−0.0452	−0.0343	−0.0254
				(0.0340)	(0.0392)	(0.0354)	(0.0458)	(0.0452)	(0.0438)
DTE				−0.0068***	−0.0049***	−0.0051***	−0.0068***	−0.0049***	−0.0051***
				(0.0018)	(0.0012)	(0.0012)	(0.0021)	(0.0014)	(0.0013)
LNSIZE				0.0888***	0.0666***	0.0740***	0.0888***	0.0666***	0.0740***
				(0.0064)	(0.0135)	(0.0068)	(0.0105)	(0.0223)	(0.0106)
PS (for profit = 1)				−0.0834***	-	−0.0909***	−0.0834*	-	−0.0909
				(0.0318)		(0.0329)	(0.0469)		(0.0620)
LS (NGO = 1)				−0.2287***	-	−0.2315***	−0.2287***	-	−0.2315***
				(0.0331)		(0.0333)	(0.0536)		(0.0525)
EDUF				−0.0094***	0.0025*	−0.0063***	−0.0094***	0.0025	−0.0063***
				(0.0006)	(0.0015)	(0.0006)	(0.0017)	(0.0031)	(0.0017)
FDI				0.0073***	−0.0012**	0.0018***	0.0073**	−0.0012**	0.0018*
				(0.0007)	(0.0005)	(0.0006)	(0.0030)	(0.0005)	(0.0010)
RURPOP				0.0058***	0.0203***	0.0068***	0.0058***	0.0203*	0.0068**
				(0.0007)	(0.0060)	(0.0007)	(0.0020)	(0.0116)	(0.0029)
UNMP				0.0002	−0.0035	−0.0043	0.0002	−0.0035	−0.0043
				(0.0028)	(0.0058)	(0.0031)	(0.0074)	(0.0111)	(0.0085)

(Continues)

TABLE 5 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: LNAVGSAL								
	POLS	**FEM**	**REM**	**POLS**	**FEM**	**REM**	**POLS**	**FEM**	**REM**
REALINT				0.0156***	−0.0023**	0.0018*	0.0156***	−0.0023	0.0018
				(0.0014)	(0.0011)	(0.0011)	(0.0034)	(0.0022)	(0.0022)
CONS	1.5131***	1.4390***	1.4448***	0.8197***	−0.8441*	0.4438***	0.8197***	−0.8441	0.4438
	(0.0334)	(0.0244)	(0.0251)	(0.1369)	(0.4750)	(0.1398)	(0.2287)	(0.8733)	(0.3270)
Observations	5511	5511	5511	4870	4870	4870	4870	4870	4870
F-Stat	6.9411	0.0099		63.0241	5.5164		32.5826	4.1807	
Chi^2			1.8242			504.2685			172.9337
BPLM			7068.84			4317.99			4317.99
R^2	0.0043	0.0000		0.3805	0.0387		0.3805	0.0387	
# of MFIs		1483	1483		1335	1335		1335	1335

Source: Authors.

Notes: Columns 1–6: Standard errors clustered at the MFI's level in parentheses. Columns 7–9: standard errors clustered at the country level in parentheses. BPLM = Breusch and Pagan Lagrangian Multiplier test.

*$p < 0.10$,

**$p < 0.05$,

***$p < 0.01$.

TABLE 6 Sub-sample analysis based on regions (REM)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Dependent Variable: LNAVGB						Dependent Variable: LNAVGSAL					
	Africa	EAP	EECA	LAC	MENA	SA	Africa	EAP	EECA	LAC	MENA	SA
WOMSTAFF	0.1665	0.1582	0.0386	0.2245***	−0.4877**	0.0129	0.2482*	−0.0370	−0.1588	−0.0931	−0.1243	−0.0432
	(0.1480)	(0.1239)	(0.1444)	(0.0862)	(0.2195)	(0.1070)	(0.1311)	(0.0876)	(0.1213)	(0.0819)	(0.2510)	(0.0749)
LNBOARD	−0.0846***	−0.1112**	0.0289	−0.0701**	−0.1075	−0.0518	−0.0384	−0.0625*	−0.0142	−0.0635**	−0.0500	−0.0385*
	(0.0313)	(0.0506)	(0.0359)	(0.0320)	(0.0852)	(0.0340)	(0.0316)	(0.0340)	(0.0281)	(0.0287)	(0.0927)	(0.0226)
LNBPS	0.1065***	0.0512	0.1964***	0.1654***	0.0305	0.0076	0.0474**	−0.0257	0.1011**	0.0856***	−0.1941**	−0.1010**
	(0.0218)	(0.0627)	(0.0413)	(0.0439)	(0.1186)	(0.0449)	(0.0192)	(0.0302)	(0.0417)	(0.0303)	(0.0969)	(0.0413)
OSS	−0.2732***	−0.1285*	−0.0100	−0.2964**	−0.0044	−0.2903***	−0.2566***	−0.0850*	0.0962**	−0.1946*	0.1359**	−0.1311***
	(0.0517)	(0.0665)	(0.0405)	(0.1188)	(0.0729)	(0.0630)	(0.0500)	(0.0478)	(0.0409)	(0.1068)	(0.0619)	(0.0501)
DTE	0.0005	0.0033	−0.0049	−0.0015	−0.0037	−0.0069***	−0.0028	−0.0023	−0.0104***	0.0026	−0.0134**	−0.0054***
	(0.0019)	(0.0026)	(0.0033)	(0.0034)	(0.0035)	(0.0021)	(0.0018)	(0.0027)	(0.0037)	(0.0020)	(0.0056)	(0.0015)
LNSIZE	0.2201***	0.2309***	0.1385***	0.1758***	0.0845***	0.0996***	0.1427***	0.1103***	0.0527***	0.0905***	0.0358	0.0901***
	(0.0158)	(0.0183)	(0.0164)	(0.0149)	(0.0288)	(0.0159)	(0.0138)	(0.0098)	(0.0129)	(0.0108)	(0.0316)	(0.0118)
PS (for profit = 1)	0.1168	−0.0640	−0.1355*	−0.0361	0.2555**	−0.0784	0.1418*	0.0317	−0.0474	0.0202	0.0827	−0.0375
	(0.0792)	(0.0892)	(0.0780)	(0.0513)	(0.1246)	(0.0799)	(0.0774)	(0.0484)	(0.0568)	(0.0433)	(0.2273)	(0.0581)
LS (NGO = 1)	−0.0197	0.0126	−0.0068	0.1287**	−0.0251	−0.1852**	0.0465	−0.1076**	0.1065	−0.0361	−0.5234**	−0.0534
	(0.0787)	(0.0828)	(0.1543)	(0.0540)	(0.1436)	(0.0791)	(0.0815)	(0.0517)	(0.1182)	(0.0489)	(0.2181)	(0.0551)
EDUF	−0.0020	−0.0066**	−0.0001	0.0042**	−0.0082***	0.0030	−0.0236***	−0.0003	−0.0034**	−0.0066***	−0.0085***	−0.0102***
	(0.0031)	(0.0026)	(0.0014)	(0.0017)	(0.0025)	(0.0024)	(0.0043)	(0.0016)	(0.0013)	(0.0014)	(0.0027)	(0.0021)
FDI	−0.0177	−0.0011**	0.0070	−0.0051***	−0.0160	0.0012	−0.0622***	−0.0007*	0.0033	−0.0016*	−0.0012	0.0023*
	(0.0199)	(0.0005)	(0.0076)	(0.0010)	(0.0132)	(0.0016)	(0.0195)	(0.0004)	(0.0068)	(0.0009)	(0.0106)	(0.0013)
RURPOP	0.0025	0.0041	−0.0156***	−0.0049	−0.0236***	−0.0231***	0.0217***	0.0269***	0.0170***	0.0191***	−0.0004	0.0148***
	(0.0024)	(0.0048)	(0.0024)	(0.0030)	(0.0034)	(0.0064)	(0.0024)	(0.0029)	(0.0017)	(0.0025)	(0.0043)	(0.0052)
UNMP	0.0181***	0.1097***	0.0179***	−0.0044	0.0195	0.0240*	−0.0053	0.0218	−0.0014	0.0054	−0.0221	0.0012
	(0.0070)	(0.0247)	(0.0043)	(0.0067)	(0.0141)	(0.0126)	(0.0085)	(0.0196)	(0.0043)	(0.0060)	(0.0141)	(0.0113)
REALINT	0.0008	0.0001	0.0043**	0.0009	−0.0031	−0.0030	0.0041**	−0.0026	0.0008	0.0011	−0.0058**	−0.0028
	(0.0018)	(0.0050)	(0.0021)	(0.0018)	(0.0040)	(0.0019)	(0.0018)	(0.0027)	(0.0019)	(0.0014)	(0.0029)	(0.0017)

(Continues)

TABLE 6 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Dependent Variable: LNAVGB						Dependent Variable: LNAVGSAL					
	Africa	**EAP**	**EECA**	**LAC**	**MENA**	**SA**	**Africa**	**EAP**	**EECA**	**LAC**	**MENA**	**SA**
CONS	4.7185***	4.3805***	6.6204***	6.1011***	8.7574***	8.1646***	−1.4130***	−1.8412***	−0.3837	−0.5208**	2.5839***	−0.2213
	(0.3379)	(0.5467)	(0.3510)	(0.3102)	(0.5975)	(0.5363)	(0.2834)	(0.3319)	(0.2859)	(0.2260)	(0.6490)	(0.4047)
Observations	727	660	871	1584	233	1273	627	596	761	1516	218	1152
Chi^2	389.0253	203.5925	253.4689	352.4636	249.2871	145.8978	381.0166	732.8181	227.9910	533.5445	39.6616	123.0255
R^2	0.1682	0.2897	0.2133	0.3109	0.1111	0.1463	0.1887	0.0661	0.1283	0.1112	0.3244	0.0070
# of MFIs	290	190	258	356	57	299	258	176	216	340	55	290

Source: Authors. Standard errors clustered at the MFI's level in parentheses.
*$p < 0.10$,
**$p < 0.05$,
***$p < 0.01$.
Notes: EAP = East Asia & the Pacific; EECA = Eastern Europe & Central Asia; LAC = Latin America and the Caribbean; MENA: Middle East & North Africa; SA: South Asia. Since country-level data are not sufficient to perform a reliable analysis, we have grouped the countries as per the regional classification of the MIX Market. POLS and FEM were also performed and the results remain qualitatively the same. To conserve space, the results are not reported here (can be obtained from the corresponding author).

TABLE 7 Sub-sample analysis based on majority (>50%) and minority (<50%) female workforce (REM)

	(1)	(2)	(3)	(4)
	DV: LNAVGB		DV: LNAVGSAL	
	<50% female staff	>50% female staff	<50% female staff	>50% female staff
WOMSTAFF	0.6521***	−0.0437	0.2235**	−0.1071
	(0.1186)	(0.1266)	(0.1015)	(0.1118)
LNBOARD	−0.0671***	−0.0823**	−0.0303**	−0.0659**
	(0.0203)	(0.0322)	(0.0154)	(0.0300)
LNBPS	0.0236	0.0847***	−0.0490***	−0.0004
	(0.0245)	(0.0309)	(0.0189)	(0.0287)
OSS	−0.0725*	−0.2255***	0.0200	−0.1069
	(0.0439)	(0.0674)	(0.0391)	(0.0659)
DTE	−0.0058***	−0.0049	−0.0063***	−0.0043
	(0.0015)	(0.0032)	(0.0012)	(0.0033)
LNSIZE	0.1317***	0.1872***	0.0686***	0.0845***
	(0.0098)	(0.0145)	(0.0078)	(0.0108)
PS (for profit = 1)	−0.0866**	−0.1712***	−0.1100***	−0.0304
	(0.0439)	(0.0570)	(0.0400)	(0.0452)
LS (NGO = 1)	−0.2042***	−0.1731***	−0.2244***	−0.2193***
	(0.0459)	(0.0589)	(0.0408)	(0.0473)
EDUF	−0.0002	0.0006	−0.0064***	−0.0058***
	(0.0007)	(0.0010)	(0.0007)	(0.0009)
FDI	0.0003	−0.0012*	0.0021**	0.0021***
	(0.0006)	(0.0007)	(0.0009)	(0.0006)
RURPOP	−0.0233***	−0.0216***	0.0062***	0.0083***
	(0.0011)	(0.0014)	(0.0009)	(0.0010)
UNMP	0.0073*	0.0037	−0.0028	−0.0052
	(0.0039)	(0.0045)	(0.0043)	(0.0033)
REALINT	0.0015	0.0046**	0.0013	0.0044**
	(0.0013)	(0.0018)	(0.0012)	(0.0019)
CONS	7.7432***	7.0290***	0.5822***	0.2914
	(0.2006)	(0.3022)	(0.1619)	(0.2219)
Observations	3377	1971	3101	1769
Chi^2	1453.9144	775.0563	304.1393	328.7743
R^2	0.1344	0.2429	0.0077	0.0243
# of MFIs	1009	662	940	598

Source: Authors. Standard errors clustered at the MFI's level in parentheses. POLS and FEM were also performed and the results remain qualitatively the same. To conserve space, the results are not reported here (can be obtained from the corresponding author).

*$p < 0.10$,
**$p < 0.05$,
***$p < 0.01$.

TABLE 8 Two-step system GMM

	(1) DV: LNAVGB	(2) DV: LNAVGSAL
L.LNAVGB	0.6739***	
	(0.1399)	
L.LNAVGSAL		0.3028*
		(0.1599)
WOMSTAFF	0.8238**	0.7690*
	(0.4109)	(0.4067)
LNBOARD	−0.0564**	−0.0534***
	(0.0263)	(0.0189)
LNBPS	0.0035	−0.0740***
	(0.0182)	(0.0282)
OSS	−0.0588**	−0.0271
	(0.0268)	(0.0214)
DTE	−0.0010	−0.0030**
	(0.0016)	(0.0014)
LNSIZE	0.0582**	0.0733***
	(0.0226)	(0.0174)
PS (for profit = 1)	−0.0114	−0.0270
	(0.0253)	(0.0328)
LS (NGO = 1)	−0.0490	−0.1373***
	(0.0336)	(0.0454)
EDUF	−0.0005	−0.0066***
	(0.0005)	(0.0016)
FDI	0.0000	0.0043***
	(0.0007)	(0.0011)
RURPOP	−0.0046	0.0062***
	(0.0030)	(0.0020)
UNMP	0.0015	0.0005
	(0.0025)	(0.0020)
REALINT	<0.0001	0.0091***
	(0.0010)	(0.0022)
YD	yes	yes
CONS	1.9779*	−3.0621
	(1.0770)	(8.9818)
Observations	4555	4150
F-Stat	519.8495***	78.7273***
AR1 (*p*-value)	−4.7521(0.0000)	−3.4984(0.0005)
AR2 (*p*-value)	1.3256(0.1850)	1.2729(0.2031)
Hansen Test statistics (*p*-value)	52.8799(0.5561)	51.1042(0.6242)

(Continues)

TABLE 8 (Continued)

	(1) DV: LNAVGB	(2) DV: LNAVGSAL
# of instruments	79	79
# of MFIs	1238	1133

Source: Authors. Standard errors clustered at the MFI's level in parentheses.
*$p < 0.10$,
**$p < 0.05$,
***$p < 0.01$.
Note: L.LNAVGB and L.LNAVGSAL are one-year lag of LNAVGB and LNAVGSAL, respectively.

workforce is below 50% (columns (1) and (3)). A possible interpretation of these results is that MFIs having below 50% of women employees operate in contexts where a qualified female workforce is relatively scarce. Hence, MFIs may be motivated to provide relatively higher compensation to attract more skilled women.

4.4 | Endogeneity

To ensure that our results are not affected by endogeneity issues, we have used the two-step system GMM (Arellano & Bover, 1995; Blundell & Bond, 1998). Results are reported in Table 8.

The reason for using GMM is that women staff may be biased towards joining MFIs that offer better financial incentives/compensation due to their selectiveness (Memon et al., 2022; Mia, 2022a). The outcome of the GMM can be considered valid since we used fewer instruments (79) than the number of MFIs. Moreover, significant AR1 and non-significant AR2 tests also suggest the presence of first-order serial correlation but not second-order serial correlation. Furthermore, the statistical non-significance of the Hansen test statistic confirms the validity of the instruments. Regarding the overall proportion of women staff, our results remain consistent and statistically significant.

4.5 | Robustness checks

Results obtained by dividing the original sample according to MFIs' dimension[13] suggest that the positive relationship between the share of women in the staff and average employee compensation is more significant for smaller MFIs than for larger ones (Online Appendix C).

Moreover, given that the coefficients of WOMSTAFF and LNBPS are subject to somehow ample variation in magnitude, we provided regressions without LNBOARD and LNBPS as covariates (Online Appendix D). The results in terms of the key effects of WOMSTAFF on LNAVGB are unaffected.

Furthermore, we use a sounder statistical criterion to select the regressors using a forward stepwise methodology (Online Appendix E). Our key predictions are ultimately unaffected.

Finally, as a complement to the estimates in Tables 4 and 5, we used the ratio of average salary to overall compensation as an alternative dependent variable (Online Appendix G). The main

[13] We excluded some covariates which may drive the key outcome of the study.

results in terms of the effects of WOMSTAFF on (LN(AVGSAL/AVGB)) are not significant, indicating that the two variables are likely to co-move as the share of the female workforce increases. From previous regressions, we obtained evidence that WOMSTAFF increases the denominator of AVGSAL/AVGB more than the numerator.

5 | CONCLUSIONS

Considering the gender diversity debate in microfinance, this study contributes to the existing literature by investigating the relationship between women's workforce representation in MFIs and both the average base wage paid to the employees and the overall monetary compensation, including bonuses and other monetary benefits.

Using a large database composed of 2,545 MFIs worldwide for the period 2008–18, we have found that a larger share of women staff members, considered at any layer of the MFI's structure, leads to higher employees' overall compensation while having weaker or non-significant effects on base wages. This tends to support the hypothesis that in the microfinance sector, women do not receive a substantially different base salary than men, but instead, they may earn higher bonuses and other performance pay benefits.

The data available for this study do not allow us to identify whether the increase in the women workforce is associated with any significant change in the compensation of all staff or only that of women. Nevertheless, according to the literature on performance pay, the latter is considered a more direct and objective measure of individual workers' productivity than the base salary (Madden, 2012). This leads to cautiously inferring that it is the higher women's performance pay that drives the overall increase in employees' compensation.

The literature on the role of women workforce in microfinance provides support for the fact that women can outperform their male counterparts because they make more responsible choices (Alves et al., 2015), and take on decisions that are valuable to the MFI in terms of efficiency and profitability (Augustine et al., 2016, Ghosh & Guha, 2019, Vishwakarma, 2017, and Hartarska & Nadolnyak, 2012), thus deserving higher compensation. Other studies recognize the role of gender affinity between staff members and the MFIs' clientele (Byrne et al., 1971; Solakoglu & Demir, 2016) as a means to expand the volume of loans, also by creating products and services that better suit their women clientele (Thomas & Ramaswamy, 1996).

Overall, our study partially rejects the widely held apprehension of the existence of gender pay discrimination in the microfinance industry. The strength of this study is that it consists of the first attempt to estimate how the share of the women workforce affects employees' compensation in a rapidly expanding and women-centered sector, both in terms of staff hired by the MFIs and in terms of customers served. Another strength is that it separately analyses base wage and bonus payments. A possible shortcoming is that it does not perfectly identify the effect of the presence of women on average pay differentials between men and women, but rather on the average wage and overall compensation considering all of the MFIs' employees. Therefore, we suggest that further research collects data on gender-specific compensation to investigate more in-depth the pattern of possible gender pay gaps.

Our empirical findings provide a positive signal to social investors that the MFI is committed to the social performance of financial inclusion, also regarding gender pay gaps. Our outcomes also motivate further research in this area, to segregate the effect of gender diversity on the various organizational ladders in MFIs. Finally, additional research could go in the direction of investigating in more depth the link between women's presence in MFIs and the various components of

their remuneration, such as the base salary and incentive bonuses, to understand what the possible merits of women within the staff are, as well as their objectives in terms of placing loans to customers.

ACKNOWLEDGEMENTS

We are grateful to the associate editor and two anonymous reviewers. The earlier version of the paper was presented at the 6th SANEM Annual Economists' Conference (SAEC), SANEM, Dhaka, Bangladesh, 2023. We thank Nazneen Ahmed, Kanti Ananta Nuzhat, and all the participants for their valuable comments and suggestions. Md Aslam Mia acknowledges financial support from the Universiti Sains Malaysia, Penang, Malaysia. Lucia Dalla Pellegrina thanks the Center for Interdisciplinary Studies in Economics, Psychology, and Social Sciences (CISEPS) at the University of Milano-Bicocca and the Baffi-Carefin Center at Bocconi University for supporting this research.

DISCLOSURE STATEMENT

The authors declare that they have no known conflict of interest associated with the study.

FUNDING

The first author acknowledges that this research was funded under the project named 'short-term research grant' (Grant No: 304/PMGT/6315547) from Universiti Sains Malaysia, Penang, 11800, Malaysia.

DATA AVAILABILITY STATEMENT

The data related to this study can be found here: https://databank.worldbank.org/source/mix-market

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REFERENCES

Anderson, C. D., & Tomaskovic-Devey, D. (1995). Patriarchal pressures: An exploration of organizational processes that exacerbate and erode gender earnings inequality. *Work and Occupations*, *22*(3), 328–356.

Abdullah, S., & Quayes, S. (2016). Do women borrowers augment financial performance of MFIs? *Applied Economics*, *48*(57), 5593–5604.

Adams, R. B. (2016). Women on boards: The superheroes of tomorrow? *Leadership Quarterly*, *27*(3), 371–386.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309.

Ahamed, M. M., Wen, J., & Gupta, N. (2019). Does board composition affect the gender pay gap? *Economics Letters*, *184*, 108624.

Ahmed, A., Monem, R. M., Delaney, D., & Ng, C. (2017). Gender diversity in corporate boards and continuous disclosure: Evidence from Australia. *Journal of Contemporary Accounting & Economics*, *13*(2), 89–107. https://doi.org/10.1016/j.jcae.2017.05.004

Alves, P., Couto, E. B., & Francisco, P. (2015). Board of directors' composition and capital structure. *Research in International Business and Finance*, *35*, 1–32. https://doi.org/10.1016/j.ribaf.2015.03.005

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, *68*(1), 29–51.

Aubert, C., De Janvry, A., & Sadoulet, E. (2009). Designing credit agent incentives to prevent mission drift in pro-poor microfinance institutions. *Journal of Development Economics*, *90*(1), 153–162.

Augustine, D., Baraldi, M., Wheat, C. O., Malgwi, C. A., & Jones, K. S. (2016). Gender diversity within the workforce in the microfinance industry in Africa: Economic performance and sustainability. *Canadian Journal of Administrative Sciences-Revue Canadienne Des Sciences De L Administration*, *33*(3), 227–241.

Baker, M., & Fortin, N. M. (2004). Comparable worth in a decentralized labour market: the case of Ontario. *Canadian Journal of Economics/Revue canadienne d'économique*, *37*(4), 850–878.

Beck, T., Behr, P., & Guettler, A. (2013). Gender and Banking: Are Women Better Loan Officers? *Review of Finance*, *17*(4), 1279–1321.

Becker, G. S., Hubbard, W. H., & Murphy, K. M. (2010). Explaining the worldwide boom in higher education of women. *Journal of Human Capital*, *4*(3), 203–241.

Berlingieri, G., Calligaris, S., & Criscuolo, C. (2018). The productivity-wage premium: Does size still matter in a service economy? *AEA Papers and Proceedings*, *108*, 328–333.

Beisland, L. A., D'Espallier, B., & Mersland, R. (2019). The commercialization of the microfinance industry: Is there a 'personal mission drift'among credit officers? *Journal of Business Ethics*, *158*(1), 119–134.

Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, *79*(1), 191–228.

Blanco-Oliver, A., & Irimia-Diéguez, A. (2021). Impact of outreach on financial performance of microfinance institutions: a moderated mediation model of productivity, loan portfolio quality, and profit status. *Review of Managerial Science*, *15*(3), 633–668.

Blau, F. D., & Kahn, L. M. (2003). Understanding international differences in the gender pay gap. *Journal of Labor Economics*, *21*(1), 106–144.

Blau, F. D., Ferber, M. A., & Winkler, A. E. (2010). Differences in occupations and earnings: The role of labor market discrimination. In *The economics of women, men, and work* (7th edn). Oxford University Press.

Blau, F. D., Ferber, M. A., & Winkler, A. E. (2014). *The economics of women, men, and work* (7th edn). Oxford University Press.

Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, *55*(3), 789–865.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, *87*(1), 115–143.

Byrne, D., Gouaux, C., Griffitt, W., Lamberth, J., Murakawa, N., Prasad, M. B., Prasad, A., & Ramirez, M. (1971). Ubiquitous relationship—attitude similarity and attraction—cross-cultural study. *Human Relations*, *24*(3), 201ff. https://doi.org/10.1177/001872677102400302

Caudill, S. B., Kroncke Jr, C. O., & Mixon Jr, F. G. (2021). Is there a firm size-wage gap after economic transition?—An examination of for-profit and not-for-profit firms in Estonia. *LABOUR*, *35*(4), 435–449.

Cavero-Rubio, J. A., Collazo-Mazón, A., & Amorós-Martínez, A. (2019). Public recognition of gender equality in the workplace and its influence on firms' performance. *Women's Studies International Forum*, *76*, 102273.

Ciminelli, G., Schwellnus, C., & Stadler, B. (2021). *Sticky floors or glass ceilings? The role of human capital, working time flexibility and discrimination in the gender wage gap*. Paris: OECD Publishing. Available at https://www.oecd-ilibrary.org/economics/sticky-floors-or-glass-ceilings-the-role-of-human-capital-working-time-flexibility-and-discrimination-in-the-gender-wage-gap_02ef3235-en

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science*, *60*(11), 2835–2857.

Elvira, M. M., & Graham, M. E. (2002). Not just a formality: Pay system formalization and sex-related earnings effects. *Organization Science*, *13*(6), 601–617.

England, P. (1992). From Status Attainment to Segregation and Devaluation [Review of The American Occupational Structure, by P. Blau & O. D. Duncan]. *Contemporary Sociology*, *21*(5), 643–647. https://doi.org/10.2307/2075546

Fontenot, K., Semega, J., & Kollar, M. (2018). Income and poverty in the United States: 2017. *U.S. Census Bureau*. Available at https://www.census.gov/content/dam/Census/library/publications/2018/demo/p60-263.pdf

Francoeur, C., Labelle, R., & Sinclair-Desgagne, B. (2008). Gender diversity in corporate governance and top management. *Journal of Business Ethics*, *81*(1), 83–95.

Ghosh, C., & Guha, S. (2019). Role of gender on the performance of Indian microfinance institutions. *Gender in Management*, *34*(6), 429–443.

Goldin, C. (2014). A grand gender convergence: Its last chapter. *American Economic Review*, *104*(4), 1091–1119.
Goldin, C., Katz, L. F., & Kuziemko, I. (2006). The homecoming of American college women: The reversal of the college gender gap. *Journal of Economic Perspectives*, *20*(4), 133–156.
Goldin, C. (2023). Gender Gap. The Concise Enclypedia of Economics. Library of Economics and Liberty. Available at https://www.econlib.org/library/Enc1/GenderGap.html (Accessed, 12/11/2023)
Groshen, E. L. (1991). The structure of the female/male wage differential: Is it who you are, what you do, or where you work? *Journal of Human Resources*, *26*(3), 457–472.
Grund, C. (2015). Gender pay gaps among highly educated professionals: Compensation components do matter. *Labour Economics*, *34*, 118–126.
Gul, F. A., Srinidhi, B., & Ng, A. C. (2011). Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting & Economics*, *51*(3), 314–338. https://doi.org/10.1016/j.jacceco.2011.01.005
Gunderson, M. (1975). Male-female wage differentials and the impact of equal pay legislation. *The Review of Economics and Statistics*, 462–469.
Gutierrez-Nieto, B., Serrano-Cinca, C., & Molinero, C. M. (2009). Social efficiency in microfinance institutions. *Journal of the Operational Research Society*, *60*(1), 104–119.
Hanka, G. (1998). Debt and the terms of employment. *Journal of Financial Economics*, *48*(3), 245–282.
Harris, M., & Raviv, A. (2008). A theory of board control and size. *Review of Financial Studies*, *21*(4), 1797–1832.
Hartarska, V., & Nadolnyak, D. (2012). Board size and diversity as governance mechanisms in community development loan funds in the USA. *Applied Economics*, *44*(33), 4313–4329.
Hartarska, V., Nadolnyak, D., & Mersland, R. (2014). Are women better bankers to the poor? Evidence from rural microfinance institutions. *American Journal of Agricultural Economics*, *96*(5), 1291–1306.
Hermes, N., Lensink, R., & Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, *39*(6), 938–948.
Heywood, J. S., & Parent, D. (2017). Performance pay, the gender gap, and specialization within marriage. *Journal of Labor Research*, *38*, 387–427.
Hulme, D., & Mosley, P. (1996). *Finance against poverty* (Vol. 2). Psychology Press.
Jirjahn, U., & Stephan, G. (2004). Gender, piece rates and wages: evidence from matched employer–employee data. *Cambridge Journal of Economics*, *28*(5), 683–704.
Julizaerma, M. K., & Sori, Z. M. (2012). Gender diversity in the boardroom and firm performance of Malaysian public listed companies. *International Congress on Interdisciplinary Business and Social Sciences 2012 (Icibsos 2012)*, *65*, 1077–1085. https://doi.org/10.1016/j.sbspro.2012.11.374
Lee, S. H., & Ha-Brookshire, J. (2017). Ethical climate and job attitude in fashion retail employees' turnover intention, and perceived organizational sustainability performance: A cross-sectional study. *Sustainability*, *9*(3), 465. https://doi.org/10.3390/su9030465
Madden, J. F. (2012). Performance-support bias and the gender pay gap among stockbrokers. *Gender & Society*, *26*(3), 488–518.
Mak, Y. T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, *13*(3), 301–318.
Malkiel, B. G., & Malkiel, J. A. (1973). Male-female pay differentials in professional employment. *The American Economic Review*, *63*(4), 693–705.
McKim, A., & Hughart, M. (2005). *Staff Incentive Schemes in Practice: Findings from a Global Survey of Microfinance Institutions*. Microfinance Network, CGAP. Available at https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-staff-incentive-schemes-in-practice-findings-from-a-global-survey-of-microfinance-institutions-2005.pdf
Memon, A., Akram, W., & Abbas, G. (2022). Women participation in achieving sustainability of microfinance institutions (MFIs). *Journal of Sustainable Finance & Investment*, *12*(2), 593–611.
Mia, M. A. (2022a). Do women on boards affect employee benefits? Evidence from the global microfinance industry. *Economics Letters*, *210*, 110194.
Mia, M. A. (2022b). Commercialization in funding and its effect on the social purpose of microfinance institutions. In *Social purpose, commercialization, and innovations in microfinance* (pp. 87–120). Springer.
Mincer, J., & Polachek, S. (1974). Family investments in human capital: Earnings of women. *Journal of Political Economy*, *82*(2), S76–S108.

Nguyen, T., Nguyen, A., Nguyen, M., & Truong, T. (2021). Is national governance quality a key moderator of the boardroom gender diversity-firm performance relationship? International evidence from a multi-hierarchical analysis. *International Review of Economics & Finance*, *73*, 370–390. https://doi.org/10.1016/j.iref.2021.01.013

Nourani, M., Mia, M. A., Saifullah, M. K., & Ahmad, N. H. (2021). Brain drain in microfinance institutions: the role of gender and organizational factors. *Gender in Management*. DOI: 10.1108/GM-04-2021-0092.

Nyamsogoro, G. D. (2010). *Financial sustainability of rural microfinance institutions (MFIs) in Tanzania*. University of Greenwich. Available at https://gala.gre.ac.uk/id/eprint/6366/1/Ganka_Daniel_Nyamsogoro_2010.pdf

Oi, W. Y., & Idson, T. L. (1999). Firm size and wages. *Handbook of Labor Economics*, *3*, 2165–2214.

Petersen, T., & Saporta, I. (2004). The opportunity structure for discrimination. *American Journal of Sociology*, *109*(4), 852–901.

Roth, L. M. (2004). The social psychology of tokenism: Status and homophily processes on Wall Street. *Sociological Perspectives*, *47*(2), 189–214.

Saini, D. S. (2006). Labour law in India. In H. J. Davis, S. R. Chatter, & M. Heuer (Eds.), *Management in India* (pp. 60–97). Response Books.

Sanborn, H. (1964). Pay differences between men and women. *ILR Review*, *17*(4), 534–550.

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. https://doi.org/10.1108/17410400610702160

Solakoglu, M. N., & Demir, N. (2016). The role of firm characteristics on the relationship between gender diversity and firm performance. *Management Decision*, *54*(6), 1407–1419.

Stainback, K., Tomaskovic-Devey, D., & Skaggs, S. (2010). Organizational approaches to inequality: Inertia, relative power, and environments. *Annual Review of Sociology*, *36*, 225–247.

Strom, R. O., D'Espallier, B., & Mersland, R. (2014). Female leadership, performance, and governance in microfinance institutions. *Journal of Banking & Finance*, *42*, 60–75.

Thomas, A. S., & Ramaswamy, K. (1996). Matching managers to strategy: further tests of the Miles and Snow typology. *British Journal of Management*, *7*(3), 247–261.

UN-Women. (2016). *UN Women Annual Report 2015–2016*.

United-Nations. (2020). *Breaking gender barriers for young women parliamentarians.* Available at https://www.un.org/youthenvoy/2020/11/breaking-gender-barriers-for-young-women-parliamentarians/#:~:text=These%20include%20aligning%20the%20minimum,and%20political%20parties%20into%20gender%2D

Vishwakarma, R. (2017). Women on board and its impact on performance: Evidence from microfinance sector. *Indian Journal of Corporate Governance*, *10*(1), 58–73.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Mia, M. A., Dalla Pellegrina, L., Wong, W.-Y., & Sangwan, S. (2023). Gender pay gap in the microfinance industry: A global perspective. *Annals of Public and Cooperative Economics*, 1–28. https://doi.org/10.1111/apce.12461