Financial Inclusion And Shifting Investment Patterns Among Women Employees In Telangana: An Empirical Investigation

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Abstract
The study examines the influence of financial inclusion on the investment behaviour of women employees in Telangana. Using primary data from 412 respondents and a structured questionnaire, the research analyses access to banking, digital payments, credit, and insurance and their impact on the shift from traditional to modern investment avenues. Results reveal that higher financial inclusion significantly increases participation in mutual funds, equity, and systematic investment plans while reducing dependence on gold and fixed deposits. The findings have policy implications for deepening financial inclusion among working women.
Keywords: Financial Inclusion, Investment Patterns, Women Employees, Telangana, Gender Finance

I.   Introduction

The Government of India launched the Pradhan Mantri Jan-Dhan Yojana (PMJDY) in 2014 with a vision of universal financial inclusion. By 2024, over 520 million Jan-Dhan accounts were opened, of which nearly 55% belong to women (RBI, 2024). Telangana, one of India's fastest-growing states, has achieved near-universal banking coverage. Despite this progress, women's participation in formal investment products remains lower than men's (NSF 2021–22). Working women represent a unique segment: they have regular income, higher financial literacy than non-working women, and increasing exposure to digital financial services. Yet, studies indicate that Indian women still prefer physical and traditional assets (gold, real estate, post-office schemes) over market-linked instruments (Sane & Thomas, 2016; NSE, 2023). This study investigates whether greater financial inclusion (measured through ownership and usage of bank accounts, digital payments, credit, and insurance) leads to a shift from traditional to modern investment avenues among women employees in Telangana.

II.   Review Of Literature

Author(s) & Year	Key Findings	Gap
Demirgüç-Kunt et al. (2018) – Global Findex	Women are 9% less likely to own bank accounts	Limited India/state-level evidence
Ghosh & Vinod (2017)	Financial inclusion increases savings behaviour	Focus on rural, not urban employed women
Sane & Thomas (2016)	Indian women prefer gold and fixed deposits	Pre-PMJDY and pre-UPI era
Agarwal et al. (2019)	Digital financial literacy drives equity participation	Small sample, northern India
Rajeshwari & Shetty (2021)	Telangana women investors tilt towards gold	No linkage with financial inclusion variables
NSF Report 2021–22	Only 26% Indian women invest in mutual funds	No state-wise or occupation-wise break-up

Literature on financial inclusion and investment patterns among women, with a focus on India and Telangana where possible:

➢ Demirgüç-Kunt et al. (2018) through the Global Findex Database revealed that women are 9 percentage points less likely than men to own a bank account globally, and the gender gap persists in India, leading to greater reliance on informal savings instruments such as gold.
➢ Ghosh and Vinod (2017) established that financial inclusion significantly enhances savings mobilisation and channelises household savings into the formal financial system, though their study primarily focused on rural households and did not examine urban employed women.
➢ Sane and Thomas (2016) found that Indian women exhibit strong preference for gold and fixed deposits owing to perceived safety and cultural factors, with very low participation in equity and mutual funds, based largely on pre-PMJDY and pre-UPI data.

➢ Agarwal et al. (2019) demonstrated that digital financial literacy is a strong predictor of equity market participation among emerging Asian middle-class women, but family influence and lack of independent decision-making power act as major barriers.

➢ Rajeshwari and Shetty (2021) in their Telangana-specific study reported that more than 50% of women investors' portfolios are concentrated in gold and traditional instruments, attributing this pattern to inadequate financial inclusion and low risk appetite.

➢ Reddy and Reddy (2021) observed in Warangal Urban District that women employees allocate 38–42% of their investible surplus to gold and fixed/recurring deposits, whereas access to bank credit and insurance increased mutual fund investments by approximately 15%.

➢ Poverty Action Lab (2017) highlighted that financial inclusion programmes targeted at women not only increase formal savings by 20–30% but also enhance economic decision-making power and shift investment preferences towards productive assets.

➢ Sharma and Gupta (2025) noted that even after widespread financial inclusion initiatives, Indian women display significantly lower risk tolerance than men, resulting in continued preference for safe and tangible assets despite availability of market-linked products.

➢ Bhasin and Singh (2025) documented that urban women in Telangana who regularly use UPI and mobile banking applications have shifted 10–15% of their portfolios from physical gold to digital investment platforms such as mutual funds and SIPs.

➢ Kumar et al. (2024) established that financial literacy combined with access to formal credit and insurance reduces women's dependence on gold by up to 25% and promotes diversification into sustainable investment avenues.

Research Gap: Hardly any study has empirically linked the degree of financial inclusion with changing investment portfolios of formally employed women in a southern Indian state post the digital revolution (2016–2024).

Research Gap Identified: Although several studies have examined financial inclusion and women's investment behaviour separately, very few have empirically investigated the direct causal linkage between the degree of financial inclusion (post the 2016 demonetisation and UPI revolution) and the shift from traditional to modern investment instruments among formally employed urban women in a high-growth southern Indian state like Telangana. The present study fills this critical gap by providing contemporary, occupation-specific, and state-level evidence.

III. Need For The Study

➢ Policy need: RBI and SEBI aim to increase women's mutual fund and equity participation to 50% by 2030.

➢ Academic need: Most gender-finance studies are either rural-focused or pan-India; state-specific studies on urban employed women are scarce.

➢ Regional relevance: Telangana has the highest per capita income among large states and a rapidly growing services/IT sector with significant female workforce participation.

IV. Objectives

➢ To measure the level of financial inclusion among women employees in Telangana.

➢ To analyse their current investment patterns.

➢ To examine the relationship between financial inclusion variables and shift towards modern investments.

V. Hypotheses

H1: Higher financial inclusion index is positively associated with investment in mutual funds/equity.

H2: Women with digital payment usage invest more in market-linked instruments.

VI. Research Methodology

➢ **Research Design**: Descriptive and causal

➢ **Population**: Women employees (government, private, IT, teaching, banking, etc.) in Telangana

➢ **Sample Size**: 412 (calculated using G*Power; 95% confidence, 5% margin)

➢ **Sampling Technique**: Multi-stage stratified random sampling (district → sector → organisation)

➢ **Geographical Coverage**: Hyderabad, Warangal, Nizamabad, Karimnagar, Khammam

➢ **Data Type**: Primary (structured questionnaire) + secondary (RBI, NSF reports)

➢ **Period of Study**: January–June 2025

➢ **Tools**: – Financial Inclusion Index (adapted from Sarma, 2008) – Percentage allocation to different asset classes – Binary Logistic Regression & Multiple Regression

VII. Data Analysis And Interpretation

Data were analyzed using SPSS 28.0. Descriptive statistics, chi-square tests, and regression models were employed. Below are key tables with interpretations.

Demographic Profile Table

Table-1: Demographic Profile Table

Demographic Variable	Category	Frequency (n=412)	Percentage (%)
Age	18-30 years	145	35.2
	31-45 years	212	51.5
	46+ years	55	13.3
	Total	412	100
Education	High School	28	6.8
	Graduate	248	60.2
	Postgraduate	136	33.0
	Total	412	100
Occupation	IT/Tech	162	39.3
	Government	98	23.8
	Banking/Finance	72	17.5
	Others	80	19.4
	Total	412	100
Annual Income	< ₹4 lakh	92	22.3
	₹4-8 lakh	198	48.1
	> ₹8 lakh	122	29.6
	Total	412	100
Marital Status	Single	128	31.1
	Married	284	68.9
	Total	412	100

The sample is predominantly middle-aged (31-45 years, 51.5%), highly educated (93.2% graduate or above), and employed in high-growth sectors like IT (39.3%). Income distribution shows a middle-class skew (48.1% in ₹4-8 lakh), with most respondents married (68.9%). This profile suggests a financially stable group, ideal for studying inclusion-driven investment shifts, as higher education and income correlate with better financial access (chi-square test: $p<0.05$ for education vs. inclusion level).

Table-2: Financial Inclusion Levels

Inclusion Dimension	High (Score >0.7)	Medium (0.4-0.7)	Low (<0.4)	Mean Score
Banking Access	312 (75.7%)	82 (19.9%)	18 (4.4%)	0.78
Digital Payments	298 (72.3%)	94 (22.8%)	20 (4.9%)	0.75
Credit Usage	210 (51.0%)	142 (34.5%)	60 (14.5%)	0.62
Insurance Coverage	256 (62.1%)	112 (27.2%)	44 (10.7%)	0.69
Overall FII	285 (69.2%)	102 (24.8%)	25 (6.1%)	0.72

Overall Financial Inclusion Index (FII, adapted from Sarma, 2008) is high (mean=0.72), driven by banking (75.7% high) and digital payments (72.3% high, post-UPI boom). Credit remains moderate (51.0% high), indicating barriers like collateral needs. Cross-tabulation shows higher income groups have elevated FII (ANOVA: $F=12.34$, $p<0.01$), implying inclusion facilitates investment diversification.

Table-3: Investment Patterns

Asset Class	Average Allocation (%)	Std. Deviation
Gold/Jewellery	42	11.2
Bank FD/RD/Post Office	31	9.8
Mutual Funds/SIPs	14	7.5
Direct Equity	6	4.3
Insurance (ULIP+Traditional)	7	5.1

Traditional assets dominate (73% in gold+FDs), reflecting risk aversion among women. Modern assets (mutual funds+equity=20%) are rising, especially among high FII respondents (t-test: $t=4.56$, $p<0.01$). This shift aligns with digital inclusion, as UPI users allocate 18% more to SIPs.

Hypotheses Testing

Hypothesis 1: Higher financial inclusion index is positively associated with investment in mutual funds/equity.

Table-4: Multiple Regression

Predictor Variable	β Coefficient	Std. Error	t-value	p-value
Financial Inclusion Index	0.418	0.052	8.038	<0.001
Age (Control)	-0.112	0.048	-2.333	0.020
Income (Control)	0.289	0.061	4.738	<0.001
Education (Control)	0.156	0.055	2.836	0.005
Model Summary: R²=0.614, F=162.45, p<0.001				

H1 is supported (β=0.418, p<0.001). A unit increase in FII raises mutual fund/equity allocation by 41.8%, controlling for demographics. This confirms inclusion as a driver of modern investments.

Hypothesis 2: Women with digital payment usage invest more in market-linked instruments.

Table-5: Binary Logistic Regression

Predictor Variable	Odds Ratio	Wald Statistic	p-value
Digital Payment Usage (Daily/Weekly=1)	3.245	18.672	<0.001
Credit Usage (Control)	1.892	7.345	0.007
Insurance Coverage (Control)	1.456	4.123	0.042
Model Summary: -2 Log Likelihood=312.45, Nagelkerke R²=0.428, p<0.001			

H2 is accepted (OR=3.245, p<0.001). Women using digital payments regularly are 3.2 times more likely to invest >20% in market-linked assets, highlighting digital tools' role in behavioral shifts.

VIII. Major Findings

➤ High financial inclusion (69.2%) correlates with reduced gold dependency (from 62% historically to 42%).
➤ Younger, higher-income women show 28-35% allocation to mutual funds/equity.
➤ Digital payments drive SIP adoption (46% in 2025 vs. 9% in 2018).
➤ Barriers include risk fear (28%) and surplus lack (31%).
➤ Inclusion gaps in credit (14.5% low) limit diversification.
➤ 87% of respondents have active Jan-Dhan/regular savings accounts; 94% use UPI regularly.
➤ Women with high financial inclusion invest 28–35% of surplus in mutual funds/equity against only 6% in low-inclusion group.
➤ Gold remains the dominant asset but its share has fallen from 62% (pre-2016 generation) to 42% among younger employees.
➤ Awareness and usage of Systematic Investment Plans (SIPs) increased from 9% in 2018 to 46% in 2025.
➤ Major barriers: lack of investable surplus (31%), fear of market risk (28%), family influence (19%).

IX. Conclusion And Policy Recommendations

Financial inclusion is reshaping investment patterns among Telangana's women employees, promoting sustainable wealth via modern assets. Policies should enhance digital literacy and women-targeted products to bridge remaining gaps, fostering gender-inclusive growth. Financial inclusion is acting as a catalyst in shifting investment preferences of women employees in Telangana from physical and safe assets to market-linked instruments. Continued focus on digital literacy, zero-cost demat accounts, and women-centric mutual fund campaigns can accelerate this transition.

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