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DISCUSSION PAPER

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Advancing Crisis-Resilient Social Protection Through A Hybrid Social Protection Scheme in Pakistan: An Empirical Analysis

Fareeha Adil and Melis Guven

WORLD BANK GROUP
Social Protection & Jobs

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Advancing CRISIS-RESILIENT SOCIAL PROTECTION through a HYBRID SOCIAL PROTECTION SCHEME IN PAKISTAN

AN EMPIRICAL ANALYSIS

Fareeha Adil and Melis Guven





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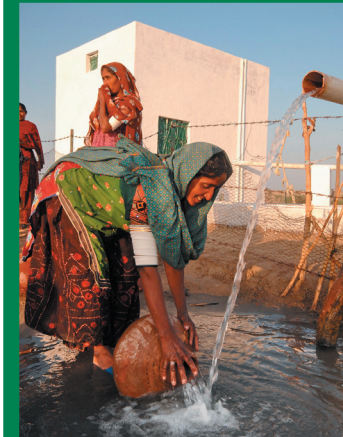
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Abstract

The objective of this paper is to summarize analysis conducted to provide inputs to the Hybrid Social Protection Scheme (HSPS) pilot. Following the analysis conducted, the Benazir Income Support Program (BISP) launched the HSPS in December 2023. Eligible households for the scheme include existing beneficiary households (with a BISP unconditional cash transfer program cut-off score of 32) and those with a PMT score of up to 40. It is expected that a significant portion of households participating in the HSPS pilot consist of households with one or more members engaged in informal sector employment. The focus of the analysis was on gaining insights into saving behaviors, perceptions, and aspirations among potential participants in the HSPS through a survey. The research employed both quantitative and qualitative analysis to gather insights from a representative sample of BISP beneficiaries who exited the program due to improvements in their welfare status, making them ineligible for continued support. This study covered 12 districts across four provinces in Pakistan. The empirical findings suggest that financial literacy, digital inclusion, and family support are key drivers of saving demand. Conversely, taking loans, money transfer methods, and a lack of self-control in spending are observed to have adverse effects on the saving behavior. The multinomial logit analysis indicates a preference for monthly saving frequency and a rationality toward saving with the expectation of lucrative profits and matching contributions from the government. Moreover, the qualitative results underscore the feasibility of implementing HSPS tailored to the savings behavior of BISP beneficiaries contingent upon their willingness to open bank accounts. The study emphasizes the need to enhance literacy skills, promote digital access, and provide customized training and awareness initiatives to successfully implement the HSPS.

Key Words: Hybrid Social Protection Scheme, Saving behavior, Qualitative analysis, FGDs, Quantitative analysis.

JEL Classification: D18, D91, E21, G41, G51s

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Acronyms and Abbreviations

BISP	Benazir Income Support Program
BRI	Bank Rakyat Indonesia
CATI	Computer Assisted Telephonic Interviews
CCT	Conditional Cash Transfer
CRISP	Crisis-Resilient Social Protection
EDA	Exploratory Data Analysis
FGD	Focus Group Discussions
HIICS	Household Integrated Income and Consumption Survey
HSPS	Hybrid Social Protection Scheme
MTF	Money Transfer Mode
NSER	National Socio-Economic Registry
NYOTA	National Youth Opportunities Towards Advancement Project
PMT	Proxy Means Test
POS	Point Of Sales
UC	Union Councils
UCT	Unconditional Cash Transfer

1

Introduction

Pakistan's commitment to the social protection of its population is evidenced by more than a decade of consistent investments in social protection initiatives. These investments comprise several flagship programs, which include an unconditional cash transfer program (UCT) and two conditional cash transfer (CCT) programs focused on education (Taleemi Wazaif) and maternal and child health (Nashonuma), all managed by BISP. This set of programs aims to support the income of the poor and vulnerable through cash transfers while at the same time linking beneficiary families to human development services to promote human capital accumulation. These programs are administered at the federal level and their coverage has consistently improved over the years, with the UCT expanding from 4 million beneficiary families' pre-pandemic to more than 9 million beneficiary families. The education CCT is currently operational in 168 districts, and the health and nutrition CCT in 155 districts. Consistent with the expansion in coverage, the Government of Pakistan has also increased its budget allocation to the programs. All programs provide cash benefits to ever married (married, widowed, divorced, and separated) adult women possessing valid Computerized National Identity Cards (CNICs) in eligible households. Payments are made directly to beneficiary women on a quarterly basis and household eligibility is determined through their Proxy Means Test (PMT) score (Guven, et al. 2024).

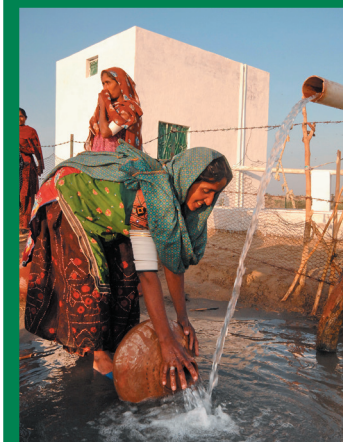
However, the effective delivery of UCTs and CCTs hinges on the availability of accurate data to identify eligible households thereby ensuring that resources are directed to those who need them the most, minimizing potential for leakages or misallocation of funds. The National Socio-Economic Registry (NSER) of Pakistan plays a pivotal role in maintaining a reliable and up-to-date database of households and individuals. It captures a wide array of socioeconomic characteristics including income, assets, education level, health status, and access to essential services. Operating as a digital platform, the NSER is continuously evolving to enhance the efficiency of benefit delivery and improve responsiveness to various shocks.

Nevertheless, most beneficiaries continue to remain vulnerable to future shocks. The COVID-19 pandemic underscored the need to build household resilience against future shocks and enhancing crisis response mechanisms. This is especially pronounced given the disproportionate impact of climate and other shocks on vulnerable populations, a trend that is increasing in both frequency and intensity across Pakistan.

More broadly, the informal sector, comprising individuals who are not necessarily poor or eligible for cash transfers in normal times, may need support when shocks occur. For example, during the COVID-19 pandemic and the floods in 2022, millions of people lost their jobs and homes but had no access to insurance or savings mechanisms. This segment of the population is typically referred to as the 'missing middle' because they are not poor enough to be eligible for social safety net benefits and are not well-off enough to be part of social insurance programs mandated for the formal sector. A failure to cover the 'missing middle' in any economy harms the welfare of those households and lengthens the road to economic recovery







While providing immediate financial assistance to individuals in need is crucial, it must be coupled with initiatives for long-term growth.

(Guven et al. 2020). The fiscal cost of expanding cash transfers to these groups in response to shocks can be significant, confirming the need to enhance the resilience of these groups to enable them to cope with minimal or no support from the government moving forward. In the case of Pakistan, the response cost to the pandemic was more than $1.3 billion (Gentilini, 2022).

Therefore, steps must be taken to establish a solid foundation for the country's future. While providing immediate financial assistance to individuals in need is crucial, it must be coupled with initiatives for long-term growth**.** Supporting families that exited cash transfer programs because they were no longer eligible, vulnerable households belonging to the 'missing middle' category, and current cash transfer beneficiaries, would require innovative social protection instruments to promote self-reliance and long-term sustainable development. Introducing a savings scheme could serve as an instrument to keep former and present cash transfer beneficiaries in the social protection system and include the 'missing middle', ensuring continued government support but not necessarily in the form of a cash transfer. To achieve this objective, BISP, with support from the World Bank, launched a Hybrid Social Protection Scheme[1] pilot with fiscal incentives to encourage participation and consistent savings.

Prior to the pilot, an extensive study, along with a nationwide survey administered to BISP beneficiaries, investigated how individuals behave toward saving and gained insights into their perceptions and aspirations for a savings program. The survey drew from a random sample of exiting beneficiaries from 12 districts[2] across four provinces in Pakistan. The quantitative approach has been employed to analyze the data and draw meaningful inferences. The qualitative analysis involved conducting Focus Group Discussions (FGDs) with three groups of stakeholders—exiting women beneficiaries who were no longer eligible for cash transfers; male members of their households; and members of the community including the local bank branch manager; mobile money agents; schoolteachers; social activists/ NGO workers; union councilors; the prayer leader at mosque; and a BISP official (Tehsil Office).

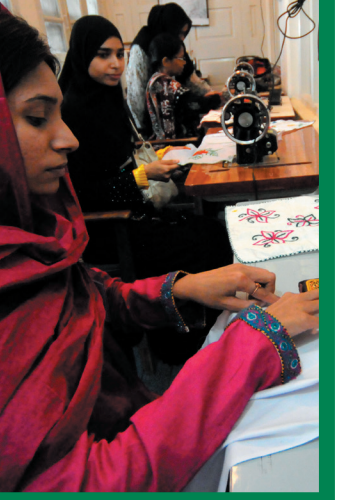
The quantitative analysis employs logit models to discern the primary determinants that shape saving behavior and inform the design of the savings scheme. The independent variables encompass financial literacy; digital inclusion; influence from male household members; and family support that positively impact the demand for saving .[3] Other independent variables which also influence the demand for saving are loans, modes of money transfer, the need for self-control in enhancing saving habits, income, and domestic decision-making.

The findings from this study indicate that graduating BISP beneficiaries are responsive to saving, preferably on a monthly basis, within a co-contributory saving design. The design features derived from this research promise a viable HSPS that can facilitate much-needed

1. A hybrid scheme that blends social assistance with social risk mitigation elements to promote savings that the poor can fall back on in case of shocks, while also providing a platform through which the government can more rapidly deploy additional support during a crisis. (CRISP Project Appraisal Document, 2021)
2. In determining the sampling frame, the first stage of cluster sampling involved a random sample of 12 districts from 4 provinces. The population size is taken to be 63,818—that is the absolute numbers of subscribers in 12 districts—and the probability of selection is proportional to the population size of BISP beneficiaries in the province.
3. Demand for saving was a binary dependent variable. The question used to measure this variable is: "Do you save money?"

Crisis-Resilient Social Protection (CRISP) in Pakistan. By addressing the challenges identified and capitalizing on the beneficiaries' willingness to save, the HSPS can contribute to the increased financial resilience of those households that are still considered vulnerable.

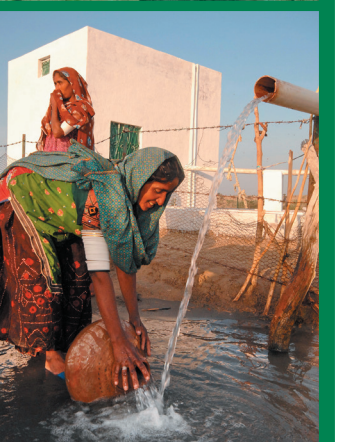
The remaining part of this study is organized as follows. **Section 2** presents the literature review. **Section 3** presents sampling framework and data collection. **Section 4** discusses the methodology. **Section 5** consists of quantitative analysis. **Section 6** presents empirical estimations and methodology. **Section 7** is focused on results and discussion. **Section 8** presents qualitative analysis, and lastly, **Section 9** discusses the conclusion.











2

Literature Review

Exploring data from the Global Findex 2021 by the World Bank provides key insights into Pakistan's savings landscape. Overall, 14 percent of the adult population saves money through formal or informal channels. The survey shows that 38 percent of the adult population with a financial institution account store money using a financial institution or a mobile money account.

Akram's (2021) study on household savings in Pakistan, using data from the Household Integrated Income and Consumption Survey (HIICS), reveals that education and participation of women in the labor force are key precursors of promoting savings in urban households. The study correspondingly suggests that women's financial empowerment increases their household autonomy consequently fostering increased savings.

Analyzing the saving patterns in rural Pakistan, Shaikh et al. (2017) studied the Community-Based Savings Groups (CBSGs) in the district of Chitral, Khyber Pakhtunkhwa. The study, focused on maternal health care challenges and CBSGs, revealed that women in these groups would pool their money and give soft loans to mothers nearing child delivery. Simultaneously, literate young women were trained to become community midwives.

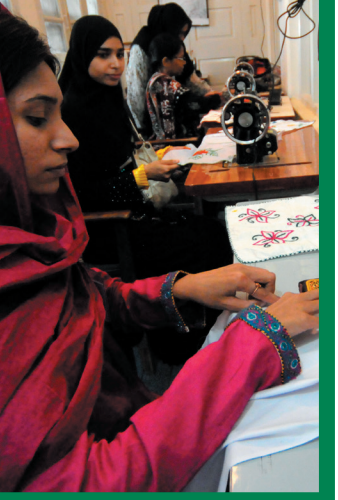
Dongen et al. (2022), in their review of gender discrimination and social norms in Pakistan, analyzed data from 1,798 married women to investigate the interventions related to women opening savings accounts. The study showed that the accounts where women had joint control had higher savings as compared to accounts where women had no control. The results implied that women who had ownership of their accounts experienced empowerment and greater bargaining power with their domestic finances. This is in line with the literature of the developing world which shows that an increase in assets under the ownership of women helps them to adjust their household needs to their own preferences (Ambler et al., 2017).

Hence, in low-income households, saving is crucial for personal finance, financial stability and improving women's bargaining power in the household. But the lack of access to traditional banking services and affordable financial products hinders the ability of economically disadvantaged populations, especially those in poverty, to build assets, manage disaster risks, and accumulate wealth (Demirgüç-Kunt et al., 2018), (Rabb, 2020).

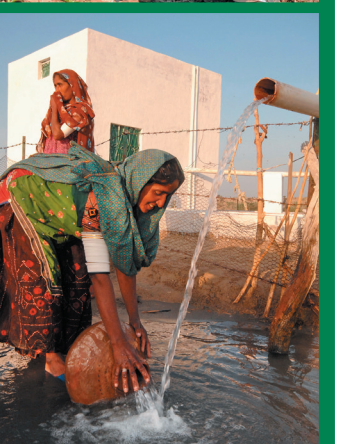
Realizing that informality is persistent and likely to stay for the foreseeable future, the number of countries considering savings schemes for the poor is increasing. Several countries have introduced voluntary national long-term savings schemes, but some allow short-term access to savings given the liquidity constraints of this group and their reluctance to lock-in their entire savings for longer periods which will render them inaccessible during emergencies. These schemes have been introduced because the existing social insurance schemes do not respond to the needs of these groups given their requirement for regular monthly contributions based on a certain percentage of salary; these groups cannot commit to regular contributions given their irregular and low incomes.

A key feature of such schemes is that they are designed to be simple so that the scheme's rules can be easily communicated to the target groups, given their level of education and financial literacy. Some schemes provide matching contributions as the thinking has been that these groups would need fiscal incentives to be able to save (Colombia, India, and Rwanda), while some others bundle products (Guven, M. Jain, H.2023) such as health insurance, life insurance, or funeral insurance (Kenya Haba Haba, Rwanda, Colombia). To help expand their reach, all schemes have identified aggregators in the form of informal sector (Guven et al. 2021) associations such as Kenya Mbao, Ejo Heza in Rwanda, telcos (Kenya Haba Haba) or banks (India). In all cases, while the scheme relies on an ecosystem of institutions, it is anchored in a strong and reliable institution in the country (Colombia-Colpensiones; Rwanda-RSSB; India-PFRD; Kenya Haba Haba-NSSF). In some cases, the scheme is interoperable with the social assistance system in the country (Rwanda) or there are plans to link it with another pillar in the social protection and labor system (Kenya Haba Haba is planned through the World Bank-financed NYOTA project). All of them use digital technology to receive contributions and to interact with scheme participants.

Education and participation of women in the labor force are key precursors of promoting savings in urban households.







3

The Objectives and Design of the Savings Scheme

The HSPS blends social assistance with social risk mitigation elements to promote savings that the vulnerable sections of society can fall back on in case of shocks. The overall objectives of the scheme are:

1. Consumption smoothening for a stable level of consumption and well-being over time, especially during periods of economic hardships or unexpected shocks.
2. Promoting saving behavior and capacity of the individual subscriber households.
3. Financial inclusion of scheme participants through savings accounts at the bank.

Drawing from global experience, the fundamental model of the HSPS entails a two-year pilot of a contributory savings scheme with matching incentives with the goal of subscribing a total of 150,000 individuals. Under this scheme, participants from poor and vulnerable households (with a proxy means test score of up to 40) are eligible to open a savings account at a bank and deposit their savings on a monthly basis. Each participant is required to contribute a minimum of PKR 1,500 every three months with the government providing a 40 percent matching incentive (PKR 600) on these contributions. The ceiling for matching contributions is set at PKR 3,000 per three months with a maximum matching contribution of PKR 1,200. Additionally, participants are entitled to receive profits on their savings from the banks.

During the pilot period, participants are restricted from withdrawing their own savings for two years; however, they may withdraw their profits and matching incentives provided by the government under specific rules, particularly in case of a shock. Participants have the option to unsubscribe from the scheme at any point, and those failing to comply with scheme rules will be automatically unsubscribed. In this context, this paper presents the results of the analysis conducted prior to the launch of the HSPS pilot to explore the perceptions regarding the design features of a contributory saving scheme.

4

Sampling Framework, Data Collection, and Methodology

Data collection was done via Computer Assisted Telephonic Interviews (CATI), administered from the Call Center at the BISP Headquarters in four provinces of Pakistan. To undertake the survey, a random sample of 0.015 percent (600[4] exited beneficiaries) of total exited beneficiaries (4,200,000)[5] was drawn from the NSER[6] database. These respondents are female beneficiaries of BISP who have received the monetary benefits over time and are no longer eligible for BISP cash transfers.

The sample selection uses a stratified cluster sampling approach. First, Pakistan is stratified by province. Four provinces—Punjab, Sindh, Baluchistan, and Khyber Pakhtunkhwa—have been selected for this study sample. Within each province, a simple random sample has been taken to ensure that each region is adequately represented. Since the population of each region is geographically diverse, a simple random sampling[7] within each region or stratum would have been impractical and expensive. To concentrate

TABLE 1: Sample Selection Framework

Provinces	Districts		Tehsils (one/ district)	UCs (5 from each tehsil)		Total UCs	Respondents per UCs	Respondents per province
	Normal	Under-privileged		Urban	Rural			
Punjab	3	1	4	10	10	20	10	200
Sindh	3	1	4	10	10	20	10	200
Baluchistan	2	1	3	8	7	15	10	150
KP	1	0	1	2	3	5	10	50
Total	**8**	**4**	**12**	**30**	**30**	**60**	**40**	**600**

Source: Authors

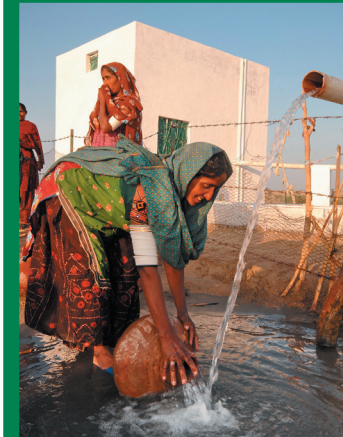
4. Out of a sample of 600, only 429 were interviewed via phone survey; the rest were reserve beneficiaries to mitigate non-response bias.
5. Number as per World Bank documents of Hybrid Social Protection.
6. National Socio-Economic Registry (NSER) is an all-encompassing dataset to provide a full spectrum of household level status of poverty & well-being across the country. NSER has evolved the most reliable and recent dataset of 34 million households of Pakistan. It covers demographic, socio-economic, education, health and assets profiling of the BISP beneficiaries.
7. The sample size for the survey has been estimated by using the following formula:

$$\text{Sample Size} = (z^2 \times p(1-p)/e^2) / (1 + ((z^2 \times p(1-p)/e^2 N)).$$

Here N = population size (taken to be 63,818 that is the Absolute no of subscribers in 12 districts)
e = Margin of error (percentage in decimal form) (taken to be 5%); z = z-score (The z-score is the number of standard deviations a given proportion is away from the mean) (taken to be 1.96 at the 95% confidence level); p = Population proportion (0.5).







To devise the HSPS, the existing saving behavior and perception, attitudes, capacities, and potential of the targeted population needed to be assessed.

resources in fewer places, a three-stage cluster sampling process has been performed within each stratum.

- The first stage of cluster sampling involved a random sample of 12 districts from 04 provinces. The probability of selection is proportional to the population size of BISP beneficiaries in the province.
- The second stage of cluster sampling involved a random sample of 12 tehsils by randomly selecting one tehsil from each district.
- The third stage of sampling involved a sample of 60 Union Councils (UCs) by randomly selecting 5 UCs within each tehsil. 50 percent of the UCs are urban and 50 percent are rural to ensure equal representation from both.
- Finally, within each chosen UC, a fixed number of 10 beneficiaries have been selected using simple random sampling.
- Further, the Quality Assurance protocol has been observed during the data collection.

To devise the HSPS, the existing saving behavior and perception, attitudes, capacities, and potential of the targeted population needed to be assessed. To do this, structured questionnaires were designed for the survey and administered to the graduating BISP beneficiaries to collect data and information. The structure and choice of sections/questions were guided by desk review, prior experience of the World Bank teams and consultations with BISP. All the instruments were pilot tested before implementation.

5

Quantitative Analysis

5.1 Exploratory Data Analysis

The Exploratory Data Analysis (EDA) attempts to examine and display observed data in relatively straightforward ways, without the imposition of a prior model or hypothesis. Essentially, EDA analyzes data sets to summarize their main characteristics through data visualization that presents data in a visual form to showcase and communicate the findings of the research.

This section explores the characteristics of the BISP beneficiaries. The scope of research is divided into five core pillars (listed below) where each pillar addresses a particular set of questions relevant to evaluating the saving behavior of the poor and designing the savings scheme for the poor:

1. Basic Financial and Digital Literacy and Inclusion
2. Saving Behavior and Thrift Habit
3. Borrowing Behavior
4. Autonomy, Agency, and Empowerment
5. Savings Scheme Design

1. Basic Financial and Digital Literacy and Inclusion

Are BISP beneficiaries financially and digitally included? What are their financial and digital literacy levels?

The process to provide accessible and affordable financial services to all members of society, particularly the individuals and communities excluded from traditional banking systems, is referred to as financial inclusion (Sarma, 2011). This includes responsible and sustainable access to basic financial products such as loans, insurance, savings accounts, and payment services (Barajas, 2020). Different financial inclusion indicators like access and usage of mobile money, internet and traditional banking were also measured during survey. Digital inclusion refers to the access of individuals and communities to various means of information and communication, as well as their ability to use them (Bruce, 2018). Ownership, access, and usage of cellphone are taken as indicators of digital inclusion.

The level of basic literacy is very low among BISP beneficiaries. The ability to write and do basic calculations are taken as primary indicators of literacy. The survey shows that 88.2 percent of respondents are unable to write a complete sentence in Urdu, the country's national language (Figure 5.1) and 57 percent are unable to perform basic calculations (Figure 5.2). This result is consistent with the literacy data of Pakistan

FIGURE 5.1: Reading and Writing Skills

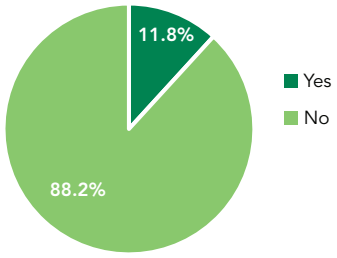
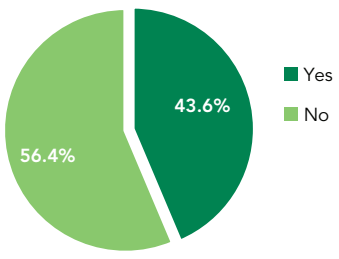


FIGURE 5.2: Mathematical Skills

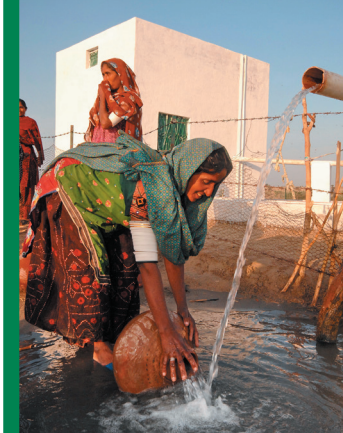












A vast majority of respondents have access to cell phones but illiteracy in general and digital illiteracy in particular hinders their digital inclusion.

where only 51.9 percent of female population have basic literacy compared to 73.4 percent of the male population (PES, 2022). Since most of the respondents were female and came from the poorest households, these results were expected.

The majority of the graduating BISP beneficiaries are digitally excluded. At the time of the survey, digital inclusion was measured in terms of access and usage of mobile phones. The majority—74.5 percent—of respondents reported that they did not own a cell phone (Figure 5.3).

These results are consistent with data reported by the GSMA *The Mobile Gender Gap Report 2022* which says that in low- and middle-income countries women are 17 percent less likely to own mobile phones. A significant number—68.2 percent—of respondents affirmed having access to mobile phones (Figure 5.4).

Lack of affordability is reported as the top reason for not owning a mobile phone by both males and females. Similarly, in this study, the main reason for not owning a cellphone is also affordability as 35.3 percent respondents said cell phone ownership was too expensive (Fig 5.5). That is why most BISP beneficiary households could afford only one cell phone. Further, the second most reported reason for not owning a cell phone is its difficulty of usage. Interestingly, 68 percent of the sample who had access to a cell phone found its usage quite difficult. This result is also consistent with GSMA report where lack of literacy and digital skills are the second most reported reason for non-ownership of mobile phones. So, in short, a vast majority of respondents have access to cell phones but illiteracy in general and digital illiteracy in particular hinders their digital inclusion.

The financial inclusion indicators of BISP beneficiaries are very poor as 96.2 percent of respondents do not own a bank account (Figure 5.6). Similarly, 92.2 percent of respondents do not have a mobile money account (Figure 5.7). As per

FIGURE 5.3: Cell Phone Ownership

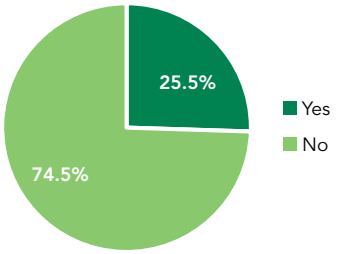


FIGURE 5.4: Access to Cell Phone

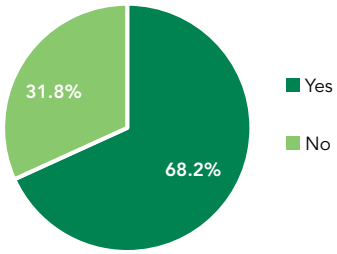


FIGURE 5.5: Reasons for not Owning a Cell Phone

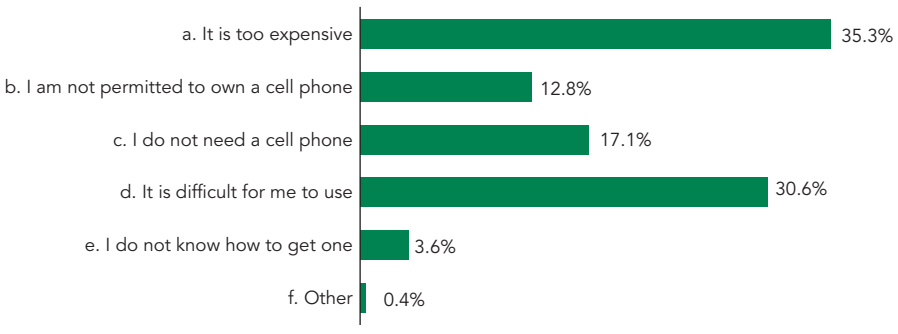


FIGURE 5.6: Bank Account Ownership

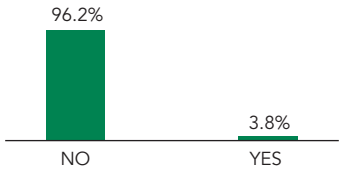


FIGURE 5.7: Mobile Money Account Ownership

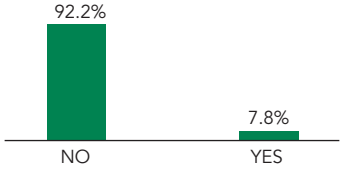


FIGURE 5.8: Global Findex Pakistan—Financial Inclusion

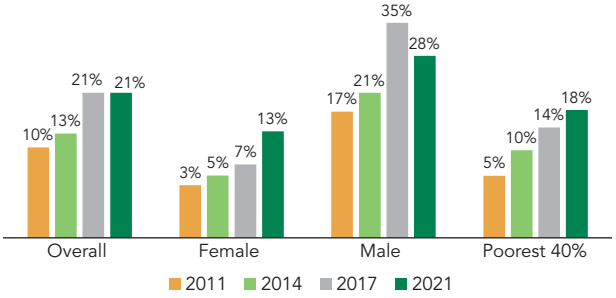
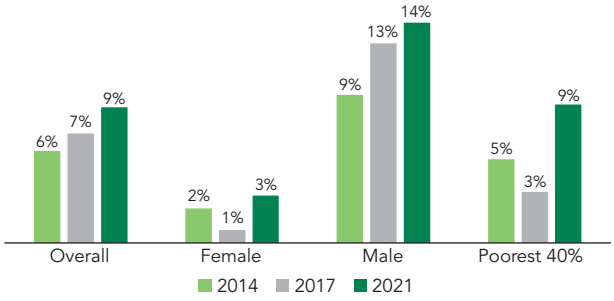


FIGURE 5.9: Global Findex Pakistan—Mobile Money Account Ownership



evidence, approximately 80 percent of poor people in emerging and developing economies are financially excluded (UNDP, 2022). Thus, the levels of financial exclusion from the survey are understandable in the country. These low levels of financial inclusion are also reflected by Global Findex 2022 data, particularly among the poorest 40 percent population (Figure 5.8). Furthermore, in the context of digital financial inclusion, only 3.3 percent of respondents reported using mobile money for transactions. These results are also reflected in the Global Findex data (Figure 5.9).

Further, the majority of the respondents ask someone for help with financial transactions (Figure 5.10) as they find it difficult to send, receive, or withdraw money (Figure 5.11). This result substantiates their lack of financial and digital literacy and emphasizes the need for training/orientation to the participants when launching the scheme and continuous facilitation during the scheme.

Lack of financial and digital literacy emphasizes the need for training/orientation for participants.

FIGURE 5.10: Money Transfer Method

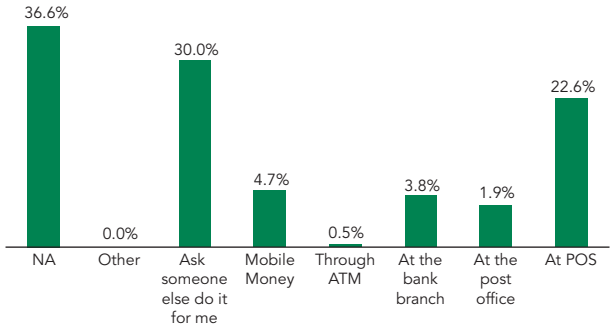
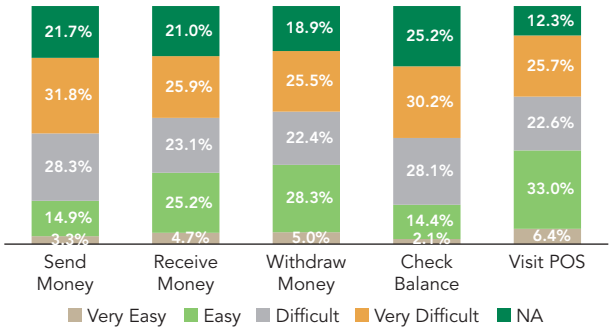


FIGURE 5.11: Ease of Transaction



Beneficiaries understand the importance of saving and try to save despite financial hardships.

2. Saving Behavior and Thrift Habit

What is the saving behavior of the beneficiaries?

Beneficiaries understand the importance of saving and try to save despite financial hardships.

Saving is valued greatly among both low- and high-income population (Glisovic & El-Zoghbi, 2011) for many reasons like education, health emergencies, weddings, funerals and other unpredictable financial risks (Steinert & Zenker et al., 2018). Globally, 76 percent of adults save in high-income countries versus 44 percent of the population in low-income countries (Findex, 2011).

In Pakistan, the overall population inclusive of the poorest 40 percent are found to be saving but there has been a declining trend from 2017 to 2021 (Figure 5.12).[8] Only 10 percent of the poorest population is saving any amount of money. The survey confirms these low levels of savings. It is found that only 28 percent of the respondents saved money[9] (Figure 5.13). The qualitative insights from FGDs also reiterated this finding of difficulty in saving due to lack of sufficient disposable income. These results confirm the willingness of the poor and the vulnerable to save but also highlight the heterogeneity in their ability to save.

The majority of the respondents save approximately 8 percent of their income on a monthly basis. The findings depict that, among those who save, 43 percent try to save on a monthly basis, whereas 28 percent save on an irregular basis due to unpredictable and inconsistent income (Figure 5.14). When monthly savers were asked about the amount of saving, 63 percent of respondents revealed saving up to PKR 1,000 which is equivalent to 8 percent of the average income of PKR 12,000. Further, 23 percent reported saving between PKR 1,000–PKR 2,000 and only 3 percent claimed to save PKR 4,000–PKR 5,000 (Figure 5.15).

There is a trust deficit when it comes to saving with a formal institution. Several empirical studies have asserted the importance of trust when it comes to saving formally. Stix (2013) established a positive relationship between trust in financial institutions and the formal method of saving. In a similar study, Beckman and Mare (2017) reported that trust in banks

FIGURE 5.12: Global Findex Pakistan—Savings

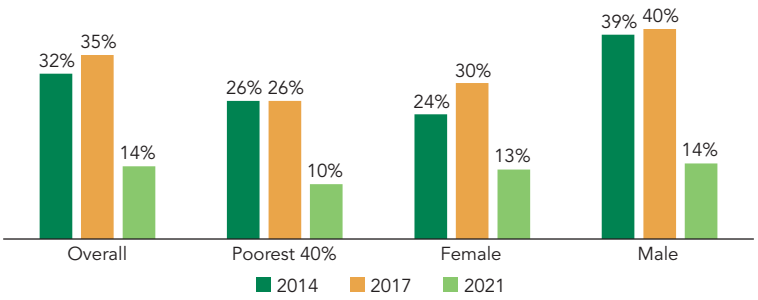
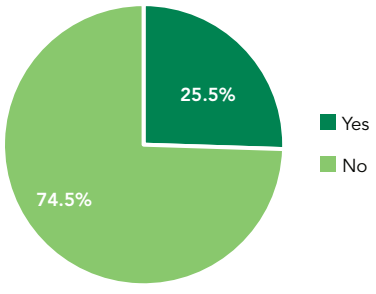


FIGURE 5.13: Do you Save Money?



8. The population of savers in Pakistan has declined from 35 percent in 2017 to 14 percent in 2021. Female savers have reduced by over a half – from 30 percent to 13 percent between 2017 and 2021 and the share of male savers has gone from 40 percent in 2017 to 14 percent in 2021. Among the poorest 40 percent of the population, the ratios have decreased from 26 percent in 2017 to 10 percent in 2021.
9. The question asked, "Do you save money?" (Y/N)

FIGURE 5.14: Frequency of Saving

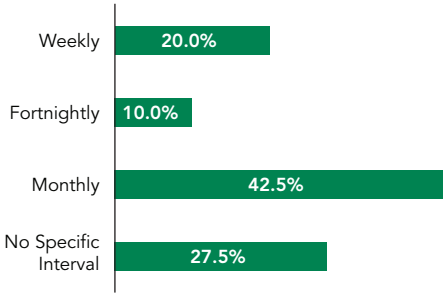
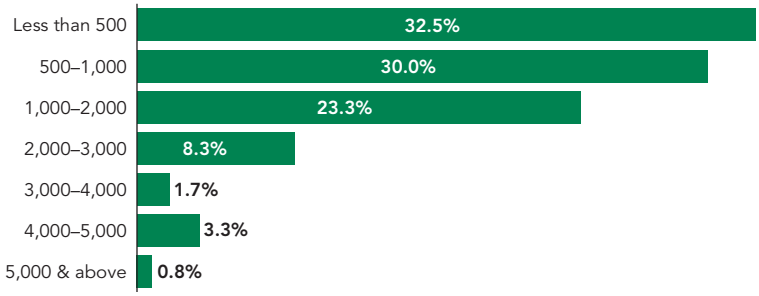


FIGURE 5.15: Average Monthly Amount of Saving



leads to high probability of formal savings. However, people in developing countries do not trust their financial institutions, making it one of the major reasons for financial exclusion (Allen et al., 2016).

In Kenya, Dupas et al., (2012) found that 37 percent of their respondents chose not to open free savings accounts due to lack of trust in the banking system. This study's survey revealed that 78 percent of female respondents trusted only themselves when it came to saving and 10 percent preferred to save through the informal 'committee' system (a mode somewhat similar to informal Susu and ROSCAs in Africa) (Figure 5.16).

In contrast to the outcome of the survey where only 2 percent trust BISP with their savings, 80 percent of FGD participants said that they would trust BISP more than banks when it comes to money.

3. Borrowing Behavior

Do the beneficiaries often borrow?

BISP beneficiaries take loans due to financial needs, but the percentage of borrowers is not high. At the time of survey, only 35 percent of the respondents reported taking any loan in the past six months (Figure 5.17). In this context, data from Global Findex 2021 indicates that the overall borrowing rates among the female and poorest populations have not notably decreased since 2017 (Figure 5.18). The rationale behind asking about loan-taking is to assess the saving ability of the graduating beneficiaries. The more loans they take, the less they will save, and even if they do save, it will be hard for them to retain those savings (Ashraf & Karlan 2006).

BISP beneficiaries take loans due to financial needs, but the percentage of borrowers is not high.

FIGURE 5.16: If saving, who do you trust with your money?

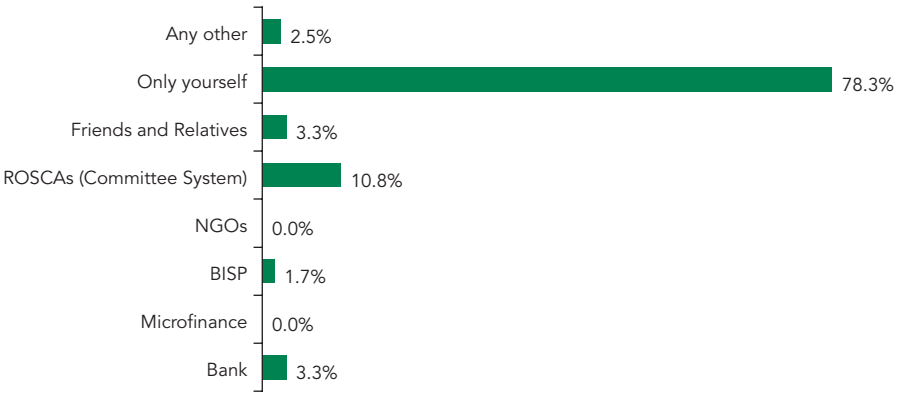


FIGURE 5.17: Source of Loan

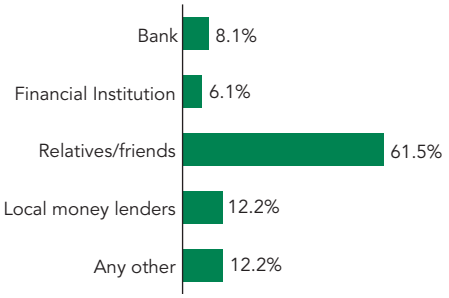
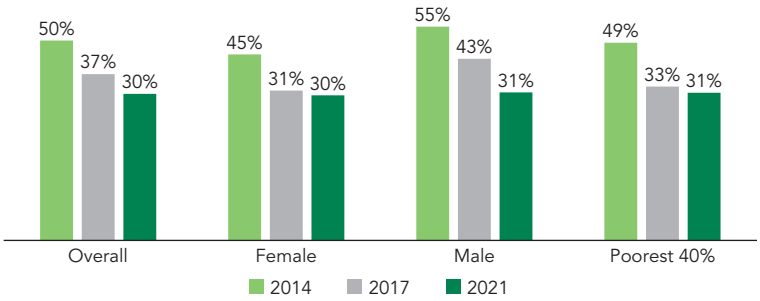


FIGURE 5.18: Global Findex Pakistan—Borrowing



The survey finds that women are empowered to take decisions regarding savings in their households.

Further, the survey revealed that informal borrowing is preferred over borrowing from formal financial institutions. Sixty-two percent of beneficiaries borrowed from friends and family and 12 percent borrowed from local money lenders (Figure 5.19). This indicates a distrust between beneficiaries and the formal financial sector. Berkeley (2019) have discussed how money lenders and other alternatives provide a sense of reliability and confidence to low-income communities which traditional banks fail to offer. Also, banking charges and lack of personal services are found to be the two main reasons for lack of trust in formal financial institutions (Mehrsa, 2012) & (Berkeley, 2019).

4. Autonomy, Agency, and Empowerment

Are the women empowered enough to take financial decisions alone?

The survey finds that women are empowered to take decisions regarding savings in their households. 43 percent of the women reported taking decisions regarding savings by themselves (Figure 5.19). In contrast to this, 27 percent women take saving decisions in mutual consultation with their husbands. Empirical studies from around the world support this higher saving agency of women within household. The study of Buvinic and Jaluka (2018) explored this aspect and found that although women earn less than men, they exhibit higher saving behavior. Brown et al., (2019) also provided similar empirical evidence suggesting that when women are involved in the household decision-making processes the probability of savings increases. Garikipati (2008, 2012), Mukherjee & Kundu (2012), and Deiniger & Liu (2017) also reported that women are empowered in decisions regarding savings.

Further, 40.2 percent of beneficiaries mentioned no influence of male family members on their saving decisions (Figure 5.20). A significant number, 23.2 percent, reported the positive influence of male family members on their savings. This evidence reflects potential higher participation of women in HSPS.

FIGURE 5.19: Primary Decision-Maker Regarding Savings

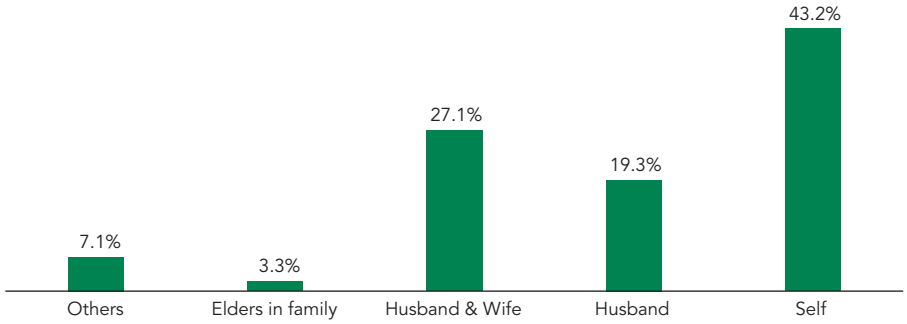
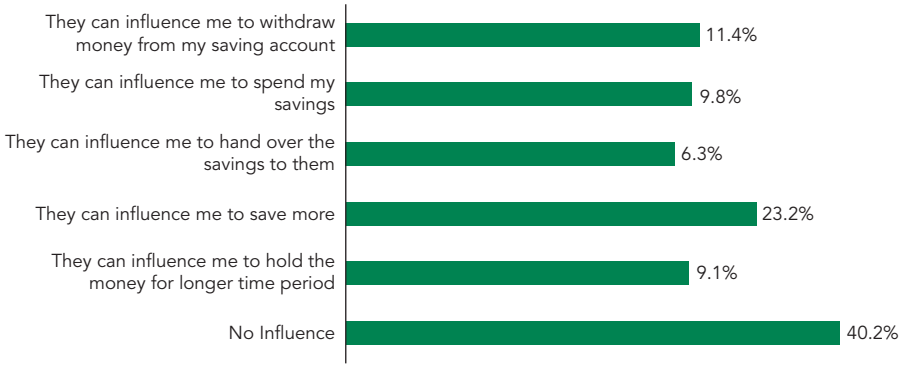


FIGURE 5.20: Influence of Male Family Members on Savings



5. Savings Scheme Design

What are the desirable features and optimal design of the Hybrid Social Protection Scheme?

Micro saving programs are becoming increasingly popular to reach poor and vulnerable populations in developing countries. Microfinance institutions and donors are diverging from the traditional focus of credit to micro saving schemes to promote financial inclusion of the poor.

Credit transfers to the poor are essential to overcome financial shocks but a number of researchers in the last two decades, including Chen and Snodgrass (2001), are concluding that saving programs have higher benefits for the financial sustainability of poor households. The savings agenda is now focusing more on the scheme design, management, and delivery systems of an affordable savings scheme for the poor that can increase their resilience in the face of financial shocks.

M-Pesa[10] in Kenya increased financial inclusion and promoted formal savings among a vulnerable and excluded population (Jack & Suri, 2011). Following this, another savings product was launched in Kenya by the name of M-Kesho which allowed the participants to open no-frill[11] accounts and offered up to 3 percent interest annually on reaching the amount of KES 10,000 (USD 125) (Mbiti & Weil, 2011). A similar voluntary saving scheme was launched in Indonesia by Bank Rakyat Indonesia (BRI) that led to an increase in savings (Khandhker, 2000).

Empirical evidence suggests that saving schemes for poor households are effective only if there are some added incentives and psychological interventions. It is because people are mostly busy in their lives and do not pay attention to their future financial needs. As a result, they often forget to save (Karlan et al., 2012). Several studies attempted to check the effectiveness of monetary and psychological interventions and found positive results.

For example, a Randomized Controlled Trial study conducted by Akbas & Ariely et al., (2016) found a 100 percent increase in savings when reminder text messages were sent. This survey also showed that higher matching contributions attracted savers. In this context, 66 percent of respondents (Figure 5.21) expressed their willingness to save under a contributory savings scheme design.[12]

Empirical evidence suggests that saving schemes for poor households are effective only if there are some added incentives and psychological interventions.

10. M-Pesa is a mobile money service launched in 2007 by Vodafone and Safaricom in Kenya.
11. No-frill bank accounts are generally offered to poor populations because they do not have any opening and maintenance charges. Further, they are free of any minimum balance requirement.
12. The question asked was "Would you be willing to save or save more than before on daily basis, if the government pays you some profit on that saved amount?"

FIGURE 5.21: Willingness to Save under Contributory Saving Design

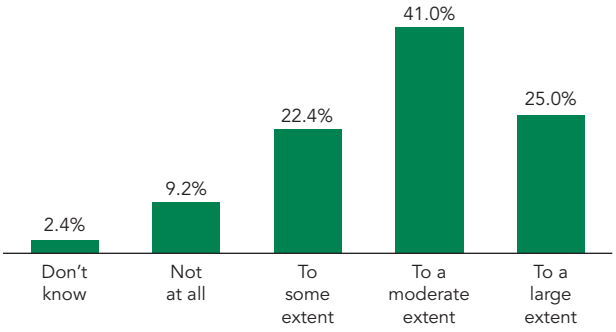
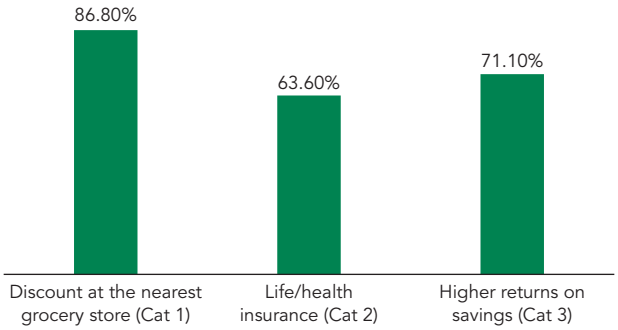


FIGURE 5.22: Saving Incentives



Given the household dynamics and income levels of BISP beneficiaries, monthly saving is the most preferred frequency of saving under the scheme.

Further, respondents were asked to pick their top three incentives from a list of additional incentives that could motivate them to save under the scheme. The most prioritized incentives were discounts at the nearest grocery store followed by higher returns on savings, and lastly, life/health insurance (Figure 5.22).

Given the household dynamics and income levels of BISP beneficiaries, monthly saving is the most preferred frequency of saving under the scheme. Among four different options of saving frequency—Daily, Weekly, Monthly, and Irregular—41 percent of survey respondents chose monthly saving as the most desirable option (Figure 5.23). Under the Daily saving scheme design, a participant who saves on a daily basis receives PKR 100 as profit on savings of PKR 1,000 at the end of the year. Figure 5.24 shows that 90 percent of respondents express their willingness to save on a daily basis under such circumstances. Under the monthly saving scheme design, a participant can get a profit of PKR 4,000 at the end of two years by saving at least PKR 500 monthly. Under such conditions, 97 percent of survey participants prefer to save on a monthly basis (Figure 5.25).

FIGURE 5.23: Preferred Frequency of Saving

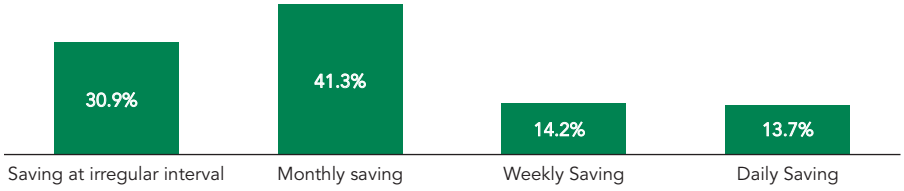


FIGURE 5.24: Daily Saving Willingness

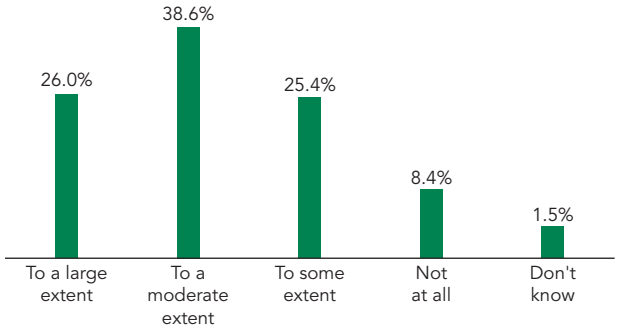
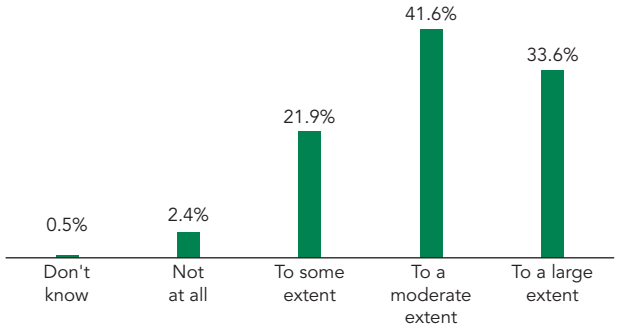


FIGURE 5.25: Monthly Saving Willingness



There is high willingness to save money in digital accounts like mobile money. Sixty-one percent of the respondents were affirmative, when asked about opening a mobile money account for saving. This indicates trust in mobile money as BISP beneficiaries are familiar with digital money services. This is an acceptable finding as per literature also. Skogqvist (2019) found that financially excluded communities who are familiar with mobile money services perceive it as an efficient and trustworthy means for storing their savings. In contrast to this, 28 percent respondents are unwilling[13] to save in digital mobile accounts. The FGDs reveal that the majority of participants perceive money saved in digital accounts as easily accessible, but some felt it would be hard for them to store their savings for a longer time period.

There was a mixed response from beneficiaries on how comfortable they would be sharing information on the saved amount in their digital accounts with their family members, particularly males. Fifty-three percent women were comfortable with sharing information about their savings with family members; 42 percent of women were not comfortable at all. The female participants in FGDs explained that if their family members, husband or children, could view the saved amount in their digital accounts, they might influence them to withdraw money, making it difficult for them to retain their savings.

The saving retention period of most BISP beneficiaries is found to be below six months. More than half (57 percent) report that it is difficult for them to retain savings beyond six months (Figure 5.27). One main reason for this inability to save is the short-term thinking of most respondents. Nearly 93 percent of respondents state that they are more interested in what happens in the short term as they essentially spend money on basic consumption. Therefore, almost 90 percent of them mention that saving money is too hard for them. Similarly, 53 percent state that they are unable to limit themselves from spending. These results are consistent with the findings of Camilla (2017) that suggest people with good self-control end up saving more.

There is high willingness to save money in digital accounts like mobile money.

FIGURE 5.26: Willingness to Save in Mobile Money Accounts

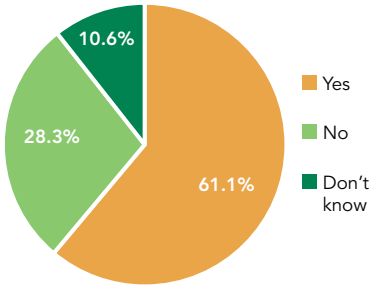
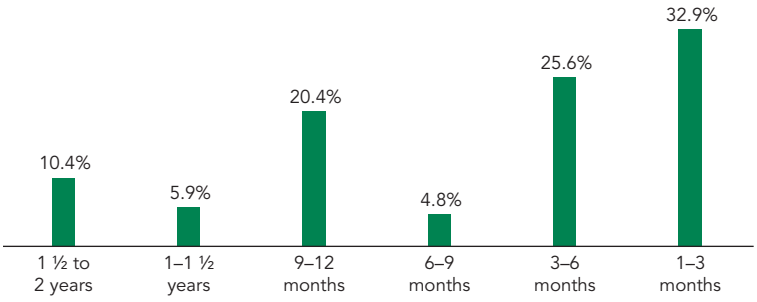
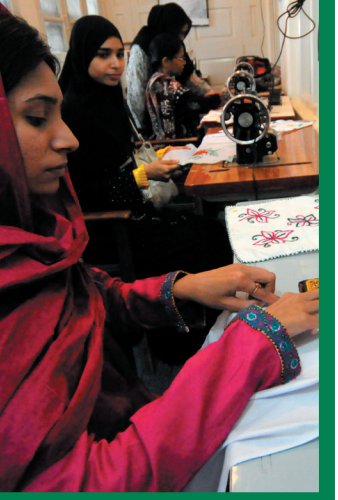


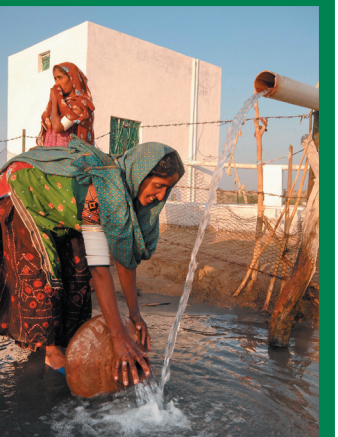
FIGURE 5.27: Saving Retention



13. The reason behind this hesitation has been explored in the focus groups discussions.







6

Empirical Estimations and Methodology

The decision of the households to save money or not, denoted as demand for saving, is a binary choice that can be represented as a qualitative variable with a limited range. Various choice-related studies have used discrete choice models to analyze such binary decisions for households; commonly used models are logit. This study uses the logit model to determine the factors influencing households' demand for saving. Therefore, the demand for saving for the BISP beneficiaries is modelled using logistic regression analysis with several socioeconomic factors and other relevant variables. A key objective of the study is to design a saving scheme that facilitates resiliency in the face of crises for the population of interest. In this regard, multinomial logistic regression is also applied to substantiate the preferred and best features of the saving scheme design. However, for this empirical analysis, several indices have been devised for a holistic understanding of the factors affecting the demand for saving and the potential saving scheme design.

The general mathematical representation of the logit model is

$$Y_i = \alpha_i X_i + U_i \qquad \text{(A)}$$

where, Y_i is binary variable (Yes/No) in case of demand for saving analysis. In case of saving scheme design analysis, it represents the categorical variable of preferred saving frequency: Daily, Weekly, Monthly and Irregular. In both analyses, conducted separately, X_i consists of all the dependent variables that can affect the demand for saving and saving frequency.

A series of regressions has been run in which the impact of various socioeconomic variables is observed on demand for saving. In the first model, the demand for saving is modelled upon the Saving Index[14] and Lending behavior along with Digital Inclusion,[15] Digital Literacy,[16] Financial Literacy,[17] and the Money Transfer Mode that represents the preferred mode of money transfer. The model is as follows:

$$DS_i = \alpha_1 + \alpha_2 \text{Save}_{\text{In}} + \alpha_3 \text{Loan} + \alpha_4 \text{Dig}_{\text{Inc}} + \alpha_5 \text{Digi}_{\text{Lit}} + \alpha_6 \text{Fin}_{\text{Lit}} + \alpha_7 \text{Money Transfer Mode} + \varepsilon_i. \qquad (1)$$

Here $\boldsymbol{DS_i}$ is a binary dependent variable representing the demand for saving. It takes the value of 1 if the respondents save money and 0 if the respondent does not. **Loan** is also a binary variable representing whether the respondent took any loan or not in the past six months.

14. Saving Index construction: Do you have a specific plan/goal that you are saving up for? What is your goal for saving?
15. Digital Inclusion Index construction: Do you own a cell phone? Do you have access to cell phone? Do you have any mobile money accounts? Have you ever sent or received money through mobile money/account?
16. Digital Literacy Index construction: How easy/difficult it is for you to use a cell phone? Who reads text messages to you? How easy/difficult it is for you to read Text messages from friends and family, Text messages from BISP, Text messages from Banks, Text messages from Mobile Network Operators. How easy/difficult it is for you to Send Money, Receive Money, Withdraw Money, Check Balance, and Visit POS?
17. Financial Literacy Index construction: Can you read/write a sentence in Urdu? Do you know how to do basic calculations?

The **second** empirical model modifies equation (1) to see how the demand for saving is influenced by the male family members[18] and personal self-control in spending[19] along with financial literacy, digital inclusion, and no cell phone ownership. The model is represented by equation (2).

$$DS_i = \alpha_1 + \alpha_2 \text{Nocell} + \alpha_3 \text{Selcon}_{\text{Sav}} + \alpha_4 \text{Digi}_{\text{Inc}} + \alpha_5 \text{Fin}_{\text{Lit}} + \alpha_6 \text{Minf} + \varepsilon_i. \quad (2)$$

The **third model** represented by equation 3 measures the impact of women empowerment and family influence on the demand for saving along with Saving Index, Loan Index, Financial Literacy, Money Transfer Mode (MTF), Save_Ctrl,[20] Permission,[21] Hard_Save, and Male Influence (Minf). Primary decision makers regarding saving (Prim_Dec) and domestic decision-making power in the family (Dom_Dec) represent women empowerment in this analysis. The equation is as follows:

$$DS_i = \alpha_1 + \alpha_2 \text{Sav_In}_i + \alpha_3 \text{Loan}_{\text{In}} + \alpha_4 \text{Fin}_{\text{Lit}} + \alpha_5 \text{Prim}_{\text{Dec}} + \alpha_6 \text{Dom}_{\text{Dec}} + \alpha_7 \text{MTF} + \alpha_8 \text{Save}_{\text{Ctrl}} + \alpha_9 \text{Permission} + \alpha_{10} \text{Hard}_{\text{save}} + \alpha_{11} \text{Minf} + \varepsilon_i. \quad (3)$$

In addition to these exercises, four more analyses were conducted for a deeper understanding of the factors affecting the demand for saving. In this analysis, income, financial inclusion, and family index have been used as additional dependent variables along with other variables. The equations of the models are mentioned in the annex.

Moving on to the empirical analysis of the saving scheme design, multinomial logistic regression is applied to analysis to determine the effect of various socioeconomic variables on the saving scheme design. The dependent variable is categorical i.e., frequency of saving (Save_Freq) with four categories: Daily, weekly, monthly, and irregular saving pattern. Whereas the independent variables comprise of Financial Literacy (Fin_Lit), Lending Behavior (Loan_In), Saving Index (Save_In), Male Influence (Minf), Self-Control on saving (Selcon_Sav), Money Transfer Mode and Empowerment Variables like Primary Decision-making Power (Prim_Dec), Domestic Decision-Making Power (Dom_Dec) and Saving on which the respondents had control (Save_Ctrl). The mathematical models take the following form.

$$Save_{Freq} = \alpha_1 + \alpha_2 \text{Fin}_{\text{Lit}} + \alpha_3 \text{Digi}_{\text{Inc}} + \alpha_4 \text{Income} + \alpha_5 \text{Prim}_{\text{Dec}} + \alpha_6 \text{Dom}_{\text{Dec}} + \alpha_7 \text{Save}_{\text{Ctrl}} + \alpha_8 \text{Permission} + \alpha_9 \text{Selcon}_{\text{Sav}} + \alpha_{10} \text{Minf} + \varepsilon_i \quad (4)$$

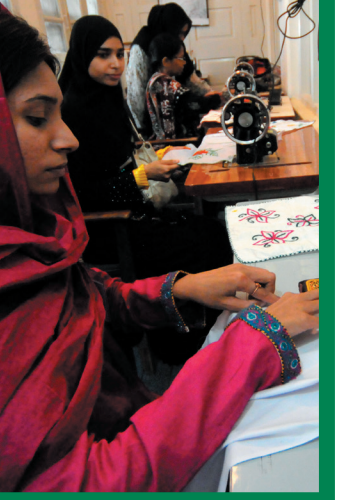
A series of regressions has been run in which the impact of various socioeconomic variables is observed on demand for saving.

18. Male Influence on Saving Index was generated using responses on the following statements: They can influence me to withdraw money from my saving account. They can influence me to spend my savings. They can influence me to hand over the savings to them. They can influence me to save more. They can influence me to hold the money for longer period. No Influence

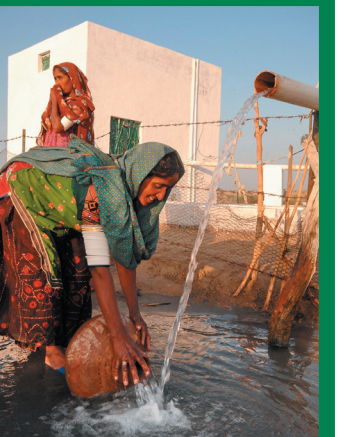
19. Self-Control on Saving Index was generated using responses on the following statements: I think it is too hard for me to save, I always spend money immediately on basic consumption needs, I always fail to limit myself from spending money, When I set saving goals, I barely achieve them, I am more interested in what happens in the short run then in the long run.

20. A binary variable, representing the information about the saved amount in the last one year over which the respondents had control.

21. A binary variable, representing an obligation to seek permission from male family members for social mobility (before leaving the house and to going market/public place).







7

Results and Discussions

Table 2 shows the empirical results of the logit model, which estimates the factors influencing the BISP beneficiary's household demand for saving. The results show that digital inclusion and financial literacy are positively associated with the demand for saving. The positive relationship between digital inclusion and the capacity to save indicates that a one unit increase in digital inclusion will increase the demand for saving by nearly 6 percent. This also implies that if access to and use of information and communication technologies, referred to as digital inclusion, is increased, then there will be higher demand for saving. Further, the empirical results indicate that a one unit increase in financial literacy will increase the demand for saving by nearly 9 percent. According to Mahdzan and Tabiani (2013), a higher level of financial literacy has a positive impact on individual savings because increased literacy implies that people have a better understanding of their financials and will be able to plan for the future.

Loans and the mode of money transfer are negatively linked to the saving demand. The negative association between loans and demand for saving implies that an increase in loans reduces the capacity to save more. Therefore, an increase in one unit of loan reduces the demand for saving by 11 percent.

Further, lack of self-control with saving is found negatively related to saving demand while male influence on saving shows a positive relation with saving demand (Table 3).

TABLE 2: **Impact of the Saving Index, Borrowing behavior, Digital literacy and Inclusion, Financial Literacy, and the Money Transfer Mode**

Demand for Saving	dy/dx	Coef.	St. Err.	p-value	Sig
Save_In	0.014	.075	.058	.197	
Loan	−0.114	−.619	.25	.013	**
Digi_Inc	0.062	.319	.098	.001	***
Digi_Lit	−0.002	−.008	.048	.869	
Fin_Lit	0.093	.474	.239	.047	**
Money Transfer Mode	−0.015	−.08	.042	.058	*
Constant		−.603	.293	.04	**
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.068	Number of obs.	429		
Chi-square	34.692	Prob > chi2	0.000		
Akaike crit. (AIC)	487.835	Bayesian crit. (BIC)	516.265		

*** p<.01, ** p<.05, * p<.1

TABLE 3: Impact of Lack of Self Control on Savings, and Male Influence

Demand for Saving	dy/dx	Coef.	St. Err	p-value	Sig
Nocell	−0.005	−.028	.097	.777	
LSelcon_Sav	−0.034	−.173	.077	.025	**
Minf	0.033	.171	.077	.027	**
Fin_Lit	0.081	.412	.241	.087	*
Digi_Inc	0.091	.467	.148	.002	***
Constant		−1.755	.227	0	***
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.061	Number of obs	429		
Chi-square	31.152	Prob > chi2	0.000		
Akaike crit. (AIC)	489.375	Bayesian crit. (BIC)	513.744		

*** p<.01, ** p<.05, * p<.1

TABLE 4: Impact of Saving Control, Permission, Income and Family Influence Index

Demand for Saving	dy/dx	Coef.	St. Err.	p-value	Sig
Fin_Lit	0.156	.81	.243	.001	***
Fin_Inc	−0.001	−.005	.114	.967	
Save_Ctrl	0.019	1.318	.272	0	***
Permission	0.290	.587	.189	.002	***
Income	0.112	.098	.171	.565	
Family Inf	0.076	.400	.174	.022	**
Constant		−4.421	1.693	.009	***
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.106	Number of obs	429		
Chi-square	53.747	Prob > chi2	0.000		
Akaike crit. (AIC)	468.780	Bayesian crit. (BIC)	497.210		

*** p<.01, ** p<.05, * p<.1

Negative relation between LSelcon_Sav on saving and demand for saving indicates that lack of self-control leads to reduction in saving demand (Stromback et al., 2017), (Liu et al., 2021). The marginal results show that demand for saving decreases by 3.4 percent with 1 unit change in lack of self-control. Positive impact of male influence indicates that a positive pressure from a male counterpart forces females to save more thereby increasing the demand for saving. The marginal results show that a unit increase in the influence of male family members[22] increases the demand for saving by 6 percent.

Further analysis focuses on finding the impact of income and family influence on the demand for saving. Table 4 displays the outcome of this analysis. It is found that income has a positive relationship with the demand for saving.

The results show that digital inclusion and financial literacy are positively associated with the demand for saving.

22. From the EDA results that the influence of male family members is essentially positive i.e., reinforces savings.

There is no statistically significant impact of social empowerment on the demand for saving.

Similarly, Family Index is statistically significant and positively affects the saving demand. It indicates that if the female beneficiaries are comfortable with their family members having knowledge of the amount of saving in their accounts along with a positive influence of males concerning saving, their demand for saving will also increase.

There is no statistically significant impact of social empowerment on the demand for saving. Table 5 shows that the variables related to decision-making, like Prim_Dec (primary decision maker) and Dom_Dec (domestic decision maker), are statistically insignificant. Similarly, the Hard_save variable is also found to be statistically insignificant. Only the impact of the Money Transfer Mode is statistically significant but represents a negative relationship. The marginal result shows that one unit change in the mode of money transfer will decrease demand for saving by 1.9 percent. However, Save_Ctrl and Permission are found to be statistically significant and positively impact the demand for saving indicating that having control on the amount of money saved and the obligation to seek permission from male family member prior to social mobility leads to increase in the demand for saving.

In addition to the above results, the loan index and family influence index are also found to be statistically significant and positive impacts on the demand for saving. The positive relationship between the loan index and demand for saving can be attributed to respondent's need to save to repay the loan. Moreover, the positive impact of the family influence index indicates that if the female beneficiaries are comfortable with their family members knowing the amount of saving in their accounts along with a positive influence of males concerning saving, their demand for saving will also increase. In contrast, it is found that the variables of Saving Index, Digital Literacy, Financial Inclusion, Income, and

TABLE 5: Impact of Decision-Making Power

Demand for Saving	dy/dx	Coef.	St. Err.	p-value	Sig
Fin_Lit	0.136	.719	.247	.004	***
Loan_In	0.042	.222	.102	.029	**
Save_In	0.012	.065	.06	.281	
Prim_Dec	0.019	.1	.102	.328	
Dom_Dec	−0.024	−.13	.102	.202	
Save_Ctrl	0.288	1.323	.28	0	***
Permission	0.105	.559	.191	.003	***
Money Transfer Mode	−0.019	−.1	.046	.029	**
Hard save	−0.014	−.075	.084	.376	
Minf	0.035	.188	.079	.017	**
Constant		−2.282	.591	0	***
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.130	Number of obs	429		
Chi-square	66.149	Prob > chi2	0.000		
Akaike crit. (AIC)	464.378	Bayesian crit. (BIC)	509.054		

*** p<.01, ** p<.05, * p<.1

not owning a cell phone, have no statistical significance on the demand for saving. The tables containing results of these additional analysis are mentioned in annex. Lastly, Table D in the annex shows the statistical significance of financial literacy, digital literacy, income, and primary decision-making power on the current savings.

Savings Scheme Design

Initially for scheme design, the results of crosstabs are discussed and then the results of multinomial logit model are presented in the next section.

Household surveys suggest that people experiencing poverty have some savings that they use for non-essential expenditures (Banerjee & Duflo, 2007). Even when formal savings products are inaccessible or prohibitively expensive, low-income people frequently save under mattresses, in informal groups, and in livestock (Karlan et al., 2013). Evidence from Table 6a presents the demand for saving at different frequencies, which is preferred by the BISP beneficiaries. The survey results show that 40 percent of households have a significant (latent) demand for saving monthly. Furthermore, 37 percent prefer irregular saving frequency. Ten percent prefer weekly savings, and 13 percent prefer daily savings. In short, the data shows that most of the respondents with a demand for saving prefer to save monthly compared to other frequencies

Finally, saving through mobile account introduces new ways to simplify savings and this is depicted in the crosstab in in Table 6b. According to Jack and Suri's (2011b) panel survey, which tracks the adoption and use of mobile banking in Kenya, the share of user-households who "withdraw funds immediately" from their mobile money account fell from 56 percent in the first survey round (2008) to 21 percent in the fourth survey round (2011). A general rule of behavioral economics is that the easier a task is, the more likely it is to be completed. The table shows that 32 percent are reluctant to save through mobile money accounts, 12 percent are not sure about this, and 55 percent are willing to save.

Table 6c is Willingness to Save and Saving Demand and the results show that most of the respondents who are currently not saving anything have a certain level of willingness to save.

Household surveys suggest that people experiencing poverty have some savings that they use for non-essential expenditures.

TABLE 6A: Saving Frequency and Saving Demand

Saving frequency	Saving Demand		
	No	Yes	Total
Daily	40	20	60
Weekly	31	30	61
Monthly	123	54	177
Irregular	115	16	131
Total	309	120	429

TABLE 6B: Willingness to Save in Digital Accounts & Saving Demand

Saving Demand	Willingness to Save in Digital Accounts			
	Yes	No	Maybe	Total
No	173	99	37	309
Yes	88	23	9	120
Total	261	122	46	429

TABLE 6C: Willingness to Save and Saving Demand

Saving Demand	Willingness to Save					
	To a large extent	To moderate extent	To some extent	To a small extent	None at all	Total
No	68	134	82	22	3	309
Yes	41	59	15	1	4	120
Total	109	193	97	23	7	429

Respondents are willing to save money for longer time periods in exchange for higher pay offs, irrespective of their demand for savings.

The crosstab of Saving Demand and Willingness to store money for longer time periods for higher payoffs is presented in Table 6d. According to causal empiricism, people struggle with self-control in various domains. Over-consuming, over-expenditure, under-saving, have all been linked to a human tendency to 'live for today'. This dynamic can manifest in the context of saving as procrastinating behavior changes and consumption splurges (succumbing to the temptation to consume today, perhaps by borrowing). The results show that the respondents are willing to save money for longer time periods in exchange for higher pay offs, irrespective of their demand for savings.

Saving Demand and Time Period of Saving retention crosstabs are given in Table 6e. Saving for a long time is difficult for poor households; as the data suggests, 36 percent respondents prefer to save for three months, 25 percent for three to six months, and 34 percent for up to one year. But it is also found that if the institution (such as BISP) restricts their savings for a longer time such as one year, they are still willing to save. Some are willing to save for more than a year to gain more profit. Another loss aversion is that taking benefits from government schemes may motivate them to save for more extended periods and increase saving (Benartzi & Thaler, 2004).

Results of Multinomial Logit

To design the scheme, it is important to capture the main effect of various socio-economic factors on saving frequency. As the literature suggests, whenever the outcome variable being predicted is nominal and has more than two categories that do not have a given rank or order, multinomial logistic regression is used. In this regard, the multinomial logit model is applied to analysis that, as compared to irregular saving frequency, daily saving, weekly saving, and monthly saving are influenced by certain variables. These variables are financial literacy, domestic decision-making power, and permission.

TABLE 6D: Saving Demand & Willingness to Store Money for Longer Time Periods for Higher Payoffs

Saving Demand	Willingness to store money for longer time periods for higher payoffs			
	Yes	No	Maybe	Total
No	201	85	23	309
Yes	96	20	4	120
Total	297	105	27	429

TABLE 6E: Saving Demand and Time Period of Saving Retention

	Time period of saving retention						
Saving Demand	1–3 months	3–6 months	6–9 months	9–12 months	1–1.5 years	1.5–2 years	Total
No	114	85	16	50	22	22	309
Yes	41	22	5	31	7	14	120
Total	155	107	21	81	29	36	429

The results show that the daily frequency of saving is positively affected by income compared to weekly, monthly, and irregular frequency of saving (Table 7). This indicates that if income increases, then daily saving frequency will increase compared to irregular frequency. The monthly saving frequency is not impacted by digital inclusion and income. However, it is positively affected by financial literacy, domestic decision-making power (Dom_Dec), and Save_Ctrl. This indicates that financially literate individuals have domestic decision-making power and control over their savings and prefer to save more monthly than by irregular savings methods.

TABLE 7: Factors Affecting Saving Frequency

Saving Frequency	Coef.	St. Err	p-value	Sig
LSelcon_Sav	−.133	.113	.237	
Minf	.173	.106	.101	
Fin_Lit	.476	.347	.17	
Digi_Inc	.12	.218	.583	
Income	.784	.286	.006	***
Permission	.279	.267	.296	
Save_Ctrl	.383	.501	.445	
Prim_Dec	.163	.135	.226	
Dom_Dec	.007	.143	.961	
Constant	−9.539	2.769	.001	***
LSelcon_Sav	−.354	.113	.002	***
Minf	−.037	.11	.735	
Fin_Lit	.515	.344	.134	
Digi_Inc	.159	.219	.467	
Income	.152	.231	.51	
Permission	.28	.259	.28	
Save_Ctrl	1.353	.437	.002	***
Prim_Dec	.079	.141	.577	
Dom_Dec	.03	.143	.832	
Constant	−3.692	2.255	.102	
LSelcon_Sav	−.245	.083	.003	***
Minf	−.043	.082	.6	
Fin_Lit	.703	.259	.007	***
Digi_Inc	.008	.171	.961	
Income	.246	.178	.167	
Permission	.03	.2	.881	
Save_Ctrl	.981	.376	.009	***
Prim_Dec	−.12	.107	.262	
Dom_Dec	.208	.105	.048	**
Constant	−2.726	1.741	.117	
Mean dependent var	2.883	SD dependent var	0.998	
Pseudo r-squared	0.064	Number of obs	429	
Chi-square	70.037	Prob > chi2	0.000	
Akaike crit. (AIC)	1088.187	Bayesian crit. (BIC)	1210.031	

*** p<.01, ** p<.05, * p<.1

The marginal effect in Table 8 shows that male influence, income, and primary decision-making significantly affect individuals' saving behavior. The positive impact of male influence indicates that male family members enforce females to save more, increasing the demand for saving. The marginal results show that the influence of male family members impact the demand for saving by 4 percent. The positive relationship between income and savings indicates that if it increases by one percent, then savings are increased by 7 percent. Results show that primary decision-making power is positively linked with saving behavior; an increase in decision power leads to an approximately 2 percent increase in savings.

TABLE 8: Marginal Effects

variable	dy/dx	Std. Err	P>z
LSelcon_Sav	0.005	0.012	0.641
Minf	0.023	0.011	0.029
Fin_Lit	0.004	0.035	0.903
Digi_Inc	0.010	0.022	0.634
Income	0.073	0.029	0.012
Permission	0.025	0.027	0.354
Save_Ctrl	-0.042	0.038	0.268
Prim_Dec	0.024	0.014	0.075
Dom_Dec	-0.012	0.015	0.421

8

Qualitative Analysis

8.1 Focus Group Discussions

FGDs capture the collective and aggregate response of BISP beneficiaries regarding their saving behavior and the proposed HSPS. Eight FGDs have been conducted separately for rural and urban participants in Punjab, Pakistan. The participants are categorized into three groups: (1) graduating female beneficiaries[23] (2) male-family members[24] of the beneficiaries and (3) members of the community[25] (local bank branch manager, mobile money agents, schoolteachers, social activist/NGO workers, Union Councilor, prayer leader at mosque, and BISP official (Assistant Director). Occupation wise, majority of the participating male members of beneficiaries' households are laborers and daily wage earners.

Number of FGDs: 02 urban x 02 (male and female) + 01 rural x 02 (male and female) + 02 x 01 (community members) = 08

Sample size (n): 87 respondents

8.1.1 FGDs with the Graduating Female Beneficiaries

Three FGDs took place with the graduating female beneficiaries.

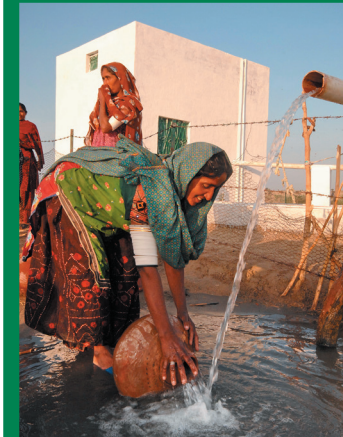
Rural—Saving Behavior, Literacy, and Levels of Inclusion: The FGD with rural women reveals that despite facing financial hardships, they try their best to save money on a daily and monthly basis. The main reasons for saving are children's expenses, health emergencies, and repaying loans. The majority of the women reported that they keep their savings at home, and a smaller proportion save in the form of groups. Though the women have a general negative perception of banks' interest rates, they are willing to open bank accounts and visit the branches occasionally, if needed. Women are also aware of the nearby bank branches, but none has any prior experience of having a bank account. The women reported that they have access to mobile phones and face no restrictions on owning the device. However, 53 percent women need assistance in using a mobile phone particularly in reading text messages. The FGD also reveals that 75 percent of the women are familiar with mobile money services, with most of them taking someone with them for assistance. They also find it easier to visit POS (Point of Sales) in comparison to banks but face the problem of paying extra charges multiple times.

Rural Savings Scheme Design: Regarding the proposed savings scheme, the women state that they would be able to save at least Rs. 500 on a monthly basis and prefer saving on a monthly instead of weekly basis. Most of the women (95 percent) reported that they would be able to retain their savings for up to six months, with a smaller proportion able to save for up to a year. In this regard, 67 percent of the women prefer depositing savings in banks as it would induce retention. The women also prefer joint accounts because they trust their husbands and have no intention of hiding their savings from them. Finally, 60 percent suggested that matching contributions would be a better incentive than grocery discounts.

23. 15 rural and 28 urban female participants
24. 10 rural and 23 urban male participants
25. 10 community members







Both groups revealed that the income of the household is barely enough to meet daily food expenses, making it difficult for the women to save.

Urban-Saving Behavior, Literacy and Levels of Inclusion: The FGDs in the urban region with 13 women each from Group 1 and Group 2 reveal that the majority of the women receive cash from their husbands for household expenses and are responsible for purchasing necessary items. However, for Group 1, husbands make the financial decisions for the households and the women are not consulted for either daily life or regular financial decisions. Further, both groups revealed that the income of the household is barely enough to meet daily food expenses, making it difficult for the women to save. Despite financial hardships, most women try to save between at least PKR 500 to PKR 1,000 monthly from their daily cash allowance and store these savings at home. Some women also reported saving with groups (committees). However, these savings are retained for barely a month. The women further reported that they visit bank branches for BISP payments but only to use the ATM and never for any other purpose. None of the women has a bank account, and in most of the cases their husbands withdraw money from the ATM.

Regarding mobile phone access, only 30 percent of women have their own mobile phones, and the rest have access to their husbands' mobile phones. None of the women's households own a smartphone. Further, in terms of mobile phone usage, most women need someone else to read text messages for them; however, if the text messages are in Urdu, nearly half of the women can read them. Fifty percent of the women can also dial numbers without help in case of emergencies.

Urban Savings Scheme Design: After explaining the savings scheme design to the beneficiaries in detail, 27 percent of women said that they could save up to PKR 1,000 on monthly basis, 53 percent said PKR 600, and the remaining 20 percent said they could not save any amount. When asked about a weekly saving of PKR 150, 85 percent of respondents said they could do this. However, the major concern is retention of savings as they often use the saved amount in emergencies. Further, Group 2 felt that depositing savings with the bank would induce retention; Group 1 preferred to deposit at POS due to convenience. To further incentivize the women to save more and help in the retention of their savings, all women agreed on matching contributions.

Further, the women are confident that there are no restrictions for them on owning a mobile phone and do not intend to hide their savings from male family members, as they trust them. Due to this they are open to the choice of having joint accounts with their husband.

8.1.2 FGDs with the Male Family Members of the Graduating Beneficiaries

One rural and two urban FGDs were held with male family members of the beneficiaries. Held in the Punjab region, there were 15 rural and 9 urban men. The discussions revealed that the men of Urban Group 1 often give cash to their wives but only for daily expenses such as groceries and children's expenses, and consulted with them on household and financial decisions. Contrary to this, the majority of the men Urban Group 2 were responsible for routine financial decisions and spending in their households but reported giving a cash allowance to their wives and consulting them on major household decisions. Further, despite acknowledging the importance of saving, all FGDs reported finding it difficult to save and said they took loans when their daily expenses exceeded their income. They said that the women also struggled to save, with any savings being quickly depleted within a month.

The FGDs also revealed that except for two, none of the male participants had personal bank accounts; however, while all had used mobile money services at some point. Further, none of the participants had ever restricted their wives from using mobile phones or going out, and often accompanied their household women to withdraw BISP cash. The men not only expressed willingness to allow women to participate in a savings scheme, but also showed interest in participating themselves. However, despite their interest, they stated that saving even PKR 500 per month would be difficult due to increasing inflation. If they could save, a bank account would be the preferred option for storing the money as mobile money.

Regarding the savings scheme design, the urban men preferred monthly saving with high matching contributions as incentives. They also suggested that ration cards would be a better incentive than interest on the savings. However, the rural men expressed deep concerns regarding the saving scheme. They suggested that if BISP contributed, they might be able to save some money. But in the absence of that, it would be difficult to retain savings for more than three months.

8.1.3 FGDs with Community Influencers

Lastly, FGDs from community influencers provided valuable insights into the opinions, attitudes, and behaviors of a particular community or demographic. In two separate FGDs with community influencers, comprising of local branch banker, a POS agent, a schoolteacher, union councilor, social/NGO workers and a prayer leader at mosque, several key points were highlighted concerning the preferences of the community. The group stated that most women, including BISP beneficiaries, visit banks with many coming in for microfinancing and concessional financial products. Profit is a significant factor for the community, and Islamic financing options are often preferred and investigated. The banker also acknowledged several challenges faced by banks, such as long queues caused by BISP beneficiaries bringing along 2-3 persons with them, as a result of which the branches get crowded, affecting the efficiency as long queues inflict a time cost. As per the banker, under HSPS, these beneficiaries should be diverted to POS for smooth and timely transaction processes. Another issue is agents charging extra fees in some areas[26] due to low service fees. However, there is an effective reporting mechanism/Grievance Redressal mechanism and once a complaint is launched, BISP takes strict action against such agents.

The POS agents reported that BISP beneficiaries have low literacy levels, don't often save, and prefer to withdraw all their money at once. Awareness regarding sending and receiving money through mobile money at POS shops is high, but the mobile wallet is not a preferred option as per POS agents. From the supply side, the incentive is not lucrative for POS agents as they receive a nominal amount per BISP transaction and this amount is subject to a certain tax deduction. However, any HSPS portfolio routed through the POS network will be endorsed as it comes with recurrent bulk transactions.

The prayer leader at mosque said that banking is acceptable for the population of interest as long as the profit was not fixed. The female teacher expressed her skepticism about relying on the poor to save, as most cannot save and even if they do, they are not able to retain savings for more than a month. Instead, she

Awareness regarding sending and receiving money through mobile money at POS shops is high, but the mobile wallet is not a preferred option.

26. Beneficiaries reported the range of 'extra charges' received by POS agents ranging from a few rupees to a substantial amount of PKR 3,500-4,000 (in one or two cases).

suggested providing incentives/'bundled options' rather than cash transfers for sustainability in the community.

One of the participants, the 'Mother Leader' (of a BISP Beneficiary Committee) reported that women want to continue receiving money from BISP to save. The union councilor emphasized the importance of information dissemination and awareness and training sessions. He suggested mosque announcements and customized training programs for all stakeholders before the scheme. He also expressed concern about retaining savings based on the beneficiaries' socio-economic status.

8.2 Findings

Based on the above discussions, the following points can be concluded:

1. All women save despite financial hardships.
2. The most common amount of saving ranges from Rs. 500 to Rs. 1000.
3. There is very low retention. Most of the savings are used within three months.
4. The beneficiaries have no prior bank experience but are willing to open bank accounts and avail of financial services from the bank.
5. Majority of the women do not own mobile phones but have unrestricted access to the devices of the male family members.
6. While digital literacy is quite low, nearly half of the women can read text messages in Urdu.
7. Everyone is familiar with mobile money services. Some have experience in availing these services but the majority need assistance from someone. Some have reported the issue of extra charges by the POS agents but the general consensus regarding POS is that it is accessible and convenient.
8. Regarding the savings scheme design, the following features are preferred:
   - Minimum amount of Rs. 500
   - The frequency of saving deposit should be monthly.
   - Deposit savings in bank to induce retention by making withdrawal comparatively difficult. Also, imposing a certain conditionality on the percentage of withdrawal would work.
   - The claim to retain savings is from 6 months to a year. The participants, however, suggest that they should be able to withdraw 50 percent of their savings in case of emergencies.
   - Lastly, the majority prefer matching contributions as an incentive to save.

The proposed HSPS has the potential to promote financial inclusion and resilience among vulnerable households in Pakistan.

Based on the qualitative and quantitative findings, it can be concluded that the proposed HSPS has the potential to promote financial inclusion and resilience among vulnerable households in Pakistan. However, there are certain challenges that need to be addressed to ensure its success. These challenges include trust issues related to digital accounts, extra charges, retention and lack of awareness and familiarity with banking services, especially among older women.

The scheme can be leveraged factoring in the existing saving behavior of BISP beneficiaries and their willingness to open bank accounts. Since people are less skeptical about the committee system (saving clubs), HSPS can incorporate this aspect into the scheme for psychological acceptance, high adoption, and retention. The scheme can also offer matching contributions and ration cards as an incentive and provide text reminders to encourage regular saving. Customized training programs, information dissemination, and awareness sessions for all stakeholders are necessary to ensure the scheme's success.

9

Conclusion

A random sample of beneficiaries was surveyed in 12 districts over four provinces of Pakistan where BISP intended to pilot the HSPS. Both quantitative and qualitative methods[27] were used for analysis to interpret data and gather inferences. For qualitative analysis, FGDs were conducted with a wide range of participants (women beneficiaries, male members of their households, community influencers) to explore the collective thought process on saving attitudes, group dynamics, social influences, shared experiences and, essentially, the optimal savings scheme design that could be tailored to the needs of the population of interest. For quantitative analysis, a structured survey (CATI) was devised and administered to the beneficiaries. The survey data has been analyzed by employing the statistical technique of logistic regression to investigate the critical factors influencing the demand for saving, and the preferred savings scheme design (daily, weekly, monthly etc.). These methods have provided insights into relationships, significance levels, and generalizability of findings.

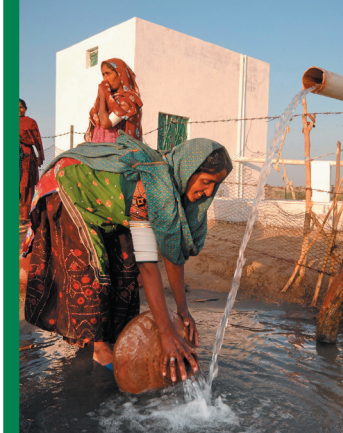
The qualitative analysis results through FGDs conclude that the proposed HSPS could promote financial inclusion and resilience among poor and vulnerable households in Pakistan. However, certain challenges need to be addressed to ensure its success. These challenges include trust issues related to mobile money accounts, undue extra charges, retention of savings for a longer period, and the need for awareness and familiarity with banking services especially among older women. The scheme can be leveraged, factoring in the existing saving behavior of BISP beneficiaries and their willingness to open bank accounts. A high level of trust in BISP was reflected by the respondents which can be leveraged for psychological acceptance and high adoption. The scheme may offer bundled options in the shape of matching contributions by the government along with incentives such as discounts on groceries or insurance to encourage regular saving. Customized training programs, information dissemination, and awareness sessions for the targeted population are necessary to ensure the scheme's success.

Furthermore, quantitative analysis of the logit model shows that factors like financial literacy, digital inclusion, influence from male members of household, and family support to save have a positive impact on the demand for saving, whereas loans, modes of money transfer, and lack of self-control in saving have a negative influence on the demand for saving. For the design of the scheme, multinomial logit captures the main effect of various socioeconomic and behavioral factors on saving frequency. The results show that saving is positively affected by income. Financial literacy, and domestic decision-making power positively affect the monthly saving frequency. Further, results show that financially literate individuals exhibit domestic decision-making power and control over their savings and prefer to save more on a monthly basis rather than through irregular savings.

Overall, the study revealed the following insights for an effective design of HSPS:







27. These methods come together to form an understanding symphony. While qualitative analysis adds the layers of depth and meaning to the quantitative analysis's structured framework, the latter only provides the framework. They blend together like a well-balanced alignment, creating a richer, more resonant understanding.

Based on the findings from the pilot phase, the Government of Pakistan will assess the feasibility of scaling up the HSPS nationwide

- **Broaden the target group.** The target population of the HSPS should not be limited only to BISP beneficiaries. Rather, other vulnerable households, who are not poor enough to be eligible for social safety net benefits, and not well-off enough to be part of social insurance programs, should be included. Further, in terms of gender, the scheme should not be limited to women; it should be for both men and women from the poor and informal sector of society.
- **Use a selection mechanism.** Scheme participants can be selected via a mechanism similar to that used by BISP (PMT score).
- **Ensure inclusion.** The majority of the target population have low literacy, digital skills, and financial knowledge, all of which prevent them from engaging fully with the scheme. To ensure inclusion, they must be trained prior to entering the scheme and continuously facilitated throughout the scheme's time period.
- **Set a matching contribution.** Despite the difficulty of saving regularly, participants have expressed a willingness to save under a contributory saving scheme where the matching contribution and profit are lucrative enough to encourage them to save and retain for longer time periods. The matching contribution should not be less than 30 percent.
- **Be flexible.** Monthly saving frequency is the most preferred option for the participants. However, for the sake of flexibility and ease, they should be given another option—either bimonthly or quarterly.
- **Partner with banks.** Participants may find it challenging to open a bank account given their low levels of knowledge and inclusion. To overcome this, BISP should partner with banks to have dedicated facilitation desks at the banks or at the BISP tehsil offices. Another solution is to have a bank representative present at the BISP office once or twice a week to facilitate account opening for the participants.
- **Cover costs.** BISP should cover the cost of opening a savings account for all scheme participants.
- **Make it easy to understand.** The design features of the scheme should be easy to understand to ensure healthy subscription by the target group. Particularly, participants should:
  - know how to subscribe and unsubscribe at any point in time; and
  - be allowed to withdraw the matching contributions and profit but not be allowed to withdraw the savings amount before the completion of the scheme to promote retention.

Overall, the study yielded promising results indicating that a hybrid social protection scheme can effectively operate in Pakistan. The findings suggest that the survey respondents are willing to save, preferably on a monthly basis, within a co-contributory (matching) savings scheme, regardless of whether bundled incentive and encompassing digital technologies are incorporated. However, the success of the scheme would heavily rely on the design features and implementation arrangements, which must be carefully considered at the pilot stage to inform a possible national scale up.

In December 2023, BISP launched a pilot savings scheme known as the Hybrid Social Protection Scheme (HSPS) aimed at enhancing resilience of the informal sector against various shocks by promoting sustainable savings behavior. The study presented in this paper provided valuable insights into the design of the HSPS tailored for BISP beneficiaries and beyond. BISP is currently documenting the implementation journey of the HSPS pilot, while also collaborating with the World Bank to design an impact evaluation of the scheme. Based on the findings from the pilot phase, the Government of Pakistan will assess the feasibility of scaling up the HSPS nationwide.

Annex: Empirical Analysis

$$DS_i = \alpha_1 + \alpha_2 \text{Save}_{\text{In}} + \alpha_3 \text{Loan}_{\text{In}} + \alpha_4 \text{Digi}_{\text{Inc}} + \alpha_5 \text{Digi}_{\text{Lit}} + \alpha_6 \text{Fin}_{\text{Lit}} + \alpha_7 \text{Nocell} + \varepsilon_i \quad \text{(A)}$$

Equation A measures the impact of loan index and reasons for not owning a cellphone on demand for saving. The loan index (**Loan_{In}**) is generated using the information about the loan taken in the past six months and whether it is returned regularly or not. **Nocell** represents the index of the reasons for not owning a cell phone.

$$DS_i = \alpha_1 + \alpha_2 \text{Save_In}_i + \alpha_3 \text{Loan}_{\text{In}} + \alpha_4 \text{Digi}_{\text{Inc}} + \alpha_5 \text{Digi}_{\text{Lit}} + \alpha_6 \text{Fin}_{\text{Lit}} + \alpha_7 \text{Nocell} + \alpha_8 \text{Save}_{\text{Ctrl}} + \alpha_9 \text{Permission} + \varepsilon_i . \quad \text{(B)}$$

In equation B, we analyze the impact of family influence (male members of household) on the demand for saving through two different variables. One, **Save_Ctrl**, a binary variable, representing the information about the saved amount in the last one year over which the respondents had control. Second, **Permission**, another binary variable, representing an obligation to seek permission from male family members for social mobility (before leaving the house and to going market/public place).

$$DS_i = \alpha_1 + \alpha_2 \text{Fin}_{\text{Lit}} + \alpha_3 \text{Fin}_{\text{Inc}} + \alpha_4 \text{Save}_{\text{Ctrl}} + \alpha_5 \text{Permission} + \alpha_6 \text{Income} + \alpha_7 \text{Family} + \varepsilon_i \quad \text{(C)}$$

Equation C measure how income and family of the respondents can affect their demand for savings. For this purpose, we use Family Index,[28] Permission, Income, and $\text{Save}_{\text{Ctrl}}$ along with Fin_{Inc},[29] and Fin_{Lit} as independent variables.

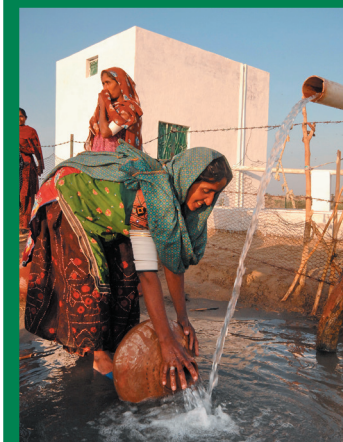
$$Save_{Cu} = \alpha_1 + \alpha_2 \text{Fin}_{\text{Lit}} + \alpha_3 \text{Fin}_{\text{Inc}} + \alpha_4 \text{Digi}_{\text{Lit}} + \alpha_5 \text{Digi}_{\text{Inc}} + \alpha_6 \text{Income} + \alpha_7 \text{Prim}_{\text{Dec}} + \alpha_8 \text{Dom}_{\text{Dec}} + \alpha_9 \text{Save}_{\text{Ctrl}} + \alpha_{10} \text{Permission} + \varepsilon_i . \quad \text{(D)}$$

In the last model represented by **Equation D**, the empirical analysis focuses on analyzing the impact of variables representing social empowerment (Prim_Dec, Dom_Dec, Self-Control on Savings (Save_Ctrl) and Permission on the probability of current level of saving. In this analysis, the previous dependent variable of saving demand got replaced with a binary variable representing current savings **(Save_Cu).** Income, financial literacy, financial inclusion, digital literacy, and digital inclusion are also incorporated in the estimation analysis.

28. Family Index was constructed using responses on the following questions: Do you feel comfortable if other members in the household can see the amount of saving in your account (especially men of the household)? Do your household members (especially male members) affect your saving decisions?
29. Financial Inclusion Index was generated using Saving Index, Loan Index and Money Transfer Mode.







Results

TABLE A: Impact of No Cell Phone Ownership and Loan Index

Demand for Saving	dy/dx	Coef.	St. Err	p-value	Sig
Save_In	0.014	.072	.058	.212	
Digi_Inc	0.067	.342	.097	0.00	***
Digi_Lit	−0.001	−.007	.049	.889	
Fin_Lit	0.116	.587	.239	.014	**
Nocell	−0.002	−.008	.099	.936	
Loan_In	0.041	.211	.098	.031	**
Constant		−1.284	.168	0.00	***
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.057	Number of obs	429		
Chi-square	28.915	Prob > chi2	0.000		
Akaike crit. (AIC)	493.612	Bayesian crit. (BIC)	522.042		

*** p<.01, ** p<.05, * p<.1

TABLE B: Impact of Saving Control and Permission

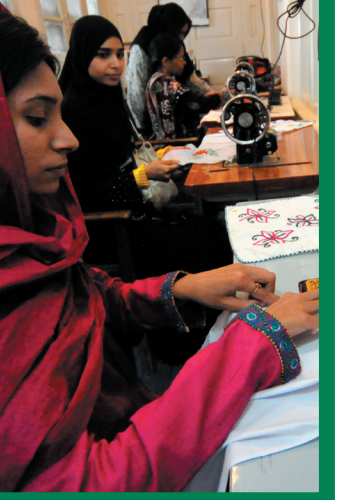
Demand for Saving	dy/dx	Coef.	St. Err	p-value	Sig
Save_In	0.012	.062	.06	.303	
Digi_Inc	0.053	.282	.102	.006	***
Digi_Lit	0.005	.025	.053	.635	
Fin_Lit	0.125	.655	.251	.009	***
Nocell	−0.003	−.017	.104	.872	
Loan_In	0.040	.209	.102	.041	**
Save_Ctrl*	0.290	1.324	.277	0.00	***
Permission	0.105	.557	.193	.004	***
Constant		−2.859	.492	0.00	***
Mean dependent var	0.280	SD dependent var	0.449		
Pseudo r-squared	0.120	Number of obs	429		
Chi-square	60.965	Prob > chi2	0.000		
Akaike crit. (AIC)	465.562	Bayesian crit. (BIC)	502.115		

*** p<.01, ** p<.05, * p<.1

TABLE C: Factors Affecting Current Savings

Current Savings	dy/dx	Coef.	St. Err	p-value	Sig
Fin_Lit	0.093	.413	.225	.066	*
Fin_Inc	0.034	.153	.106	.147	
Digi_Lit	0.026	.115	.044	.01	***
Digi_Inc	0.026	.115	.096	.232	
Income	0.116	.518	.192	.007	***
Prim_Dec	−0.040	−.178	.092	.053	*
Dom_Dec	0.013	.059	.088	.504	
Save_Ctrl	−0.053	−.242	.278	.385	
Permission	−0.033	−.149	.175	.393	
Constant		−5.094	1.838	.006	***
Mean dependent var	0.350	SD dependent var	0.477		
Pseudo r-squared	0.053	Number of obs	429		
Chi-square	29.518	Prob > chi2	0.001		
Akaike crit. (AIC)	545.805	Bayesian crit. (BIC)	586.420		

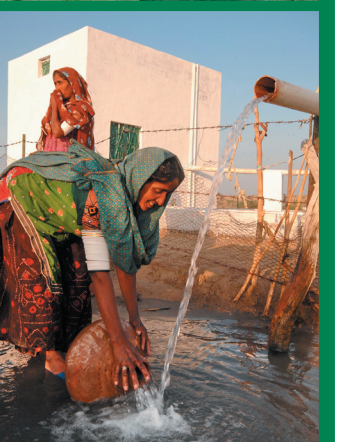
*** p<.01, ** p<.05, * p<.1w











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ABSTRACT

The objective of this paper is to summarize analysis conducted to provide inputs to the Hybrid Social Protection Scheme (HSPS) pilot. Following the analysis conducted, the Benazir Income Support Program (BISP) launched the HSPS in December 2023. Eligible households for the scheme include existing beneficiary households (with a BISP unconditional cash transfer program cut-off score of 32) and those with a PMT score of up to 40. It is expected that a significant portion of households participating in the HSPS pilot consist of households with one or more members engaged in informal sector employment. The focus of the analysis was on gaining insights into saving behaviors, perceptions, and aspirations among potential participants in the HSPS through a survey. The research employed both quantitative and qualitative analysis to gather insights from a representative sample of BISP beneficiaries who exited the program due to improvements in their welfare status, making them ineligible for continued support. This study covered 12 districts across four provinces in Pakistan. The empirical findings suggest that financial literacy, digital inclusion, and family support are key drivers of saving demand. Conversely, taking loans, money transfer methods, and a lack of self-control in spending are observed to have adverse effects on the saving behavior. The multinomial logit analysis indicates a preference for monthly saving frequency and a rationality toward saving with the expectation of lucrative profits and matching contributions from the government. Moreover, the qualitative results underscore the feasibility of implementing HSPS tailored to the savings behavior of BISP beneficiaries contingent upon their willingness to open bank accounts. The study emphasizes the need to enhance literacy skills, promote digital access, and provide customized training and awareness initiatives to successfully implement the HSPS.

JEL codes: D18, D91, E21, G41, G51s

Keywords: Hybrid Social Protection Scheme, Saving behavior, Qualitative analysis, FGDs, Quantitative analysis

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