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SAVING CHOICES IN SOUTH ASIA: EVIDENCE FROM FORMAL, INFORMAL, AND DIGITAL CHANNELS

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Abstract
This study analyzes individuals saving behavior in South Asia using a multi-channel approach. It distinguishes between formal bank saving, mobile money saving, informal saving, and saving through any channel. The analysis uses Global Findex Database 2024 microdata for Bangladesh, India, Nepal, Pakistan, and Sri Lanka (N = 6,984). Logit models are estimated to examine how demographic, socioeconomic, digital-access, and country factors shape saving choices. Education, income, and employment emerge as strong and consistent predictors, especially for formal bank saving. Digital access plays an important but uneven role. Mobile money saving is largely driven by country-level digital ecosystems, while informal saving is more common among women and rural households. Overall, saving channels coexist rather than replace one another, highlighting the need for inclusive and context-sensitive financial policies.
Keywords: *Formal saving, informal savings, Saving behaviors, Financial inclusion*

INTRODUCTION

Saving activity has increased across much of the developing world in recent years. This reflects economic recovery after the pandemic and wider access to financial services. The Global Findex Database 2025 shows that the share of adults who saved in the past year rose in all regions between 2021 and 2024. In low- and middle-income economies, 55 percent of adults reported saving, an increase of 12 percentage points since 2021 (Klapper et al., 2025). Strong gains are observed in East Asia and the Pacific and in Sub-Saharan Africa. Progress in South Asia, however, has been slower. These trends highlight the growing role of saving in household financial resilience and the uneven shift toward inclusive saving practices. This makes it important to examine how formal, informal, and digital saving channels operate in South Asia.

Household saving behavior in developing economies reflects institutional limits, economic conditions, and access to financial services. In South Asia, saving rarely follows a single path. Many households combine formal banks, informal arrangements, and digital tools. Research shows that informal saving persists because it solves enforcement and commitment problems that formal systems may not address. Evidence from rotating savings and credit associations highlights the role of internal design in sustaining participation and limiting default (Anderson et al., 2009; Zafar & Shair, 2025). Other studies show that informal and formal finance usually coexist and serve complementary roles under access constraints (Ayyagari et al., 2010).

Digital finance adds another layer to this setting. Financial inclusion depends on income, education, location, and digital access working together, not on technology alone (Kabakova & Plaksenkov, 2018; Marc & Ali, 2019). Limited affordability, trust, and digital skills can restrict use, leading households to retain informal practices (Ozili, 2018; Marc et al., 2022). Spatial gaps also matter, as informal finance can ease urban–rural disparities (Liu et al., 2025). Household studies further show that channel choice reflects assets, risk preferences, and local infrastructure (Li & Hiwatari, 2025; Umair et al., 2025), while South Asian evidence points to social costs when informal finance lacks protection (Ali, 2015; Pradeep Kumar & Sumalatha, 2024; Asim et al., 2025; Rana et al., 2025).

A growing literature shows that saving behavior in developing economies reflects the coexistence of formal, informal, and digital systems, rather than a simple shift toward formality (Shair et al., 2023). Informal finance persists where formal institutions face limits in enforcement, information, or access. Studies on rotating savings

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and credit associations show that trust, social ties, and flexibility help informal saving survive even when banking expands (Han et al., 2020; Al Asad Bin Hoque & Khalily, 2002). Evidence from South Asia suggests that informal saving often supports liquidity needs and risk management, especially among low-income households (Purohit, 2022; Pradeep Kumar & Sumalatha, 2024; Ali et al., 2025).

Household-level studies also reveal strong socioeconomic patterns in saving. Education, income, employment, and gender shape both saving and channel choice. Using Global Findex data, Dar and Ahmed (2020) find that education and income raise formal saving in India, while women rely more on informal mechanisms. Similar patterns appear in India and China, where formal saving is concentrated among richer and more educated households (Ghosh & Chaudhury, 2023; Farras et al., 2025).

The literature shows that formal and informal finance often complement each other. Evidence from China indicates that wealthier households rely more on formal finance, yet informal mechanisms remain important for smoothing consumption and managing risk across income groups (Li & Hiwatari, 2025; Cull et al., 2019). Informal finance is especially relevant in rural areas and during shocks, where formal access is limited or costly (Chakraborty & Pandey, 2022; Liu et al., 2025). Similar patterns are observed in South Asia, where informal saving persists despite financial inclusion efforts (Goedecke et al., 2018). Recent studies show that digital finance reshapes saving behavior, but adoption depends on affordability, skills, and trust (Lubawa & Kandpal, 2024; Esquivias et al., 2020). As a result, digital tools often complement rather than replace existing saving practices (Sharma, 2025).

Despite growing work on financial inclusion, little research jointly examines how households allocate saving across formal, informal, and digital channels, especially in South Asia. Many studies focus on a single mechanism or rely on firm-level or macro data that cannot capture household saving choices (Anderson et al., 2009; Ayyagari et al., 2010; Ozili, 2018; Khalid et al., 2025). This study addresses this gap using household-level data for South Asian economies. It examines how demographic, socioeconomic, spatial, and digital factors shape saving across different channels. By distinguishing between saving mechanisms, the analysis offers a clearer view of financial behavior in a region marked by persistent informality and uneven digital adoption.

DATA AND VARIABLES

This study relies on microdata of the Global Findex Database 2024, a nationally representative survey of adults aged 15 years and above. The survey is available at the website of the the World Bank. For the empirical analysis, this study limited to South Asian region economies. In the survey data collected 5 out of 8 south Asian economies such as Bangladesh, India, Nepal, Pakistan and Sri Lanka. The pooled sample of South Asian economies is consisting of 6,984 respondents. The current round of survey gives comprehensive information on saving behavior, access to finances and personalized socioeconomic attributes.

For the empirical analysis, the study uses four binary outcome variables measuring different aspects of saving behavior are presented in Table 1. The outcome variables are saving through any channel, saving in formal financial institutions, saving in mobile money accounts and saving in informal mechanisms. The explanatory variables are gender, age, education, income quintiles, employment status, area, mobile phone ownership, the internet use and country indicators. The designed framework to enables one to make a consistent comparison of formal, informal, and digital saving behavior among households in the South Asian setting.

Table 1: Definition of variables

Variable	Type	Description	Coding
Outcome Variables			
Saving	Binary	Indicator equal to one if the respondent reported saving or setting aside money in the past year, through any channel, and zero otherwise.	1 = Yes; 0 = No / Don't know / Refused
Savings at bank	Binary	Indicator equal to one if the respondent reported saving at a bank or similar formal financial institution in the past year.	1 = Yes; 0 = No
Saving at mobile	Binary	Indicator equal to one if the respondent reported saving using a mobile money account in the past year.	1 = Yes; 0 = No

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		Observed only for respondents covered by the mobile money module.	
Savings informal	Binary	Indicator equal to one if the respondent reported saving through an informal savings mechanism, such as a savings club or a person outside the family.	1 = Yes; 0 = No
Covariates:			
Female	Binary	Gender of the respondent.	1 = Female; 0 = Male
Age	Continuous	Age of the respondent in completed years at the time of the survey.	Years (15–100)
Education	Categorical	Highest level of education completed by the respondent.	1 = Primary or less; 2 = Secondary; 3 = Tertiary or higher
Income	Categorical	Within-economy household income quintile.	1 = Poorest; 2 = Q2; 3 = Q3; 4 = Q4; 5 = Richest
Employment	Binary	Employment status of the respondent at the time of the survey.	1 = In the workforce; 0 = Out of the workforce
Urban	Binary	Place of residence based on population-grid classification.	1 = Urban; 0 = Rural
Mobile own	Binary	Indicator equal to one if the respondent owns a mobile phone used for personal calls.	1 = Yes; 0 = No
Internet use	Binary	Indicator equal to one if the respondent used the internet within the past three months.	1 = Yes; 0 = No
Country	Categorical	Country identifier for South Asian economies included in the analysis.	Bangladesh, India, Nepal, Pakistan, Sri Lanka

EMPIRICAL STRATEGY

To examine determinants of saving behavior across channels, the study estimates binary logit models for four outcomes: saving through any channel, saving at a bank, saving via mobile money, and informal saving. For respondent i in country c, let $Y_{ic}^{(k)} \in \{0,1\}$ denote outcome $k \in \{\text{Any, Bank, Mobile, Informal}\}$. The probability of saving in channel k is modeled as:

$$\Pr\left(Y_{ic}^{(k)} = 1 \mid \mathbf{X}_{ic}\right) = \Lambda\left(\alpha^{(k)} + \mathbf{X}_{ic}'\boldsymbol{\beta}^{(k)} + \boldsymbol{\delta}^{(k)\prime}\mathbf{C}_c\right),$$

where $\Lambda(z) = \frac{1}{1+e^{-z}}$ is the logistic cumulative distribution function, $\mathbf{X}_{ic}$ is a vector of individual covariates, and $\mathbf{C}_c$ denotes country indicators (Bangladesh, India, Nepal, Pakistan, Sri Lanka), with one country omitted as the reference category.

Equivalently, the estimating equation can be expressed in log-odds form:

$$\log\left(\frac{\Pr\left(Y_{ic}^{(k)} = 1 \mid \mathbf{X}_{ic}\right)}{1 - \Pr\left(Y_{ic}^{(k)} = 1 \mid \mathbf{X}_{ic}\right)}\right) = \alpha^{(k)} + \mathbf{X}_{ic}'\boldsymbol{\beta}^{(k)} + \boldsymbol{\delta}^{(k)\prime}\mathbf{C}_c \qquad (1)$$

The covariate vector is specified as:

$$Xic = \left[Female_{ic},\ Age_{ic},\ Employment_{ic},\ Urban_{ic},\ MobileOwn_{ic},\ InternetUse_{ic},\ Edu_{ic},\ Inc_{ic}\right] \quad (2)$$

where Edu_{ic} includes dummies for education categories (Secondary, Tertiary or higher; Primary or less as the base), and Inc_{ic} includes dummies for income quintiles (Q2–Q5; Poorest Q1 as the base). Robust standard errors are used, and results are reported as odds ratios and/or average marginal effects for interpretability. For the mobile-saving model, estimation is conducted on the relevant subsample covered by the mobile money module.

RESULTS

DESCRIPTIVE PATTERNS

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Table 2 is a summary of the key features of the pooled South Asian sample (N=6984) and indicates that there is a substantial difference in savings behavior among channels. On the whole, 35.81 percent of adults save in any channel in the reference period with 20.52 percent saving at a bank, meaning that a significant proportion of saving is taking place outside the formal institutions. The informal saving is reported to be 13.73 which implies that the informal mechanisms do not become irrelevant but are rare compared to bank-based saving within the pooled sample. Only the respondents with access to the mobile money module (N=1,583) are found to be mobile money savers, with 34.30% of them saving through mobile money, suggesting that mobile-based saving should not be considered an insignificant alternative saving channel.

The distributions of covariates indicate that there is significant heterogeneity in the digital access and socioeconomic conditions. There are 53.26% women in the sample, and the average age is 38.12 years (SD =16.01) which demonstrates a wide range of adults. There is a low level of education: 52.55% have primary or less, 41.35% secondary and also, only 6.10% have tertiary or higher which is in line with unending human-capital constraints in some areas of the region. The distribution of income among quintiles is quite equal with a minor proportion in the wealthiest quintile (24.27%). Approximately fifty percent of the respondents are in the workforce (50.82%). The sample is more rural (64.58%), and the role of spatial inequalities in accessing and using finances is emphasized.

There is an improvement, and there are gaps in digital access indicators. A mobile phone is owned by approximately 74.37% but internet use within the last three months is only 45.60% indicating that the access and adequacy of connections and digital competence may be an impediment to effective utilization of digital financial services by many households. Lastly, the aggregate dataset is spread over nations with India having 42.88 percent of observations followed by Bangladesh, Nepal, Pakistan, and Sri Lanka with about 14 percent each. The significance of this composition is that it can be interpreted and encourages the country controls in the multivariate analysis to capture the cross-country differences in institutions, financial infrastructure, and digital ecosystems.

Table 2: Descriptive statistics

Variable	Category	Observations	Share (%)	Mean	Std. Dev.
Any saving	Yes	6,984	35.81	0.358	0.479
	No	6,984	64.19	0.642	0.479
Bank saving	Yes	6,984	20.52	0.205	0.404
	No	6,984	79.48	0.795	0.404
Mobile money saving	Yes	1,583	34.30	0.343	0.475
	No	1,583	65.70	0.657	0.475
Informal saving	Yes	6,984	13.73	0.137	0.344
	No	6,984	86.27	0.863	0.344
Gender	Female	6,984	53.26	0.533	0.499
	Male	6,984	46.74	0.467	0.499
Age (years)	-	6,984		38.12	16.01
Education	Primary or less	6,982	52.55	0.525	0.499
	Secondary	6,982	41.35	0.413	0.492
	Tertiary or higher	6,982	6.10	0.061	0.239
Income quintile	Poorest (Q1)	6,984	17.41	0.174	0.379
	Q2	6,984	18.23	0.182	0.386
	Q3	6,984	19.42	0.194	0.396
	Q4	6,984	20.68	0.207	0.405
	Richest (Q5)	6,984	24.27	0.243	0.429
Employment status	In workforce	6,984	50.82	0.508	0.500
	Out of workforce	6,984	49.18	0.492	0.500
Residence	Rural	6,984	64.58	0.646	0.478
	Urban	6,984	35.42	0.354	0.478

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Mobile phone ownership	Yes	6,984	74.37	0.744	0.437
	No	6,984	25.63	0.256	0.437
Internet use	Yes	6,984	45.60	0.456	0.498
	No	6,984	54.40	0.544	0.498
Countries	Bangladesh	6,984	14.29	0.143	0.350
	India	6,984	42.88	0.429	0.495
	Nepal	6,984	14.29	0.143	0.350
	Pakistan	6,984	14.28	0.143	0.350
	Sri Lanka	6,984	14.26	0.143	0.350

DETERMINANTS OF OVERALL SAVING

Table 3 reports logit estimates of the determinants of household saving behavior across four progressively enriched specifications. Model 1 includes basic demographic and education controls, Model 2 adds income and employment status, Model 3 incorporates digital access variables, and Model 4 further accounts for urban residence and country fixed effects. Across specifications, education emerges as a strong and robust correlate of saving. In the fully specified model, relative to primary education or less, having secondary education increases the log-odds of saving by 0.295, while having tertiary education or more increases the log-odds by 0.602, indicating a pronounced education gradient even after controlling for income and digital access. Income also exhibits a clear monotonic pattern. Compared to the poorest quintile, belonging to income quintiles 3, 4, and 5 increases the log-odds of saving by 0.394, 0.478, and 0.906, respectively.

The employment status is also a significant predictor. The out of work status lowers the log odds of saving by 0.536 compared to workforce, which is in line with lower income flows and saving ability. The explanatory power is significantly enhanced by digital access variables introduced in Model 3. The lack of a mobile phone is linked to a 0.516 log-odds decrease in saving whereas recent internet usage is related to a 0.730 log-odds increase in saving, indicating the strong relationship between saving behavior and digital connectivity even in the broad sense of saving behavior through all channels. The difference on gender is brought about when economic and digital controls are included. In Model 4, a male gender has a 0.245 reduction of the log-odds of saving compared to that of a female. Age effects are not very large yet statistically significant as an extra year of age raises the log-odds of saving by 0.003, which suggests small life-cycle effects.

Model 4 also demonstrates that the urban residence is not statistically significant in predicting saving when other variables are also put into consideration; hence the small coefficient. By contrast, country fixed effects display a significant cross country heterogeneity. Compared to the country excluded, which is India, living in India, Nepal, Pakistan, and Sri Lanka makes the log-odds of saving increase by 0.950, 0.931, 0.512, and 0.783 respectively. The gradual rise in pseudo-R-squared in 0.031 in Model 1 to 0.119 in Model 4, shows the better fit of the models, since socioeconomic, digital and country level variables have been included. On the whole, the findings emphasize the primary contribution of education, income, employment, and digital access to the determination of the household saving behavior in South Asia.

Table 3: Determinants of Household Saving Behavior in South Asia (Logit Estimates)

Variables	Model 1	Model 2	Model 3	Model 4
Male	0.208***	-0.097*	-0.283***	-0.245***
	(0.051)	(0.058)	(0.060)	(0.061)
Age	-0.004**	-0.004**	0.005**	0.003
	(0.002)	(0.002)	(0.002)	(0.002)
Secondary education	0.608***	0.482***	0.210***	0.295***
	(0.055)	(0.057)	(0.061)	(0.065)
Tertiary education or more	1.283***	1.051***	0.630***	0.602***
	(0.107)	(0.112)	(0.116)	(0.117)
Income quintile = 2		0.179*	0.119	0.121
		(0.096)	(0.098)	(0.099)
Income quintile = 3		0.478***	0.385***	0.394***

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		(0.092)	(0.094)	(0.095)
Income quintile = 4		0.631***	0.448***	0.478***
		(0.090)	(0.093)	(0.094)
Income quintile = 5		1.152***	0.856***	0.906***
		(0.088)	(0.091)	(0.094)
Out of the workforce		-0.723***	-0.629***	-0.536***
		(0.058)	(0.059)	(0.060)
Have a mobile phone (No)			-0.449***	-0.516***
			(0.074)	(0.075)
Used the internet (Yes)			0.850***	0.730***
			(0.066)	(0.068)
Urban				-0.090
				(0.060)
India				0.950***
				(0.096)
Nepal				0.931***
				(0.112)
Pakistan				0.512***
				(0.113)
Sri Lanka				0.783***
				(0.113)
Constant	-0.886***	-0.882***	-1.204***	-1.887***
	(0.081)	(0.111)	(0.125)	(0.150)
Observations	6,982	6,982	6,982	6,982
N	6982	6982	6982	6982
Pseudo R2	0.0311	0.0759	0.104	0.119

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

FORMAL BANK SAVING

Table 4 provides logit estimates of the determinants of institutionalized bank saving behavior in four specifications, which add economic, digital, and geographic controls. One of the main outcomes that are gaining emergence out of the richer models is that access to digital sources plays a central role in determining formal saving. The results of model 4 show that mobile phone ownership decreases the log-odds of saving at a bank by 0.635, whereas recent internet use enhances the log-odds by 0.707, meaning that the use of formal banking institution is tightly related to the use of digital connectivity despite the control of income and education. These impacts are some of the highest in terms of magnitude and this highlights why one should be digital ready in a bid to participate in formal saving.

The determinant is also the economic capacity. The results of the log-odds of bank saving in the income quintile 3, 4, and 5 are found to be 0.301, 0.435, and 0.951 respectively, which describes a strong and monotonic income gradient. Status of employment is another precondition of formal saving. Out of the workforce means a decrease in the log-odds of bank saving by 0.459 relative to employed, which indicates less income stability and less engagement with formal financial institutions. These trends do not change with specifications implying that income and employment barriers are intrinsic to formal saving participation.

The education level has a strong independent effect. Other conditions being equal, secondary education generates an increase of 0.470 in log-odds of bank saving, whereas tertiary education or higher generates an increase of 0.767 in log-odds of bank saving in comparison to primary education or less. This gradient implies that education is not only an influencer on earning capacity but also on familiarity and comfort with formal money institutes. Demographic controls have lesser impacts. Formal saving is positively related to age, adding one more year to the log-odds by 0.010, which is also in line with the gradual accumulation of the life-cycle. Contrarily, gendered disparities are no longer statistically significant when both income and digital variables

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were added, which indicates that any existing difference in genders in formal saving is mostly mediated through economic and access factors.

Geographic controls imply the presence of minimal within-country spatial-heterogeneity and high cross-country heterogeneity. There is no statistically significant correlation between urban residence and bank saving and other features are considered. Compared to the omitted country of residence, which is India, the odds of formal bank saving are improved by factors of 1.253, 1.156, and 1.126 in India, Nepal and Sri Lanka but the coefficient of Pakistan is less and not significant. The gradual rise in pseudo-R-squared between 0.041 in Model 1 and 0.141 in Model 4 indicates improvement in the explanatory power as the digital access and fixed effects of countries are included. On the whole, it can be seen that digital connectivity, income capacity, and education are the main factors affecting formal bank saving in South Asia, whereas there are considerable cross-country distinctions.

Table 4: Determinants of Individual Formal Bank Saving Behavior in South Asia (Logit Estimates)

Variables	Model 1	Model 2	Model 3	Model 4
Male	0.267***	-0.014	-0.185***	-0.091
	(0.061)	(0.068)	(0.070)	(0.070)
Age	0.004**	0.004**	0.014***	0.010***
	(0.002)	(0.002)	(0.002)	(0.002)
Secondary education	0.822***	0.675***	0.398***	0.470***
	(0.067)	(0.069)	(0.073)	(0.078)
Tertiary education or more	1.495***	1.229***	0.812***	0.767***
	(0.113)	(0.117)	(0.121)	(0.124)
Income quintile = 2		0.078	0.005	0.021
		(0.126)	(0.128)	(0.129)
Income quintile = 3		0.380***	0.269**	0.301**
		(0.118)	(0.120)	(0.122)
Income quintile = 4		0.574***	0.373***	0.435***
		(0.114)	(0.117)	(0.119)
Income quintile = 5		1.173***	0.857***	0.951***
		(0.108)	(0.111)	(0.115)
Out of the workforce		-0.684***	-0.568***	-0.459***
		(0.069)	(0.071)	(0.071)
Have a mobile phone (No)			-0.577***	-0.635***
			(0.101)	(0.102)
Used the internet (Yes)			0.853***	0.707***
			(0.081)	(0.084)
Urban				-0.050
				(0.071)
India				1.253***
				(0.131)
Nepal				1.156***
				(0.147)
Pakistan				0.061
				(0.165)
Sri Lanka				1.126***
				(0.147)
Constant	-2.145***	-2.171***	-2.528***	-3.406***
	(0.101)	(0.140)	(0.159)	(0.198)
Observations	6,982	6,982	6,982	6,982
N	6982	6982	6982	6982
Pseudo R2	0.0406	0.0846	0.112	0.141

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Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

MOBILE MONEY SAVING

Table 5 displays logit estimates of the determinants of mobile money saving behavior in four different specifications where Model 4 gives the fully adjusted estimates. One of the most interesting characteristics of the estimates is the level of cross country heterogeneity in mobile saving adoption. When compared to the excluded country of residence, India, living in Nepal, Pakistan, and Sri Lanka makes the log-odds of saving using a mobile money account higher by 2.646, 1.798, 2.750, and 1.096, respectively. The presence of these large coefficients indicates that institutional, regulatory, and ecosystem country-specific factors are predominant in the development of mobile saving behavior in South Asia in addition to individual characteristics.

The level of education is also a significant correlate of mobile saving, however, its impact is not as significant as that of overall and formal bank saving. In the complete model, mobile money saving is more likely with secondary education by 0.360 and more likely with tertiary education or higher by 0.522 compared with primary education or less. These findings suggest that education eases a person to use mobile-based financial services, though the gradient is not as steep as the formal bank saving. Employment status also matters. Being out of the workforce reduces the log-odds of mobile saving by 0.244, reflecting lower transaction needs and weaker integration into digital financial systems among economically inactive individuals.

Digital access variables display weaker and less stable associations in the mobile saving model once country fixed effects are included. While internet use is strongly associated with mobile saving in Model 3, its coefficient becomes smaller and statistically insignificant in Model 4. Similarly, not owning a mobile phone does not show a statistically significant effect in the fully specified model, suggesting that country-level mobile money infrastructure and market penetration may dominate individual access constraints. Income effects are comparatively muted. Only the richest quintile shows a positive association in earlier specifications, and this effect attenuates and loses statistical significance once digital and country controls are introduced. Demographic factors play a limited role. Gender and age do not exhibit statistically significant associations with mobile saving in the full model, indicating that mobile money saving is less structured by life-cycle or gender patterns than other saving channels.

The pseudo R^2 increases sharply from 0.019 in Model 1 to 0.144 in Model 4, indicating substantial gains in explanatory power after incorporating digital variables and country fixed effects. Overall, the results suggest that mobile money saving in South Asia is driven primarily by country-level digital finance ecosystems and institutional context, with education and employment playing secondary roles, and income and demographic characteristics exerting comparatively weaker influence.

Table 5: Determinants of Individual Formal mobile money account Saving Behavior in South Asia (Logit Estimates)

Variables	Model 1	Model 2	Model 3	Model 4
Male	0.401***	0.216	0.159	0.196
	(0.119)	(0.132)	(0.134)	(0.143)
Age	0.001	-0.004	-0.001	-0.003
	(0.005)	(0.005)	(0.005)	(0.006)
Secondary education	0.380***	0.273*	0.152	0.360**
	(0.136)	(0.141)	(0.145)	(0.152)
Tertiary education or more	0.861***	0.684***	0.514***	0.522***
	(0.170)	(0.176)	(0.181)	(0.187)
Income quintile = 2		-0.067	-0.145	-0.149
		(0.269)	(0.273)	(0.290)
Income quintile = 3		-0.033	-0.122	-0.300
		(0.244)	(0.248)	(0.264)
Income quintile = 4		0.270	0.133	-0.084
		(0.225)	(0.230)	(0.245)
Income quintile = 5		0.791***	0.601***	0.316

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		(0.213)	(0.219)	(0.236)
Out of the workforce		-0.566***	-0.551***	-0.244*
		(0.134)	(0.135)	(0.145)
Have a mobile phone (No)			0.052	-0.386
			(0.352)	(0.361)
Used the internet (Yes)			0.841***	0.213
			(0.201)	(0.225)
Urban				0.155
				(0.122)
India				2.646***
				(0.293)
Nepal				1.798***
				(0.338)
Pakistan				2.750***
				(0.308)
Sri Lanka				1.096*
				(0.616)
Constant	-1.322***	-1.152***	-1.723***	-3.481***
	(0.219)	(0.309)	(0.350)	(0.445)
Observations	1,581	1,581	1,581	1,581
N	1581	1581	1581	1581
Pseudo R2	0.0192	0.0507	0.0602	0.144

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

INFORMAL SAVING

Table 6 provides logit results of the determinants of informal saving behaviour on four specifications, with Model 4 showing the completely adjusted results. One of the most distinguishable characteristics of an informal saving is that it is closely connected with gender and labor market attachment. Under the full specified model, male decreases the log-odds of informal saving in comparison to female by 0.571 indicating there exist a significant gender gap in the dependence of informal saving means. Employment status also takes centre stage. The fact that one is not in the workforce reduces the log-odds of informal saving by 0.647 indicating that informal saving, although flexible, still requires the income flows and economic participation.

There is an obvious and monotonic gradient in income in terms of informal saving behavior. Compared against the poorest quintile, the income quintile 3, 4 and 5 raise the log-odds of informal savings by 0.445, 0.354 and 0.662 respectively. This trend suggests that it is not the poorest households that are engaged in informal saving, but rather the middle- and higher-income groups that tend to engage in savings clubs or reciprocity, which may be an indication of more ability to save. Contrarily, informal saving does not seem to be predicted by education alone after controlling by income, digital accessibility and country. The secondary and tertiary education coefficients are small and statistically insignificant in Model 4 indicating that informal saving is not organized using formal human capital as much as it is organized through other saving mechanisms.

Digital access variables have statistically significant and less strong relationships. The log-odds of informal saving decreases by ownership of a mobile phone by 0.437 and increases by ownership of the internet by 0.400 meaning that the use of digital connectivity does not displace informal saving practices, but complements it. Spatial factors also matter. Living in urban places is also linked to a 0.231 decrease in the log-odds of informal saving, in line with the higher access to formal and digital substitutes in city places. The heterogeneous patterns are observed in country fixed effects. Considering other countries not included in the reference, informal saving is much more likely to be realized in Pakistan with a 0.783 increase in the log-odds, whilst India and Sri Lanka show statistically insignificant but moderate-sized effects.

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The pseudo-R-squared rises in Model 1 as 0.003 to Model 4 as 0.046, which means that there is a limited but significant increase in explanatory power as socioeconomic, digital and geographic factors are added. Generally, these findings indicate that gender roles, income potential, labor market involvement, and space are the most influential factors in informal saving in South Asia, as opposed to education or life cycle factors.

Table 6: Determinants of Individual informal Saving Behavior in South Asia (Logit Estimates)

Variables	Model 1	Model 2	Model 3	Model 4
Male	-0.111	-0.412***	-0.512***	-0.571***
	(0.071)	(0.077)	(0.079)	(0.081)
Age	-0.003	-0.003	0.001	0.002
	(0.002)	(0.002)	(0.003)	(0.003)
Secondary education	0.122	0.024	-0.128	-0.099
	(0.075)	(0.078)	(0.082)	(0.086)
Tertiary education or more	0.404***	0.198	-0.021	0.021
	(0.138)	(0.142)	(0.146)	(0.148)
Income quintile = 2		0.196	0.162	0.155
		(0.136)	(0.137)	(0.137)
Income quintile = 3		0.507***	0.451***	0.445***
		(0.129)	(0.129)	(0.130)
Income quintile = 4		0.462***	0.357***	0.354***
		(0.128)	(0.130)	(0.131)
Income quintile = 5		0.821***	0.650***	0.662***
		(0.122)	(0.125)	(0.127)
Out of the workforce		-0.720***	-0.649***	-0.647***
		(0.079)	(0.080)	(0.082)
Have a mobile phone (No)			-0.384***	-0.437***
			(0.102)	(0.104)
Used the internet (Yes)			0.377***	0.400***
			(0.089)	(0.092)
Urban				-0.231***
				(0.079)
India				0.199
				(0.128)
Nepal				0.247*
				(0.148)
Pakistan				0.783***
				(0.141)
Sri Lanka				0.245
				(0.152)
Constant	-1.763***	-1.699***	-1.774***	-2.016***
	(0.110)	(0.153)	(0.168)	(0.198)
Observations	6,982	6,982	6,982	6,982
N	6982	6982	6982	6982
Pseudo R2	0.00261	0.0297	0.0375	0.0457

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

DISCUSSION AND CONCLUSION

This study provides micro-level evidence on saving behavior across formal, informal, and mobile channels in South Asia. The findings show that education, income, employment status, and digital access are central correlates of saving, confirming that saving reflects both economic capacity and financial capability. The strong association between internet use and saving suggests that connectivity facilitates engagement with financial

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practices, though access alone is not sufficient to ensure participation (Ozili, 2018). These results are consistent with ecosystem-based perspectives that emphasize the interaction of socioeconomic and technological factors in shaping financial inclusion (Kabakova & Plaksenkov, 2018).

Clear gradients emerge for formal bank saving. Households with higher education and stable income are significantly more likely to save through banks, reflecting persistent requirements related to documentation, literacy, and income stability. This aligns with earlier evidence that formal finance serves households with stronger economic fundamentals, while informal mechanisms continue to play a complementary role rather than acting as substitutes (Ayyagari et al., 2010). Digital access also supports formal saving, and the weak role of urban residence suggests that digital tools may reduce traditional spatial barriers.

Mobile money saving follows a distinct pattern. Once country effects are considered, cross-country differences dominate, highlighting the importance of national digital finance ecosystems, regulation, and platform maturity over individual characteristics (Kabakova & Plaksenkov, 2018). Informal saving shows strong gender effects, with women more likely to rely on trust-based and socially embedded mechanisms (Anderson et al., 2009). Informal saving also rises with income and coexists with digital access, indicating complementarity rather than displacement (Ozili, 2018).

Overall, the results show that saving mechanisms in South Asia coexist and complement one another. Policy efforts should therefore move beyond one-size-fits-all approaches and instead strengthen digital capability, institutional trust, and consumer protection across saving channels to support inclusive and resilient financial behavior.

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