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Inclusive Finance: Bridging Gender Gaps in India

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Abstract

This study examines the demand-side factors of financial inclusion and the gender disparity that persists in remote hilly regions of India, with empirical evidence drawn from 400 respondents in the Uttarkashi district of Uttarakhand. Data were collected using a structured questionnaire and a multistage stratified random sampling approach to ensure representation across diverse demographic groups. Logistic regression analysis was applied to evaluate the influence of key socio-economic determinants on levels of financial inclusion. The findings indicate the presence of significant gender-based differences in financial participation, with women encountering greater barriers to access and usage of formal financial services compared to men. Beyond gender, variables such as age, education, income, employment status, and marital status emerged as important predictors shaping financial inclusion outcomes. Notably, the study underscores the increasing role of digital financial services and transaction modes in altering financial behaviour, even within geographically challenging and underserved regions like Uttarkashi. These results not only enrich the growing body of literature on financial inclusion but also offer practical insights for policymakers, financial institutions, and development agencies striving to create inclusive and gender-sensitive financial ecosystems. The evidence suggests that targeted interventions, enhanced financial literacy, and customized delivery mechanisms are essential for bridging existing gaps. By focusing on a remote and marginalized hilly district, this research contributes a unique perspective to the discourse on inclusive finance and highlights the urgent need for context-specific strategies to promote equitable financial inclusion.

Keywords: Borrowing, Digital Transaction, Financial Inclusion, Gender Gap, Logistic Regression.

Introduction

In fostering economic development, reduce poverty, and social equity, it is imperative that all people and enterprises have access to affordable and useful financial services. The growing importance of financial inclusion has prompted a series of policy measures designed to expand financial access. It is claimed by researchers that nations with greater financial inclusion rates typically have stronger economic growth (1). Financial services, especially credit and savings, enable people to budget their money more wisely, control their spending, and make profitable investments. Increased access to banking services in rural India dramatically decreased poverty and raised income levels (2). Offering a broad range of banking services, including advances, savings, payments, and insurance products, to a sizable section of the population requires a stable financial system (3). Furthermore, savings accounts offer a secure location to keep money, lowering the risk involved with haphazard savings techniques. Because it diversifies the financial sector and distributes risks more fairly, a financial system that is more inclusive can result in increased financial stability (4). Promoting financial inclusion is crucial to achieving gender equality and empowering women. Access to financial services for women can help them become more independent economically and have more influence over household decisions. Women's access to financial services improves the health and academic performance of their offspring, underscoring the wider social advantages of gender-inclusive financial systems (5). India's economic strategy has placed a strong emphasis on financial inclusion, particularly since the Pradhan Mantri Jan Dhan Yojana (PMJDY) was executed in 2014 with the intention of providing banking services to all. The larger objectives of social justice and economic development are hampered by the notable gender gaps in financial services access that still exist in spite of these efforts (6). The proportion of adult Indians who own a bank account has increased significantly (7). Because it

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gives people access to a variety of financial services, having a saving or current account is frequently seen as the first step toward financial inclusion. However, account ownership alone is insufficient to achieve financial inclusion. It is an on-going process that necessitates the efficient use of a range of financial products, including digital services, credit, insurance, and savings, all of which improve the financial wellbeing of both individuals and companies. Nevertheless, these collective advancements conceal pervasive gender disparities. Obstacles still prevent women from being fully included in the financial system, especially for people residing in remote, hilly and rural areas. These obstacles include sociocultural norms, lower literacy rates, and little financial awareness and digital technology access (8). While there is less of a gender gap in transaction account usage, there are still significant in utilizing other financial services. In this instance, the rural, remote and hilly area have seen a worsening of the gender disparity. Gender disparity in financial inclusion has several aspects including bank account accessibility; other crucial financial services including credit, savings, insurance, and online transactions are also impacted. Due to discriminatory lending practices, a lack of collateral, and lower financial literacy, women in India are less likely than men to obtain formal credit (9). Comparably, women have much lower insurance coverage, which limits their capacity to control risks and guarantee financial security (10). Disparities in gender are also evident in savings behaviour. Due to cultural barriers that prevent them from becoming financially independent and a lack of trust in formal financial institutions, in India women are more likely to save informally (11). There is a comparable gender disparity in digital transactions, which are becoming more and more important in the contemporary financial ecosystem. Due to lower internet access, digital literacy, and mobile phone ownership, Digital financial services are less accessible to and used by women (12). This paper takes a very different approach in that it gathers primary data from respondents who already have a bank account in order to study financial inclusion from a gender perspective in a remote hilly region of India. Through an emphasis on digital transactions, savings, insurance, and credit availability, this study intends to investigate the complex gender disparity in India's financial inclusion. This paper will contribute to the body of research on financial inclusion while attempting to identify gender disparities in other financial inclusion services other than account ownership.

“Financial inclusion is the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost" (13). "Broadening access to financial services to include the poor and underserved segments of society in order to facilitate inclusive growth and development" is how former Reserve Bank of India governor Raghu ram Rajan defines financial inclusion (14). When it comes to transactions, payments, savings, credit, and insurance, the World Bank describes financial inclusion as "individuals and businesses having access to useful and affordable financial products and services that meet their needs – delivered in a responsible and sustainable way" (15). The availability and accessibility of basic financial services to all individuals and enterprises, especially those who have traditionally been neglected or shut out of the financial system, is known as financial inclusion. These services include credit, insurance, savings accounts, and transactions. It entails making certain that these financial services are rendered in an ethical and long-lasting way is an effort to reduce poverty and promote economic growth.

Financial inclusion is primarily linked to lower account costs, closer access to financial institutions, stronger legal protections, and an atmosphere that is more politically stable (16). According to a recent Credit Rating Information Services of India Limited (CRISIL) study, financial institutions are widely dispersed geographically, with a strong concentration in major cities. There is a significant demand side constraint in addition to the supply side issue since there isn't enough money in people's hands to open bank accounts. Along with regional disparities and labour force participation, infrastructure such as roads plays a significant role in financial inclusion (17). The topography of the area and the proximity to financial institutions are two important elements that also affect the degree of financial inclusion (18).

Credit services allow people and companies to borrow money for a range of uses, including

investing, business development, and consumption. These products and services include loans and credit lines. Having access to loan is important for economic growth and can greatly increase the financial opportunities available to both individuals and companies (8). Insurance services offer defence against monetary risks and unanticipated circumstances, including accidents, natural disasters, and health problems. Insurance plays a critical role in protecting people and businesses from financial shocks and maintaining economic stability (19). Savings accounts encourage financial independence and security by enabling people to safely deposit money for later use. Savings products aid people in planning for the future and managing financial uncertainty, which enhances their overall financial well-being (20). The capacity to send and receive money, send and receive payments, and securely and efficiently handle regular financial transactions is all included in payment and transaction services. Financial inclusion and the facilitation of daily financial activities are dependent upon having access to dependable and reasonably priced payment services (21). Digital financial services include digital payment platforms, online and mobile banking, and mobile banking that improve user accessibility and convenience. Transaction expenses can be reduced by using digital financial services and get around geographical restrictions to increase financial inclusion (8).

Men show greater formal credit and saving than women do (22). Employment and education are significant contributors to this difference, but the study also notes that income has little bearing on the gender gap. On the other hand, women's financial inclusion is significantly influenced by their income (23). This can be attributed to a number of factors, including women's attitudes toward financial institutions, distance from banks, and responsibilities at work or home. The findings in Nigeria support the notion that there is a gender gap in financial participation that favours male households, with income and education playing a major role in explaining the discrepancy (24). The study used the Fairlie decomposition method and the binary Probit model on the Global Findex 2011 data set and discovered that younger age, higher income, and better education increase the likelihood of financial inclusion. The PMJDY, India's premier financial inclusion program, demonstrated that financial inclusion positively impacts the social, political, and economic facets of women's empowerment (25). Lower income, literacy, and occupation status is the main reason for gender disparity in sub-Saharan Africa when it comes to financial inclusion (26). Financial inclusion will empower women (27) and strengthen women's entrepreneurship traits (28). One of the biggest obstacles to financial inclusion in Indian society is the devalued status of women, who contribute equally to the economy but have comparatively fewer decision-making rights than men (27). The gender gap in financial inclusion in areas such as formal savings, formal accounts, and mobile accounts has been confirmed by the findings of (29). The study also provides evidence that the lower income, education, and over-dependence of women on men are the causes of this gap.

Despite notable progress in financial inclusion, significant gaps remain, particularly concerning gender disparities in developing countries like India. Much of the existing research emphasizes overall measures of inclusion while overlooking the distinct challenges and opportunities faced by men and women. Comprehensive analyses that integrate key dimensions—such as borrowing, savings, insurance, and digital transactions—are limited, and the role of socio-economic and cultural factors in shaping women's financial access is underexplored. Moreover, few studies employ robust econometric methods to examine these dynamics. Addressing these gaps, the present study sets out to explore the dimensions of financial inclusion, examine gender differences across them, analyse the socio-economic determinants influencing access, and apply logistic regression to generate empirical insights. The study also aims to provide context-specific policy recommendations to support gender-responsive financial inclusion in Uttarkashi district.

Methodology

In order to better understand the gender disparity in financial inclusion, this study looks at differences in savings, insurance ownership, borrowing from formal financial institutions, and using digital transactions. For the main variables and concepts examined in the study, the operational definitions listed below are utilized to guarantee consistency and clarity:

The capacity of individuals to access and utilize formal financial services, such as borrowing from formal financial institutions, possessing insurance, having savings in formal financial institutions, and transacting digitally, is known as financial inclusion. This covers the capacity to get credit that is timely and reasonably priced, as well as the availability of insurance, savings plans, and digital financial transactions that can be carried out safely.

The model employed in this study was created using empirical evidence from financial inclusion studies and the literature review. To investigate the differences in financial inclusion between genders, this study suggests utilizing a logit regression model, with a particular emphasis on digital transactions, savings, insurance, and credit availability. The research will make use of information gathered from a primary survey that was directed towards a heterogeneous group of people from different socioeconomic backgrounds. Because of its prowess in managing binary dependent variables—such as the existence or absence of financial inclusion services—the logit regression model was selected. Gender, age, marital status, income, education and work status are examples of independent variables. The research attempts to determine and measure the impact of gender on financial inclusion outcomes while accounting for other socio-economic factors by using this statistical technique.

A multistage stratified random sampling method will be used to collect primary data from individuals aged 15 and above who own a bank account. The population will first be divided into administrative blocks and then into villages, with random sampling applied within each stratum to ensure fair representation. Data will be gathered using a structured questionnaire covering credit, savings, insurance, and digital transactions. This method is expected to produce reliable data for analysing gender disparities in financial inclusion.

The measuring variables used in this investigation were drawn from earlier research. Table 1 displays four metrics used to gauge financial inclusion. Given the nature of the study region, with a focus on G 20 financial inclusion measures, the measuring items cited in this study are taken from a range of literatures. These indicators are also supported by the studies of (18). Every scale item's content validity was preserved even after the items were changed or reworded to better suit the study's central theme. The instrument's binary outcome, which was represented by 1 and 0 respectively, was anchored on four items that measured on a yes/no scale. Demographic details including gender, age, marital status, level of education, income, and occupation are covered in the interview agenda as well.

To examine the key information gathered for this research, multivariate techniques, particularly logistic regression, have been employed. Since the dependent variables identified in Table 1 are categorical and dichotomous in nature, logistic regression is an appropriate tool for modelling binary outcomes. The analysis has been carried out using STATA, a widely recognized statistical software package known for its robust data management and econometric capabilities.

Table 1: Source of Measurement Items (8, 9, 4, 16)

Sr. No.	Items	Sources
1	Borrowing	(8)
2	Insurance	(9)
3	Saving	(4)
4	Digital transaction	(16)

Skewness and kurtosis are statistical characteristics that are evaluated to determine the greatest departure from normalcy (30). The accepted value of kurtosis and skewness is less than plus or minus 3 (31). The following are the demographic details of the respondents who took part in this study's survey: With 51.7 percent of male and 48.3 percent of female, shows even distribution of gender among 400 respondents. About 60 percent of respondent are in middle age group of 35-59 years. Educational status of respondent has given a mixed response and out of total respondent polled 28.2 percent is graduate, 30.5 percent have gained higher secondary education, 11.3 percent have not gained any formal education and 10.5 percent are illiterate. 74.3 percent of polled respondent are married. As per the employment of respondent is concerned 10.2

percent have salaried occupation, 37.5 are self-employed and 37.5 percent are unemployed. Income data shows that 52.8 percent are earning less than 7000 Indian rupees per month.

Gender shows a negative correlation with saving, borrowing, insurance, and digital transactions. Age is positively but insignificantly related to saving and borrowing, while it has a significant negative correlation with digital transactions and a significant positive one with insurance. Marital status, income, and occupation show positive and significant correlations with all financial services. Education exhibits mixed effects—significant positive correlations with saving, insurance, and digital transactions, but an insignificant positive correlation with borrowing. Preliminary analysis using descriptive statistics compared the dimensions of financial inclusion across gender groups, while inferential econometric models captured the effect of gender after controlling for employment, income, age, marital status, and education.

Table 2: Gender-wise Descriptive Statistics on Financial Inclusion Indicator

Description	Female %	Male %	Total %	Sig.
Having a loan account	6.0	16.0	22	*
Having at least an insurance policy	10.8	28.5	39.3	*
Saving in formal financial institution	11.8	30.5	42.3	*
At least One digital transaction in last three months	10.2	17.5	27.7	*

Note: Levels of significance – * at 5%, ** at 1%.

The findings from Table 2 highlight significant gender gaps in the usage of financial services—loans, insurance, savings, and digital transactions. Women were found to own fewer loan accounts, hold fewer insurance policies, save less in formal institutions, and engage less in digital transactions compared to men. Overall, only 21.8% reported borrowing from formal institutions, 39.3% had insurance, 42.3% saved formally, 27.3% used digital transactions, and 19% maintained multiple accounts.

Results and Discussion

Tables 3 to 6 display the results of binary logistic regression, which examines the relationship between gender and financial inclusion indicators by taking into account the dependent variables listed in Table 2 while maintaining the explanatory variables such as age, marital status, income, employment status, and education constant.

Table 3: Determinants of Borrowing as Measure of Financial Inclusion

	Male		Female	
Variables	Logit coefficient	Margin dy/dx	Logit coefficient	Margin dy/dx
Education	-0.17(0.13)	-0.02(0.03)	-0.09(0.17)	-0.01(0.02)
Age	-0.22(0.30)	-0.04(0.58)	0.54(0.44)	0.01(0.04)
Marital status	0.01(0.48)	0.00(0.09)	-0.41(0.60)	-0.04((0.06)
Income	0.11(0.16)	0.22(0.32)	0.98(0.34)	0.01(0.32)
Employment	0.41(0.24**) ***	0.08(0.48**) ***	0.34(0.32)	0.03(0.03)
Wald $\chi 2$	14.78*		20.99	
Pseudo R^2	0.058		0.144	

Note: (Asterisks mark significance: *** = 1% level; ** = 5% level; * = 10% level)

Borrowing as Measure of Financial Inclusion

Borrowing is considered as an important determinant of financial inclusion, as it not only reflects individuals' access to formal credit but also highlights gender-based differences in credit utilization and financial behaviour. The findings in Table 3 show that education, age, marital status, and income are not statistically significant determinants of borrowing from formal institutions for both men and women. Younger individuals often face limited credit access due to shorter credit histories and unstable finances, with young women further constrained by lower financial literacy and economic dependence (8). Older women may also struggle due to career breaks affecting income and creditworthiness, alongside shifting needs such as medical or business expenses (32). Marital status influences

borrowing, as married women's access to loans is often restricted by dependence on their spouse's income and decision-making (33). In contrast, single, widowed, or divorced women may seek credit for financial security but face barriers like lack of collateral and social bias (34). Similarly, lower income limits women's ability to provide collateral (4), highlighting the need for tailored financial products for low-income women (35). Although higher education improves financial literacy and employability, its impact on borrowing is not significant in this study, even though past research links education to narrowing the gender gap (9, 36). Employment shows significant results only for men: salaried males are 8 percent more likely to borrow compared to just 3 percent of women, reflecting a gender gap of 5 percent. Formal jobs improve creditworthiness and repayment ability, while women in informal work struggle due to irregular income and lack of financial records (16). Promoting women's formal employment is therefore vital for improving their borrowing capacity and financial inclusion (37).

Insurance as Measure of Financial Inclusion

The findings in Table 4 show that education, age, and marital status are not statistically significant determinants of insurance ownership for either men or women.

Table 4: Determinants of Insurance as Measure of Financial Inclusion

	Male		**Female**	
Variables	Logit coefficient	Margin dy/dx	Logit coefficient	Margin dy/dx
Education	0.11(0.15)	0.02(0.02)	0.20(0.14)	0.03(0.02)
Age	0.21(0.35)	0.03(0.05)	0.16(0.35)	0.02(0.05)
Marital status	-0.31(0.51)	-0.04(0.08)	0.15(0.50)	0.02(0.72)
Income	1.08(0.19) ***	0.17(0.02) ***	0.15(0.27)	0.02(0.39)
Employment	0.19(0.24)	0.03(0.04)	0.64(0.27) **	0.09(0.04) **
Wald $\chi 2$	87.90***		32.14***	
Pseudo R^2	0.308		0.157	

Note: (Asterisks mark significance: *** = 1% level; ** = 5% level; * = 10% level

This contrasts with earlier studies which suggest that younger women tend to own fewer insurance policies due to lower incomes and limited financial literacy, while older women may acquire more insurance but still face barriers such as income constraints and fewer employment opportunities (38, 39). Although education enhances awareness and confidence in accessing financial services (40), its impact on insurance ownership remains insignificant in this study, even though prior work highlights its role in improving financial inclusion (4). Marital status also shows no significant effect, as married women often rely on their spouse's coverage, whereas widowed, divorced, or single women may purchase insurance independently (41). Cultural and social norms restricting women's financial autonomy may further widen gender disparities (42). Income, however, shows significant results for men: 17 percent of higher-income males are more likely to own insurance compared to only 2 percent of higher-income females, reflecting a 15 percent male-biased gap. The gender wage gap remains a critical barrier, limiting women's ability to afford premiums and reducing their access to broader insurance options. Addressing income disparities and designing affordable insurance products for women are essential to narrow this gap (43). Interestingly, employment plays a relatively stronger role for women, with 9 percent of salaried females more likely to own insurance compared to only 3 percent of males, resulting in a female-biased gap of 6 percent—a finding that contradicts theoretical expectations. Employment not only provides financial stability but also improves women's awareness and knowledge of insurance products, highlighting the importance of formal sector participation in enhancing their financial security (44).

Table 5: Determinants of Saving as Measure of Financial Inclusion

	Male		**Female**	
Variables	Logit coefficient	Margin dy/dx	Logit coefficient	Margin dy/dx
Education	0.13(0.16)	0.14(0.02)	0.27(0.15)	0.04(0.02)

Age	-0.37(0.42)	-0.04(0.05)	0.12(0.40)	0.02(0.05)
Marital status	1.01(0.61)	0.11(0.07)	0.19(0.51)	0.03(0.07)
Income	1.73(0.26) ***	0.19(0.02) ***	1.29(0.32) ***	0.18(0.04) ***
Employment	0.22(0.27)	0.02(0.03)	-0.44(0.28)	0.06(0.04)
Wald $\chi 2$	133.80*		44.07*	
Pseudo R^2	0.477		0.205	

Note: (Asterisks mark significance: *** = 1% level; ** = 5% level; * = 10% level)

Saving as Measure of Financial Inclusion

The finding of saving as financial inclusion determinant in table 5 indicating that education, age, marital status and employment are insignificant determinant of saving both for male and female. The results are in contrast to the findings of other research of gender gap in saving in formal financial institutions. Age influences the saving patterns of women and they have limited control over financial resources including saving in male dominated household (45), educated women are more likely to participate in financial decision about their saving (36), employment enhance saving and overall financial inclusion (37). However, income is a significant determinant of saving for both male and female indicating that 19 percent of higher income males are more likely to do saving in formal financial institutions as compare to 18 percent of higher income female. The finding indicating that the gender gap is disappearing as the income of female increasing it is also supported by the research that closing the gender savings gap requires addressing income disparities and it is also empowering the women in decision making regarding saving (46). Overall, the findings underscore that economic capacity, rather than personal or social attributes, is the primary driver of financial inclusion through saving.

Digital Transactions as Measure of Financial Inclusion

The findings in Table 6 suggest that education positively influences digital transactions for both men and women, with higher-educated males being 9 percent more likely to use digital transactions compared to 3 percent of females, reflecting a 6 percent male-biased gap (34, 47). Age shows a negative relationship with older men 28 percent less likely and women 12 percent less likely to engage in digital transactions, indicating a female-biased gap of 16 percent, which contrasts with earlier evidence suggesting older women face greater digital barriers (8, 48).

Table 6: Determinants of Digital Transaction as Measure of Financial Inclusion

	Male		**Female**	
Variables	Logit coefficient	Margin dy/dx	Logit coefficient	Margin dy/dx
Education	0.52(0.18) **	0.09(0.03) **	0.17(0.14)	0.03(0.02)
Age	-1.56(0.41) ***	-0.28(0.06) ***	-0.83(0.39) **	-0.12(0.06) **
Marital status	1.11(0.55) **	0.20(0.09) **	0.09(0.45)	0.04(0.07)
Income	0.30(0.17) *	0.05 (0.03) *	-0.24(0.30)	-0.04(0.04)
Employment	-0.05(0.26)	-0.01(0.05)	0.55(0.29) **	0.08(0.42) **
Wald $\chi 2$	47.09 ***		19.06***	
Pseudo R^2	0.178		0.095	

Note: (Asterisks mark significance: *** = 1% level; ** = 5% level; * = 10% level)

Marital status shows a positive relation, with married men 20 percent more likely to transact digitally compared to only 4 percent of married women, reflecting a 16 percent male-biased gap, likely linked to household decision-making constraints on women (49). Income exhibits mixed results: higher-income men are 5 percent more likely to engage in digital transactions, while higher-income women are 4 percent less likely, underscoring the role of gendered income disparities in shaping digital financial inclusion (50). Finally, employment also shows mixed effects. While employed men are insignificantly less likely (–1 percent) to transact digitally, employed women are 8 percent more likely, indicating a female-biased gap. Women's participation in formal employment appears to strengthen their digital financial engagement by increasing both income stability and exposure to digital tools (16).

In similar studies conducted throughout South Asia, which consistently show low levels of financial inclusion and men actively using banking services like credit and save more than women (51, 52). Financial inclusion is strongly influenced by factors including income, education, and formal employment, especially for those in the lowest income group, where education is essential for improving access (53). Data from Indian subcontinent shows that, older, educated, and working men are more likely to be financially included, and using a mobile phone is another factor that makes this possible (54). Similarly, women are less likely to be included, whereas those with higher education and self-employment income have easier access to financial services (55). The results are consistent with the findings of present study, where gender disparities still exist and women participate less in digital transactions, borrowing, insurance, and saving than men do. The study does, however, also show that employment status has a considerable impact on inclusion for males but not for women, indicating that structural and cultural obstacles are still more ingrained locally than they may be across South Asia.

The formal financial services are restricted by various demand side barrier. Irregular or low income limits the capacity of women to avail insurance, borrow from or save in formal financial institutions. Lower level of financial literacy among women reduces their confidence in dealing with financial products. Challenges to women financial inclusion gets compounded due to digital divide which hamper older and less educated to adopt digital banking. Further women's engagement with domestic or casual work diminishes their effective demand to use financial service from formal institutions. Participation of women to formal financial services is also restricted from supply side barriers. As per the study employment play a major role in borrowing for men but not for women indicating a restrictive lending policy favouring male consumers. The study has also showed a male biased gap in insurance ownership, with higher-income men more likely to obtain policies suggesting that financial products are designed in a way that excludes low-income women. Similarly, digital transaction reveals weaknesses in financial institutions' capacity to offer women, especially older and less educated consumers, easily accessible and user-friendly platforms. Overall, this study identifies three major supply-side barriers: strict eligibility requirements, product design that is geared toward men, and inadequate adaptability to the socioeconomic reality of women.

Recommendations

Policymakers, financial institutions, and development organizations working to improve financial inclusion and address gender disparities will find great significance in the research findings. Usage of financial services increases financial inclusion. The policy makers should encourage usage of financial service, through targeted credit, insurance and saving. Financial institutions should develop product and services that can be customized as per the need of women, young, poor and population living in hilly and remote area. It has been found significant relation between income and financial service usage, so government should emphasize on income generating scheme in the area. Pinpointing the precise demographic variables that impact the gender disparity in financial inclusion—such as age, marital status, education, income, and employment—offers insightful information for focused interventions. The significance of digital financial services in advancing financial inclusion is also highlighted by the research. The improvement of women's digital financial literacy and the accessibility and affordability of digital financial services should be the primary concerns of policymakers and financial institutions.

Limitations of the Study

The study provides insightful information about financial inclusion in hilly remote area of India. As the study is limited to geographic spread of Uttarkashi district only, its wider generalizability is restricted. Use of primary data collected through self-reporting questionnaire may contain certain biases like recall and social desirability, which could skew the results regarding financial behaviour and the availability of financial services. The cross-section methodology of the study can explain correlation but restrict the capacity to deduce causation between the variables analysed, including the influence of age, employment, income, marital status, education, and employment on the gender disparity in financial inclusion. Notwithstanding these drawbacks, the study's strength is its primary data collection, strong

statistical analysis, and unambiguous identification of gender-based and structural disadvantages, which makes it a useful starting point for further research and policy initiatives.

Scope for Future Research

The future studies should use longitudinal method to investigate how education and employment leads to long term gain in women financial behaviour and to establish causal relationship. Furthermore, broadening the research's focus to incorporate various geographical areas would yield a more all-encompassing comprehension of the gender disparity in financial inclusion on a global scale. Since fintech innovations and digital financial literacy are rapidly evolving and have significant potential to enhance financial inclusion, more research should be done on their effects on bridging the gender gap. Infrastructural and employment disparities that contribute to gender gaps can be clarified by comparing rural and urban areas. Qualitative study could also investigate how women's financial decision-making is influenced by cultural and intra-household dynamics. Future research can also focus to look at how literacy initiatives and digital infrastructure affect gendered access to technology-driven finance. Lastly, studies should assess how well government programs reduce gender gaps and relate financial inclusion to more general outcomes like resilience, empowerment, and financial well-being.

Conclusion

This study has highlighted the key demographic factors—age, education, income, employment and marital status—that influence financial inclusion disparity in context of gender. The findings provide valuable guidance for policymakers, financial institutions, and development organizations to design targeted strategies such as women-focused financial literacy programs, inclusive financial products, digital banking solutions, and microfinance support. Strengthening women's digital financial literacy and expanding access to affordable digital services emerge as critical pathways for advancing inclusion.

At the same time, certain limitations must be acknowledged. The reliance on self-reported survey data may introduce bias, and the cross-sectional design restricts causal interpretations. Moreover, the focus on a single district limits the wider applicability of results. Future research should adopt longitudinal approaches, expand to diverse regions, and examine the role of fintech innovations in bridging the gender gap.

Overall, this research contributes to building inclusive financial practices and policies that promote women's empowerment and sustainable economic growth.

Abbreviations

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Author Contributions

Pramod Kumar Ojha: developed the idea of the research, writing the manuscript, Devinder Kumar: provided guidance, feedback in the research writing process, proofread the final manuscript.

Conflict of Interest

The author declares no conflict of interest.

Declaration of Artificial Intelligence (AI) Assistance

The authors declare no use of artificial intelligence (AI) for the write-up of the manuscript.

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References

1. Demirguc-Kunt A, Klapper L, Singer D, Ansar S, Hess J. The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution. World Bank Publications. 2018. https://doi.org/10.1596/978-1-4648-1259-0
2. Burgess R, Pande R. Do rural banks matter? Evidence from the Indian social banking experiment. American economic review. 2005;95(3):780-95. h
3. Demirguc-Kunt A, Klapper L, Randall D. Islamic finance and financial inclusion: measuring use of and demand for formal financial services among Muslim adults. Review of Middle East Economics and Finance. 2014;10(2):177-218.
4. Beck T, Demirgüç-Kunt A, Levine R. Finance, inequality and the poor. Journal of economic growth. 2007;12(1):27-49.
5. Duflo E. Women empowerment and economic development. Journal of Economic literature. 2012;50(4):1051-79.
6. Sarma M, Pais J. Financial inclusion and development. Journal of international development. 2011;23(5):613-28.

7. Agarwal S, Alok S, Ghosh P, Ghosh S, Piskorski T, Seru A. Banking the Unbanked: What do 280 million New Bank Accounts Reveal about Financial Access? Columbia Business School Research Paper. 2017;26:17-12. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2906523
8. Demirgüç-Kunt A, Klapper LF. Measuring financial inclusion: The global findex database. World bank policy research working paper. 2012;(6025). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2043012
9. Ghosh S, Vinod D. What constrains financial inclusion for women? Evidence from Indian micro data. World development. 2017;92:60-81.
10. Klapper LF, Lusardi A, Van Oudheusden P. Financial literacy around the world: insights from the Standard and Poor's ratings services global financial literacy survey. 2015. https://gflec.org/wp-content/uploads/2015/11/Finlit_paper_16_F2_singles.pdf
11. Sahay R, Cihak M, IMF staff. Women in finance: A case for closing gaps. Staff discussion notes SDN/18/05. Washington (DC). International Monetary Fund. 2018. https://www.researchgate.net/profile/Martin-Cihak/publication/327762329_Women_in_Finance_A_Case_for_Closing_Gaps/links/5f96ca2c299bf1b53e45f9a7/Women-in-Finance-A-Case-for-Closing-Gaps.pdf
12. Organisation for Economic Co-operation and Development. Bridging the Digital Gender Divide: Include, Upskill, Innovate. Paris: OECD 2018. https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf
13. Rangarajan C. Report of the committee on financial inclusion. Ministry of Finance, Government of India. 2008;155-67. https://the1991project.com/sites/default/files/2024-12/2008_Rangarajan_CommitteeFinancialInclusion.pdf
14. Rajan R. The changing paradigm for financial inclusion. Speech at the National Seminar on "Equity, Access, and Inclusion – Transforming Rural India through Financial Inclusion," Hyderabad; 2016. https://www.bis.org/review/r160719a.htm
15. World Bank. Gender Differences in Access to Financial Services 2014; (Policy Research Working Paper). https://www.worldbank.org/en/topic/financialinclusion
16. Allen F, Demirguc-Kunt A, Klapper L, Peria MS. The foundations of financial inclusion: Understanding ownership and use of formal accounts. Journal of financial Intermediation. 2016;27:1-30.
17. Dangi N, Kumar P. Current situation of financial inclusion in India and its future visions. International Journal of Management and social sciences research. 2013;2(8):155-66.
18. Bhanot D, Bapat V, Bera S. Studying financial inclusion in north-east India. International Journal of Bank Marketing. 2012;30(6):465-84.
19. Kessler D, de Montchalin A, Thimann C, Hufeld F, Koijen SJ. The macroeconomic role of insurance. The economics, regulation, and systemic risk of insurance markets. 2017;2:20-54. https://academic.oup.com/book/27174/chapter-abstract/196600991?redirectedFrom=fulltext&login=false
20. Ashraf N, Karlan D, Yin W. Female empowerment: Impact of a commitment savings product in the Philippines. World development. 2010;38(3):333-44.
21. World Bank. Committee on Payments and Market Infrastructures. Payment aspects of financial inclusion. 2016. https://documents1.worldbank.org/curated/en/806481470154477031/pdf/Payment-Aspects-of-Financial-Inclusion.pdf?utm_source=chatgpt.com
22. Özşuca EA. Gender gap in financial inclusion: Evidence from MENA. Economics and Business Letters. 2019;8(4):199-208.
23. Swamy V. Financial inclusion, gender dimension, and economic impact on poor households. World development. 2014;56:1-5.
24. Abdu M, Buba A, Adamu I, Muhammad T. Drivers of financial inclusion and gender gap in Nigeria. The Empirical Econometrics and Quantitative Economics Letters (EEQEL). 2015;4(4):186-99.
25. Bhatia S, Singh S. Empowering women through financial inclusion: A study of urban slum. Vikalpa. 2019; 44(4):182-97.
26. Aterido R, Beck T, Iacovone L. Access to finance in Sub-Saharan Africa: is there a gender gap? World development. 2013;47:102-20.
27. Shetty S, Hans V. Women empowerment in India and financial inclusion barriers. International Journal of Management Sociology and Humanities. 2018;9(3):344-52.
28. Goel N, Madan P. Benchmarking financial inclusion for women entrepreneurship–a study of Uttarakhand state of India. Benchmarking: An International Journal. 2019;26(1):160-75.
29. Adegbite OO, Machethe CL. Bridging the financial inclusion gender gap in smallholder agriculture in Nigeria: An untapped potential for sustainable development. World Development. 2020;127:104755.
30. Hair JF, Ringle CM, Sarstedt M. Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. Long range planning. 2013;46(1-2):1-2.
31. Bhat AA, Mishra RK. Demographic characteristics and residents' attitude towards tourism development: A case of Kashmir region. Journal of Public Affairs. 2021;21(2):e2179.
32. Johnson, E., and Stanforth, N. The role of aging and gender in financial literacy and the borrowing behavior of older adults. Journal of Financial Counseling and Planning 2018;29(2):287-298.
33. Agier I, Szafarz A. Microfinance and gender: Is there a glass ceiling on loan size? World development. 2013; 42:165-81.
34. World Bank. Global Financial Development Report 2017/2018: Bankers without Borders 2017; Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1201-9
35. Raheem S, Addo A, Shaffakat S, Lunberry D. Designing for financial inclusion in developing countries: Digital financial service for low-income

women in Ghana. The Information Society. 2024;40(5):376-94.
36. Lusardi A, Mitchell OS. The economic importance of financial literacy: Theory and evidence. American Economic Journal: Journal of Economic Literature. 2014;52(1):5-44.
37. Sahay R, Cihak M, N'Diaye PM, Barajas A, Mitra S, Kyobe A, Yousefi SR. Financial inclusion: Can it meet multiple macroeconomic goals? 2015; (IMF Staff Discussion Note SDN/15/17). International Monetary Fund. https://www.imf.org/external/pubs/ft/sdn/2015/sdn1517.pdf
38. Mahdzan NS, Victorian SM. The determinants of life insurance demand: A focus on saving motives and financial literacy. Asian social science. 2013;9(5):274.
39. Piras C, Presbitero AF, Rabellotti R. Determinants of insurance demand in the Afro-Eurasian regions. World Development 2013;47:35-51.
40. Cole S, Sampson T, Zia B. Prices or knowledge? What drives demand for financial services in emerging markets? The journal of finance. 2011;66(6):1933-67.
41. Loke YJ. Financial preparedness for income shock among Malaysians. Malaysian Journal of Economic Studies. 2016; 53(2):279-95.
42. Arun T, Kamath R. Financial inclusion: Policies and practices. IIMB Management Review. 2015; 27(4):267-87.
43. Sharma SK, Nambiar D, Sankar H, Joseph J, Surendran S, Benny G. Gender-specific inequalities in coverage of publicly funded health insurance schemes in southern states of India: evidence from national family health surveys. BMC Public Health. 2023;23(1):2414. https://link.springer.com/article/10.1186/s12889-023-17231-0
44. Fletschner D, Kenney L. Rural women's access to financial services: credit, savings, and insurance. Gender in agriculture: Closing the knowledge gap. 2014;19:187-208. https://link.springer.com/chapter/10.1007/978-94-017-8616-4_8
45. Chowa GA, Despard MR. The influence of parental financial socialization on youth's financial behavior: Evidence from Ghana. Journal of family and economic issues. 2014;35(3):376-89.
46. Seguino S, Were M. Gender, development and economic growth in Sub-Saharan Africa. Journal of African Economies. 2014;23(suppl_1):18-61.
47. Maji SK, Laha A. Role of financial and digital literacy in determining digital transaction behaviour: evidence from student level survey in West Bengal (India). International Journal of Business Environment. 2023;14(2):183-210. https://www.inderscienceonline.com/doi/abs/10.1504/IJBE.2023.129917
48. Gupta M, Kiran R. Reflection of Gender Digital Divide on Digital Financial Inclusion in Context of Indian Bankers: An Empirical Analysis. SAGE Open. 2024;14(4):21582440241288980. https://journals.sagepub.com/doi/pdf/10.1177/21582440241288980
49. Chakraborty S. Laws, attitudes and financial inclusion of women: A cross-country investigation. Economics Bulletin. 2014;34(1):333-53. https://www.researchgate.net/publication/286818404_Laws_attitudes_and_financial_inclusion_of_women_A_cross-country_investigation
50. Gammage S, Kes A, Winograd L, Sultana N, Hiller S, Bourgault S. Gender and digital financial inclusion: What do we know and what do we need to know. International Centre for Research on Women (ICRW). 2017. https://www.icrw.org/wp-content/uploads/2017/11/Gender-and-digital-financial-inclusion.pdf
51. Mani M. Financial inclusion in South Asia—Relative standing, challenges and initiatives. South Asian Survey. 2016;23(2):158-79.
52. Malik FA, Yadav DK, Lone NA, Adam H. An investigation into the dynamics of financial inclusion in south Asian countries. Pakistan Economic and Social Review. 2021;59(2):231-51.
53. Aslan G. Enhancing youth and women's financial inclusion in South Asia. Cogent Economics & Finance. 2022;10(1):2136237.
54. Badar R, Anwar S, Naqvi SA. Financial inclusion and determinants in South Asian countries. Journal of Accounting and Finance in Emerging Economies. 2020;6(2):623-33.
55. Aslan G. Towards financial inclusion in South Asia: A youth and gender perspective. New Delhi: United Nations ESCAP South and South-West Asia Office; 2019. https://repository.unescap.org/items/8df188a6-eefc-4d0a-9e2f-faf1fab0174a

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