RESEARCH REPORT

DIGITISING WOMEN'S MONEY MANAGEMENT

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Executive Summary

In India, digital financial services (DFS) have significantly improved access to formal financial infrastructure. Yet sustained use of these services among low-income households remains uneven. A growing body of evidence suggests that access alone is insufficient; adoption depends on the extent to which DFS align with the pre-existing financial practices of the households they seek to serve. The Digitising Women's Money Management study was undertaken against this backdrop to understand how women in low-income households manage money, the mental models that underpin their transactions, and the extent to which these practices are amenable to digitisation.

The study followed 293 women in rural Rajasthan over 6 months, documenting more than 135,000 financial transactions while introducing assisted access to a UPI-based mobile payments application through community-based women facilitators. By observing not only what women did but also why they did it, the study sought to develop a richer understanding of household money management and its implications for digital financial services.

The study is premised on the observation that the financial lives of low-income households are characterised by radical uncertainty. Additionally, the insufficiency, instability, and illiquidity of incomes underpin household financial management. The study then draws on the literature on money management practices (MMPs) developed by Mas and Murthy (2017) to interpret the mental models and routines that households use to simplify financial decision-making. The report interprets these routines through three MMPs: income shaping, through which households influence the timing and composition of income to meet expenditure; liquidity farming, through which they cultivate social and commercial relationships that provide liquidity during periods of need; and animating money, through which resources are assigned specific purposes to protect them from competing claims. These provide the conceptual framework through which respondents' transactions are examined and through which the interaction between existing financial practices and digital financial services is understood.

The study found that women occupy an active role in the financial management of low-income households. Across more than 135,000 observed transactions, respondents actively coordinated household cash flows, managed anticipated and unanticipated expenditure (both regular and irregular), mobilised resources during periods of financial stress, and maintained the relationships through which financial support became available. These responsibilities were evident irrespective of whether respondents were earning members of the household.

Among the three MMPs, liquidity farming emerged as the dominant practice. Respondents routinely relied on networks of family members, neighbours, village members, shopkeepers, employers, and other familiar counterparties to manage both anticipated and unanticipated expenditure. Each transaction, therefore, served a purpose beyond the immediate movement of money. Everyday transfers, purchases, borrowing, lending, and reciprocal exchanges simultaneously sustained relationships that later functioned as sources of liquidity. The findings

suggest that financial relationships constitute an integral component of household financial management rather than mere channels for the flow of money.

The study further found that the introduction of digital financial services largely reinforced, rather than displaced, existing practices. Most respondents adopted UPI when provided with assisted access, but digital payments generally migrated existing financial behaviour rather than transforming it. Digital transactions enabled respondents to extend financial interactions to relatives and family members living outside the immediate household, expanding the geographical reach but continuing to leverage existing relational networks and their underlying logic. Rather than altering the MMPs that households rely on, digitisation primarily provided an additional channel for expressing such practices.

These findings have important implications for how women's economic empowerment is understood. Existing literature largely explains women's bargaining power through individual economic resources such as labour market participation, asset ownership, and access to formal financial institutions. While these dimensions remain important, the study's findings suggest that they do not adequately capture the role played by women respondents within low-income households. Women respondents' influence over household financial decisions frequently derived from their management of uncertainty, their cultivation of reciprocal relationships, and their ability to ensure that resources became available when required. Agency therefore emerged not only through independent control over resources but also through the management of the social and financial relationships that made household resilience possible.

The report consequently argues that financial management may be understood as the production of resilience. Under conditions of radical uncertainty, managing household finances extends beyond allocating existing resources to encompass the continuous work of creating, preserving, and mobilising them. This perspective also suggests a more contextual understanding of social norms. Rather than viewing norms exclusively as constraints on women's agency, they also structure trust, reciprocal obligation, and the social relationships through which households manage uncertainty. Essentially, women can exercise agency by navigating these norms in ways that sustain household welfare.

These insights carry direct implications for the design of DFS. Formal financial products frequently assume that financial decisions are made by autonomous individuals operating exclusively in markets. The findings of this study suggest that DFS intended for low-income households should instead recognise the relational contexts underpinning financial decisions. Products that complement existing practices and strengthen established networks are likely to align more closely with users' financial lives than those that require households to abandon long-standing practices.

Finally, the report advances two conjectures. First, digital financial services may benefit from giving greater prominence to person-to-person and relationship-oriented use cases. Second, the relational information generated through digital transactions may create opportunities for group-based financial products. While these propositions need empirical validation across different contexts, the study points towards a broader emerging principle: meaningful financial inclusion is more likely to be achieved when digital financial services are designed around the financial realities of low-income households rather than expecting households to adapt to the assumptions embedded in existing products.

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Chapter 1: Introduction

Financial inclusion has been a key policy priority in India. More recently, significant efforts have been made to expand access to formal financial services through digital technologies. The rapid growth of digital financial services (DFS), particularly through mobile-based payment systems and the Unified Payments Interface (UPI), has created new opportunities to extend financial access to previously underserved populations. However, access does not guarantee usage. The extent to which individuals adopt and use digital financial services depends on how well these services align with their existing financial practices, needs, and social realities.

Current product offerings often import the financial logic of middle- and high-income households while merely scaling the product down to suit lower-income users. The implicit assumption is that low-income households will eventually adopt the financial behaviours of wealthier households, differing only in the scale, frequency, and value of transactions. This assumption, however, ignores the distinctive context in which low-income households (LIHs) operate, reducing a complex reality to a single dimension—the quantum of income.

The financial lives of LIHs are shaped by small, irregular, and often unpredictable income streams, coupled with frequent contingencies. In such contexts, managing money requires constant decision-making and a careful balancing of competing priorities. For many low-income households, the properties of income flows – namely instability, insufficiency, and illiquidity – are not exceptions to be folded into a calculable problem of risk, but ubiquitous features of their financial existence. Women in these households, who often act as the primary money managers, employ sophisticated practices that have evolved in response to these economic realities. These practices are intuitive and adaptive, deeply embedded within social and community networks. Consequently, the logic underlying them is as much social as it is economic. To navigate income volatility, women draw upon a sophisticated mix of informal savings mechanisms, reciprocal borrowing arrangements, and established routines to ensure that household needs are met.

Despite the sophistication and effectiveness of these practices, formal financial products are rarely designed with them in mind. As a result, many financial solutions, including digital products, fail to integrate seamlessly into these women's daily lives. Given the long arc of time over which women's money management practices have adapted to be what they are today, one would expect that the burden of adaptation to those practices should be borne by formal financial products rather than the other way around. But that has not been the case. While digital technologies can reduce transaction costs and improve convenience, the lack of tools that reflect users' lived experiences has contributed to relatively low sustained usage. This disconnect highlights the need for a deeper understanding of how women currently manage their finances—a prerequisite to designing digital financial services that are relevant, intuitive, and sustainable.

The Digitising Women's Money Management (DWMM) project was conceived to address this gap, though within a limited sample space. The project seeks to examine how women from low-income households manage their money and to explore the extent to which these practices can be digitised without disrupting the strategies they rely upon to navigate financial uncertainty. Rather than viewing digital adoption solely as a technological challenge, the project proceeds on the premise that successful digitisation requires a ground-up understanding of existing practices for managing money, decision-making processes, and social contexts. The central premise of the project is that digital financial services are more likely to be adopted when they simplify and strengthen existing practices, rather than requiring users to abandon established mental models.

To investigate this, the DWMM project combines detailed longitudinal data collection with an assisted digital adoption intervention. Conducted among 293 women residing in Rajasthan, the study documents participants' financial transactions, their underlying reasoning, and the priorities shaping their decisions over six months. By capturing not only what women do but also why they do it, the project generates a richer understanding of how money is managed and what aspects of these approaches may be amenable to digitisation.

Given the breadth of the collected data, several causal and inferential analyses are possible. While some of these exercises are ongoing or completed, they are deliberately excluded from this report. This exclusion serves two purposes. First, it avoids overwhelming the reader with multiple concurrent analytical threads, each requiring its own set of assumptions and methodological caveats. Second, as an exploratory study, the project's primary value lies in the perspective it offers. The report, therefore, prioritises the development of a conceptual lens through which the observed approaches to managing money can be interpreted, leaving hypothesis-driven investigations as separate exercises that build upon these foundational observations.

The report is structured into six chapters. Chapter 1 reviews the relevant literature and establishes the conceptual foundations of the study. Chapter 2 outlines the survey design and operational details of the data collection exercise. Chapters 3 and 4 present key observations from the study and situate these findings within the broader literature on women's economic empowerment. Chapter 5 develops a conceptual frame through which the findings may be interpreted. Finally, Chapter 6 presents a set of conjectures emerging from the study that, subject to further validation, may help refine strategies for expanding meaningful access to digital financial services.

Chapter 2: Review of Literature

In this section, we discuss the literature on money management practices among low-income households, especially drawing on the work of Mas & Murthy (2017). Additionally, we discuss the emerging literature on digitisation and its interactions with the financial lives of low-income households.

2.1 Money Management Practices (MMPs)

Despite decades of policy efforts to promote financial inclusion, many low-income households in India remain underrepresented in formal financial markets. While the number of bank account holders has increased manifold over the past decade, account usage has remained limited (Prasad et al., 2024). The predominant explanation for the lack of usage is often the presence of frictions and a lack of contextual fit within people's financial and social realities (Cole et al., 2013; Field et al., 2022). Against this background, we examine the economic lives of such households, which are characterised by high exposure to uncertainties, like economic and environmental shocks (Mas & Murthy, 2017).[1] These households also face a high risk of adverse outcomes because they often engage in informal employment (including self-employment), which lacks cash flow stability and predictability and affords few, if any, labour protections or social security benefits. This lack of social security also limits the ability of such households to cope with shocks such as illness or a sudden loss of employment. The brunt of such shocks and their economic implications is borne by the household, manifesting as unanticipated spikes in expenditure. The situation is made worse by the insufficiency, instability, and illiquidity of incomes (Collins et al., 2009). This is exacerbated by unanticipated expenditure spikes stemming from the uncertainties these households face.

The financial context of the households interacts regularly with their social context. Granovetter (1985) remarks that individuals do not "behave as atoms outside a social context", and low-income households are no exception. As such, the lives of these households are embedded in "concrete, ongoing actions of social relations". The degree of social embeddedness tends to be much higher among low-income households, as their social networks often serve as financial networks as well, and there is a social character to the financial relationships of such households. Higher exposure to shocks often necessitates greater dependence on such networks of mutual aid. Given the defining features discussed above, we refer to these households as low-income, socially embedded (LISE) households. This choice is deliberate, since the project implicates both the financial (or economic) and the social dimensions of households.

[1] Households face a mix of both risks (known unknowns) and uncertainties (unknown unknowns). Low-income households experience greater uncertainty than other households due to the lack of formal safety nets and human capital such as education, socioeconomic class, etc.

Beyond social embeddedness, another defining feature of such households is the need to make multiple recurring decisions about managing expenses, given the nature of their income flows. For example, while bulk purchasing a commodity, such as cooking oil, may be cheaper, their cash flows prevent such purchases. Hence, mundane transactions that are often carried out monthly or fortnightly in higher-income households translate into regular, recurrent, and frequent decisions for LISE households. Such decisions are often driven by mental heuristics that help automate the decision-making process. These heuristics typically take the form of "hierarchies" and "routines." Hierarchies help individuals prioritise their needs and obligations, while routines refer to default rules for spending and saving. As such, hierarchies and routines are complementary decision-making processes that rely heavily on intuition rather than explicit analysis. This suggests that, over time, though the specifics of the situations may differ, the common thread underpinning them helps shape and sustain the heuristics. Often, not all information surrounding a situation is carefully considered before arriving at a decision; instead, similarities between a newly occurring situation and previous ones implicitly trigger hierarchies and routines, offering a quick way forward to a decision. In this contingent working out, order emerges insofar as hierarchies and routines resolve into three identifiable and distinct “coping strategies”. Mas & Murthy (2017) describe them as follows:

(a) Income shaping refers to managing the timing and amount of income to meet anticipated, yet dynamically changing requirements. This strategy includes mechanisms by which LISE households attempt to bridge the gap between their income and expenditure by matching the timing of their income flows to both anticipated, recurrent, smaller expenditures and one-off, larger expenditures. The objective here is to ensure predictable cash inflows to meet anticipated expenditures. One way to achieve this is through income diversification, whereby the pursuit of additional income sources that meet their cash flow needs in both value and timing becomes inevitable (Mas, 2015). LISE households may not always succeed at this, and, further, income diversification almost always involves trade-offs for the household. By not pursuing a single job in the short term, the household could be giving up on long-term pathways in which specialisation may yield higher returns on goods produced or services rendered. For instance, a job as an apprentice at a tailor shop may generate less income in comparison to working as domestic help during the morning and at a construction site during the evenings in the short term; however, the first offers the opportunity to specialise in the trade and build a career as a seamstress or tailor.

(b) Liquidity farming refers to the management of liquidity through social and business relationships. This strategy includes mechanisms through which LISE households seek to nurture potential sources of liquidity by continuously cultivating relationships within, and sometimes beyond, their communities. They may do this, for instance, through acts of generosity and mutual support that create occasions for reciprocity, even if they do not explicitly invite it. While income shaping can help households manage liquidity, the inherent instability of income may not enable them to fully achieve the goal of regular and adequate cash inflows. This is made worse when contingencies (e.g., unexpected emergencies) occur and place additional strain on households that already suffer from inadequate and unstable incomes. During such times, cultivated relationships often function as networks of mutual aid that can be harvested for on-demand liquidity to meet shortfalls. For instance, a household may shop for groceries from the same store to build trust. This long-term familiarity (and resultant trust) is then monetised during emergencies through shop credit.

(c) Animating money refers to the separation of money for different purposes based on a hierarchy of goals. The hierarchy of goals is determined by the timeline for achieving them and their importance. For instance, a child's wedding or education has a concrete timeline. At the same time, a home-improvement goal is likely to be fuzzy, as it can be deprioritised to accommodate more urgent goals. At its core, this strategy is built around mechanisms that enable LISE households to exercise self-discipline and bottle liquidity. These mechanisms can take the form of allocating money or savings to receptacles with specific assigned purposes, or of mentally assigning specific income streams to specific purposes to protect money from unwarranted use. The key to successfully storing liquidity is converting money or savings into valued receptacles that, by their very nature, act as "social or psychological barriers" that enable households to resist the temptation to liquidate. For instance, a household may convert money into jewellery or livestock and use mental labels to tag them as savings for specific goals, such as a child's marriage. Neither of these two receptacles – jewellery or livestock – is wholly illiquid or inconvertible so that an unforeseen emergency may still be provisioned for. Still, they reduce the fungibility of cash held, which is easily accessible whenever a need arises. Similarly, money saved with a trusted community member or employer (money guard) may be labelled as savings for a specific goal but may also be used in an emergency. (Neelam & Prasad 2024)

Mas & Murthy (2017) use the terms "intuitive and automatic decision-making", "mental models" and "rules-of-thumb" to describe money management practices. Giuliano (2026) frames this as a "collection of rules of thumb-decision-making tools" that help navigate uncertain situations, "mental heuristics" that guide one's choices, "fast and frugal decision-making" and "intuitive feelings about appropriate behaviour"[2]. While it is undeniable that there is an economic logic at the heart of MMPs, the actions that constitute MMPs are not necessarily borne out of an economic logic. For example, according to Mas & Murthy (2017), a liquidity farm refers to the relationships that can be called on in a "moment of financial need". This framing of "relationships" as being exclusively utilitarian (serving as a means to some economic end) does not quite capture the full spectrum of transactions that may constitute it. Nurtured social relationships hold value in themselves, as interpersonal relationships often provide "meaning" to one's life by satiating the

[2] Giuliano (2026) describes these as features of "culture". However, the conception mirrors that of the money management practices, and "culture" in this report describes the supra forces that give meaning to life, i.e., it is operating at a paradigm beyond just MMPs. Given the conceptual equivalence between Giuliano's "culture" and MMPs, and the dissonance between how "culture" is used throughout the document, respectively, framing of the practices as "culture" is avoided.

"need to belong" (Baumeister & Leary, 1995). Further, the relationships often also provide non-financial support. "Liquidity Farming" envisages mutual support between individuals as an exchange of money in times of need. However, reciprocal support can also be in kind and extend beyond material form. While we mostly use "liquidity farming" as Mas & Murthy define it and, therefore, the paper mostly discusses MMPs in the economic context, it is important to underscore that MMPs often function beyond the confines of the economic realm. Only "income shaping" may be construed as an exclusively economic practice (i.e., involving some manner of economic exchange), but neither "liquidity farming" nor "animating money" is ontologically tied to an economic paradigm. Relationships are meaningful in themselves, and goals derive meaning from the cultural context that underpins the heuristics of "animating money". However, for the purposes of this paper, we mostly anchor the MMPs in the traditional economic paradigm.

2.2 Digitisation of financial services in LISE households

The aforementioned MMPs, some of which have long histories of being passed down from one generation to the next (Mas, 2015), now find themselves amidst an increasing policy-level push towards digitisation across all spheres of life, including financial services. Given this shift, it is crucial to consider whether digital financial services align with the financial needs and contextual realities of LISE households and can therefore find a place in their financial lives.

Early scholars researching digital services upon their introduction in the African context questioned whether digital financial services, which replicate the logic of formal banking, can truly advance financial inclusion, since they are based on the financial necessities of middle- and upper-income households with rigid schedules and, therefore, assume a product-centric orientation. By referencing socio-cultural practices, these scholars found that such an approach is fundamentally at odds with the social and temporal realities of low-income financial life. However, emerging literature on mobile money transfers hints at a different picture. It is seen that households are using mobile money technology in ways that ground it within their socio-cultural context. Further, the technology itself is not constrained by rigidity and allows the user to use it for purposes meaningful to them. Essentially, the observation is that pre-existing social and financial practices co-opted mobile money rather than mobile money changing these practices.

A foundational insight in literature emerging from the African context is that money transfers, even in digital form, are never purely financial acts. Kusimba et al. (2015), in their ethnographic study of mobile money use among the Bukusu of Western Kenya, demonstrate that digital transfers function simultaneously as financial and "communicative" acts. They argue that mobile money transfers are best understood as an "amplifier of enduring practices around reciprocity, obligation, belonging and exclusion". They find that digital money networks in Western Kenya are structured around maternal kinship ties and sibling relationships, with some individuals occupying central positions as brokers of value across groups. The reciprocal, multi-directional character of these networks, in which senders are also receivers, mirrors long-standing forms of mutual support, now made more fluid by digital infrastructure. Crucially, the privacy afforded by digital transfers also reinforces selective obligation: the ease with which e-money can be hidden enables individuals to preferentially support, say, siblings over in-laws, navigating social hierarchies while still allowing them to persist. This contrasts with cash transactions, where the physical exchange is often noticed and cannot be “hidden”. For instance, if one is seen providing financial support to their sister, they cannot deny support to another sibling seeking support without leading to antagonism or conflict. Kusimba's later work (2018) extends this analysis to platforms like M-Pesa, arguing that the transition to digital tools is best understood as a "creative technological adaptation of long-standing cultural practices of relational work".

Johnson and Krijtenburg (2018) offer a complementary framework with two divergent repertoires: a relationship-focused repertoire and a resource-focused one. The relationship-focused repertoire is one driven by the core cultural values of “upliftment” and “ask for and assist” dynamic, both of which emphasise social ties. In contrast, the resource-focused repertoire places the resource at the centre of the interaction between individuals rather than the relationship. The latter repertoire aligns with formal finance and involves strict agreements with clear repayment expectations. Johnson and Krijtenburg (2018) rely on Heyer & Mas (2011) to argue that digital financial services that are either built on a relationship-focused repertoire or strongly resonate with relational dynamics, even when functioning on a resource-focused repertoire, are likely to receive greater uptake. Most digital financial services inherit the "architecture of formal banking" with its rigid systems, which sit uneasily with the "fluid, relational logics" of how LISE households actually manage money.

The central learning from the above-mentioned papers is that social and financial context is critical for how digital interventions are adopted or used among low-income populations. While it is likely that the relationship-focused repertoire manifests in the Indian context as well, how it does so and how it shapes or is shaped by MMPs have not been studied. By exploring the MMPs adopted by women in Rajasthan, we examine these practices among LISE households and their readiness for digital migration. We chose women from households because much of the day-to-day money management falls to them in LISE households (Tiwari & Dubey, 2024), and they are the ones who deploy the aforementioned MMPs. Recognising this reality, we call our project the Digitising Women's Money Management (DWMM) project, and we aim to examine, in granular detail, the MMPs of the women in our study group, along with what happens when a digital option for sending and receiving cash is enabled.

Chapter 3: Research Design

This chapter outlines the research design of the DWMM study, which has three primary objectives. Firstly, to document the mental models associated with day-to-day transactions and assess whether they map to the MMPs discussed in the previous chapter. Secondly, to study how amenable the transactions were to digitisation. Finally, to assess whether the scope of digitisation would apply uniformly to all MMPs. To address the latter two objectives, the study incorporated a digital optionality component, offering participants the opportunity to access and use a UPI-based mobile payments application through a network of community-based women facilitators, referred to as *Sakhis,* a colloquial term for a female friend. In this chapter, we discuss the overall project design in detail, including the study setting, institutional partners, and sample selection. Additionally, we discuss the operating model for the *Sakhi*-assisted digital optionality, followed by the data collection process, the survey instrument, and the analytical framework employed in the study.

3.1 Study Design and Implementation

The study was conducted over six months, from March to September 2024, in villages across the Alwar and Dausa districts of Rajasthan. The study was implemented in partnership with CRISIL Foundation and Gram Vikas Trust (GVT), a national-level non-profit with strong grassroots presence in Rajasthan. Both CRISIL Foundation and GVT have strong networks in Rajasthan and were, as such, instrumental in providing field expertise and day-to-day operational support. These districts were primarily chosen because the partnering institutions had established a field presence, and the household economic profiles in their catchment areas matched those of typical LISE households. Data were collected every fortnight over 12 rounds in 6 months.

3.1.1 Sample Selection

The study sample was purposively selected. Respondents were required to be adult women meeting two primary criteria. First, respondents were required to have some inflow of money, however small, whether through wages, self-employment earnings, or transfers from family or government. Second, respondents were required to have access to a smartphone, whether their own or one present in the household. The first condition ensured that participants had operational control over their cash flows, i.e., they would be transacting. The second ensured that the digital optionality component applied to them.

Respondents were identified and recruited through GVT. Before data collection began, a trust-building exercise was conducted in both districts to establish rapport among respondents, *Sakhis*, and surveyors. A total of 299 women were enrolled following this process and provided consent to participate. Of them, a small number did not complete all rounds of data collection. After accounting for this attrition, the final analytical sample comprised 293 respondents, of whom 151 were from Alwar, and 142 were from Dausa.

3.2 Digital Optionality through the Sakhi-Assisted Model

For the digital optionality component to function as intended, the participant needed a meaningful opportunity to choose whether to adopt the digital payments application. As such, rather than opting for interventions that actively promote adoption, an ambassador model was chosen. Under this *Sakhi*-assisted model, *Sakhis* helped respondents onboard to the UPI platform by alleviating operational challenges and raising awareness of best practices for UPI transactions. Neither of these two forms of assistance was conditional on the respondent transacting over UPI, i.e., it was not an outbound process (from the *Sakhis*) in which the *Sakhis* would insist on a digital transaction. Instead, it was an inbound process (to the *Sakhis*) which was intended to provide assistance and training for individual transactions only when the respondent expressly requested help. To ensure adequate training of the *Sakhis* and familiarity with the payment service provider's features, the study focused on a single player, PhonePe.

3.2.1 Selection of PhonePe

PhonePe was selected given its strong presence in Alwar and Dausa. At the time of the study, PhonePe QR codes were in use at local shops and merchants in these areas, suggesting that participants were likely to have encountered the application in everyday life, even if they had not used it themselves. This was a field-driven decision and was not the result of an institutional arrangement with PhonePe.

3.2.2 The *Sakhi* Network and The Structure of Assistance

Sakhis are women from the local community who worked as grassroots facilitators under CRISIL Foundation's *"Mein Pragati"* programme, supporting community members to access government schemes, pensions and financial services. Their sustained presence in these villages and the familiarity and trust they had built through this work made them well-placed to support the study's digital optionality component by acting as ambassadors. Thirty *Sakhis* were recruited from the same villages as study participants, with each *Sakhi* responsible for approximately ten participants.

The digital optionality component was not introduced from the get-go. Instead, after the first two rounds of data collection, spanning a month, the digital optionality component was introduced, i.e., starting from Round 3[3]. The choice was made for two reasons: first, it helped us obtain a baseline insight into the money management of the respondents without the digital optionality being present, and second, it afforded adequate time for the *Sakhis* and respondents to overcome any operational hurdles associated with accessing UPI.

The *Sakhi*-assisted model operated in two stages. In the first stage, spanning Rounds 3 to 8, *Sakhis* provided active assistance to participants who chose to engage with PhonePe. This involved supporting participants through the onboarding process, training them on the application's functionalities, and educating them on safety practices, including identifying and avoiding fraudulent transactions. In the second stage, from Round 9 through Round 12, active assistance

[3] See section 3.3 for a detailed discussion on the data collection frequency and the associated rounds.

was discontinued. During this period, *Sakhis* remained available to participants who needed support, but no structured assistance was provided, allowing the study to observe the extent to which adoption was sustained independently.

The *Sakhis* provided non-directive assistance to support UPI adoption, i.e., they guided participants through setup and educated them on safe usage but did not encourage or incentivise adoption. The decision to engage with PhonePe remained entirely with the participant at all stages. This boundary between assistance and direction is central to what the study means by digital optionality: the aim was to ensure that the observed adoption of UPI reflected a choice made by the participant under conditions free from external pressure or incentive.

3.3 Data collection

The study employed three data collection instruments: a demographic survey, a transaction survey conducted during the 12 fortnightly data collection rounds, and a UPI usage and experience survey. The fortnightly interval was chosen because field observations indicated that financial activity in typical LISE households tends to follow a roughly two-week cycle. For example, earnings from petty trade, casual labour, and savings group payouts all typically follow this frequency.

3.3.1 Demographic Survey

The demographic survey captured information across three broad areas. The first was the respondent and household profile, which contained basic socio-demographic details of the respondent and her household, including household composition and the economic activities of household members. The second was income and financial behaviour, i.e., the nature and sources of income flowing into the household, patterns of cash use, and membership in savings groups or other informal financial arrangements. The third was the respondents' extent of digital exposure measured by (a) whether the respondent owned or had access to a smartphone, (b) her familiarity with UPI, and (c) any prior experience with mobile payments. Together, these dimensions were intended to establish the descriptive foundation of the study and the reference point against which the UPI usage and experience thereof are read.

3.3.2 Fortnightly Survey: Design and Modules

The fortnightly survey was designed on the premise that transactions provide an observable entry point into money management, as financial decisions are ultimately expressed through transactions. At the start of each round, enumerators used a memory aid to help respondents recall transactions from the preceding fortnight. This tool comprised a calendar marking the date of the previous visit, weekends, and local festivals, as well as a set of illustrated images depicting common transactions. These prompts were used before the formal survey questions were administered to improve recall of the transactions.

For each transaction, the instrument recorded contextual information tailored to the "transaction type" to capture the purposes, counterparties, and decision-making processes associated with financial behaviour, rather than simply documenting its occurrence. Transaction amounts were deliberately excluded from the instrument to protect the respondent's privacy. This reduced the risk that sensitivity about amounts would constrain open engagement with the relational and purposive dimensions of transactions that the study needed to understand.

Beyond transactions, the instrument was designed to capture two other dimensions of money management: the goals towards which women are working, and the strategies they employed to manage unexpected financial demands. The instrument, therefore, comprised three modules: a transaction module, a goals module, and an unplanned expenses module.

Transaction Module

The transaction module recorded each financial transaction reported by the respondent during the preceding fortnight. For each transaction, the instrument captured its direction (inward or outward), a transaction label describing its nature, the counterparty, the respondent's reason for choosing that counterparty, and the channel used (UPI or cash). Beyond these common fields, additional contextual details were recorded for each "transaction type", with questions tailored to elicit the reasoning and circumstances specific to that type.

Goals Module

The goals module captured the personal and household objectives and aspirations respondents were working toward at the time of each round. For each goal, the instrument recorded its nature, its urgency, the resources already accumulated toward it, and the planned sources of support. Goals ranged from short-term household needs to longer-term aspirations. This module was designed to capture the anticipatory dimension of the planning and effort that precede a transaction and shape financial behaviour even when no transaction occurs in a given round. In the analytical framework, goals-related data provides contextual information about intent that transaction features alone may not fully convey.

Unplanned Expenses Module

The unplanned expenses module recorded the unexpected financial demands that respondents experienced during the survey round, the circumstances that gave rise to them, and the means through which they were addressed. The module provides data on how respondents manage liquidity under conditions of financial uncertainty and on the social and financial resources they mobilise in response.

Table 3.1: Components of the fortnightly survey instrument

Fortnightly Survey Instrument		
Transaction Module	**Goals Module**	**Unplanned Expenses Module**
• Direction (inward / outward) • Transaction label • Counterparty • Reason for choice of counterparty • Use of money received • Channel (UPI or cash)	(Short and long-term aspirations) • Nature of the goal • Urgency of the goal • Resources accumulated • Planned sources of support	• Nature and cause of the expense • How the expense was met • Sources drawn upon to meet expenditure

3.3.3 UPI Usage and Experience Survey

The UPI usage and experience survey was administered in September 2024, following the completion of Round 12. It revisited the dimensions covered in the demographic survey, including financial behaviour and engagement with digital tools, to document any changes over the study period. It also captured respondents' experiences using PhonePe, their assessments of the support provided by *Sakhis*, and their accounts of how digital payments had or had not affected their existing financial practices and relationships. Read alongside the demographic survey, it was intended to provide a before-and-after account of respondents' engagement with digital financial tools over the six months of the study.

3.4 Analytical Framework

The starting point for any analysis under the study is the transaction. A transaction is understood as an exchange of money for any purpose. Beyond the movement of money itself, each transaction record contains information about why money was sent or received, whether an intermediary was involved, who the counterparty was, why that specific counterparty was chosen, and how frequently similar transactions occur, among other details. These characteristics are referred to as "transaction features", and they constitute the primary unit of observation within the analytical framework. Finally, the analytical framework consists of two complementary lenses, "transaction class" and "MMPs". These are discussed below.

3.4.1 Transaction Classes (TCs)

Among the several transaction features available, three are treated as defining: transaction direction (inward or outward), "transaction type" (e.g., Sale of services, Utility Payments, Loan repayments, borrowings or transfers), and counterparty (e.g., Siblings, Neighbour, Customer, Wholesaler, Immediate Family member, Retailer). Appendix A.2 presents a comprehensive list of all "transaction types" and counterparties. These features are considered defining because they are fundamental to all transactions and represent the irreducible characteristics of a transaction. Every transaction necessarily involves a direction of money transfer, a specific economic purpose, and a counterparty. As such, these features provide the minimum information required to characterise and differentiate transactions, making them foundational to the classification framework. A particular combination of these features constitutes a TC. This classification shifts the level of analysis from individual transactions to TCs that share the same defining features, thereby grouping similar transactions together. For example, one TC comprises all "inward" "sales of goods" to "customers", another comprises all "outward" payments for "health expenses" to "Private Hospital", and another comprises all "outward" "transfers" to "children". This allows examination of both variations within TCs and differences across them.

Intra-class analysis focuses on variation among transactions within the same TC, allowing differences in behaviour to be examined while holding the class's defining features constant. Inter-class analysis focuses on differences between TCs, including their prevalence, relational and purposive character, association with money management, and patterns of digital adoption.

3.4.2 Money Management Practices (MMPs)

To understand how women manage money and the purposes that different transactions serve, the framework draws on the work of Mas and Murthy (discussed in detail in the previous chapter), which identifies three MMPs: income shaping, liquidity farming, and animating money. These practices provide a way of interpreting transactions within broader patterns of financial behaviour.

Income shaping refers to managing the timing and amount of income so that receipts align with expenditure needs. In this study, the concept is operationalised more broadly to include all inward transactions used (or intended to be used) to finance expenditures. Income shaping transactions are categorised into regular income shaping and active income shaping. Regular income shaping comprises transactions in which regular inward flows of money are used (or intended to be used) to meet expenses. Active income shaping comprises transactions involving changes in effort, time spent, or quantity sold, as well as other non-typical inward flows, that are undertaken or utilised (or intended to be used) to meet expenditure needs.

Liquidity farming transactions are categorised based on "transaction type", counterparty characteristics, and the motivations underlying the exchange. Transactions are categorised as liquidity farming when they are embedded in relationships of familiarity, reciprocity, obligation, or mutual support, and when these relationships influence the choice of counterparty. This includes participation in informal savings and credit arrangements, transactions undertaken on behalf of others, and transfers associated with family obligations, social events, religious occasions, gifts or donations. The classification also captures situations where individuals exhibit loyalty to particular counterparties or networks, switching only when significantly better terms are available elsewhere. Transactions are generally excluded when the relationship-based element is absent, such as interactions with formal financial institutions motivated primarily by administrative convenience, payments made purely in exchange for technical expertise, transfers to a spouse, or cases in which a respondent acts solely as an intermediary.

Transactions are categorised as animating money based on the intent behind the transaction and the use of its proceeds. A transaction is included in this type where it is undertaken with a specific goal or expense in mind, where its proceeds are used to meet a goal or expense, or where its proceeds are used to save or purchase an asset in which liquidity is stored. Making savings is included in its entirety, reflecting the deliberate setting aside of money for a purpose. Within this framework, drawdown of savings is categorised as animating money when undertaken with a goal or expense, or to save or purchase an asset; additionally, when the stated reason is to put money away and avoid temptation, or to lock in funds. Providing a loan is also included, with the reason cited as putting money away and avoiding temptation, reflecting the use of lending as a means of earmarking funds.

Additionally, the study extends the original Mas and Murthy framework by incorporating information from the Goals module. While transaction features provide substantial information about financial behaviour, they may not always be sufficient to determine the MMP represented by a transaction. Goals data provides additional context on the intentions and aspirations behind financial decisions. The combination of Transactions data and Goals data constitutes the MMP framework in this study.

MMP analysis, therefore, complements TC analysis by shifting attention from the irreducible characteristics of transactions to their role within broader patterns of money management.

3.4.3 Complementary Perspectives

The framework also examines the association between TCs and MMPs. This inquiry arises because TCs and MMPs represent two different, yet equally valid, ways of categorising the same set of transactions. TCs group transactions by observable characteristics, including direction, type, and counterparty, whereas MMPs group transactions by the money management purpose they serve. Since these categorisations are based on different organising principles, it is not evident a priori how closely they correspond.

Some TCs may be closely associated with a single MMP, while others may span multiple practices depending on the context in which they occur. Examining these patterns provides a basis for understanding the association between recurring transactions and their money management.

Additionally, it also serves a critical role in future research. Specifically, because most providers and researchers may not have adequate time or resources to capture the intricate details required for an MMP categorisation, mapping between TCs and MMPs can help estimate MMPs using readily available information in TCs. Admittedly, there is a trade-off between the resolution and ease of data collection. An analysis that bridges TCs and MMPs can help researchers better evaluate trade-offs and select an appropriate data-collection regime.

3.4.4 Digital Migration

Digital migration is examined through the analytical structure established by the TCs and MMPs. At the TC level, it considers whether certain recurring forms of financial activity exhibit higher levels of digitisation. At the level of MMPs, it examines whether income shaping, liquidity farming, and animating money differ in their propensity to be conducted through digital channels. Examining digital migration through these complementary lenses enables it to be understood in relation to pre-existing financial practices rather than as an isolated technological choice.

Taken together, the framework connects individual transactions, TCs, MMPs, and digital migration within a single analytical structure. It provides a basis for understanding how everyday transactions (cashflows) relate to categorically defined MMPs and whether these practices are associated with distinct patterns of digital migration.

In the next chapter, we discuss some of the key findings from the study.

Chapter 4: Research Findings

This chapter presents the observations from the study. We begin by discussing the respondents' profiles and households. Then we move through four interlocking analytical threads: the volume and relational character of everyday financial activity; the money management practices that organise it; the way financial shocks are absorbed; and the pattern of digital migration that emerged. Each thread connects back to the respondent profile, and together they build toward a broader interpretive question, addressed in the final chapter, about what these women are optimising for and what that implies for the place of digital tools within household money management.

4.1 Who Are the Respondents?

The analytical sample comprised 293 women who participated in all stages of the study. The respondents were adult women with access to a smartphone and individual sources of cash flow. As a result, the sample comprised economically active women with some degree of exposure to digital technologies. Although we did not collect data on the income profiles of these households, the economic profiles of the hamlets were generally similar, and all households were in the low-income segment, as confirmed by the field partners and verified during our field visits.

Respondent demographics

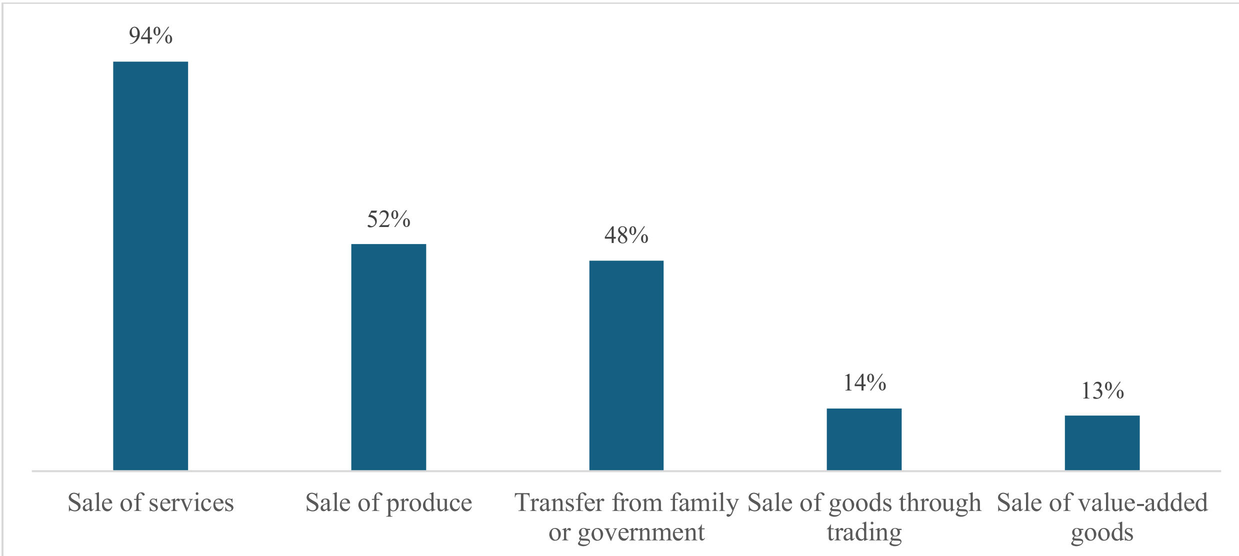
Most respondents were married (95%) and below 40 years of age (90%). Respondents also occupied different positions within their household structures: 37% identified themselves as the household head, while most of the remainder were spouses or daughters-in-law of the identified head. Household sizes ranged from one to more than six members. Nearly three-quarters of respondents (74.6%) lived in households comprising three to six members, with four-member households being the most common (26.8%).

Sources of inflows for the Household

Household inflows originate from a range of sources, and in this report the term refers to all money received by the household, regardless of its source. In addition to earnings generated by household members, inflows include transfers from family members, government programmes, savings withdrawals, loan receipts, and other non-earned receipts. Thus, inflows encompass all money received rather than only income derived from employment or productive activities.

Figure 4.1 presents the broad categories of household inflows reported by respondents. These categories represent the principal sources through which households received money during the study period and provide an overview of the composition of household inflows. Each broad category comprises many specific income-generating activities or other forms of monetary receipts. A detailed breakdown of the activities and receipts included within each category is provided in Appendix A.1.

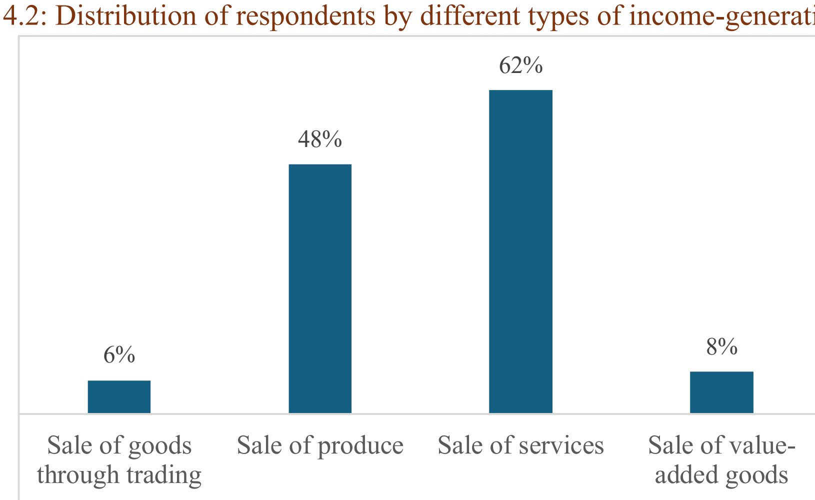
Figure 4.1: Distribution of respondents' households by their source of inflows



Respondents' income-generating activities

Figure 4.2 presents respondents' participation in income-generating activities. Income-generating activities refer to the economic activities through which respondents earned income directly, including self-employment, wage employment, agricultural production, and business activities. Unlike inflows, which include all money received, income-generating activities relate only to earned income.

Figure 4.2: Distribution of respondents by different types of income-generating activities

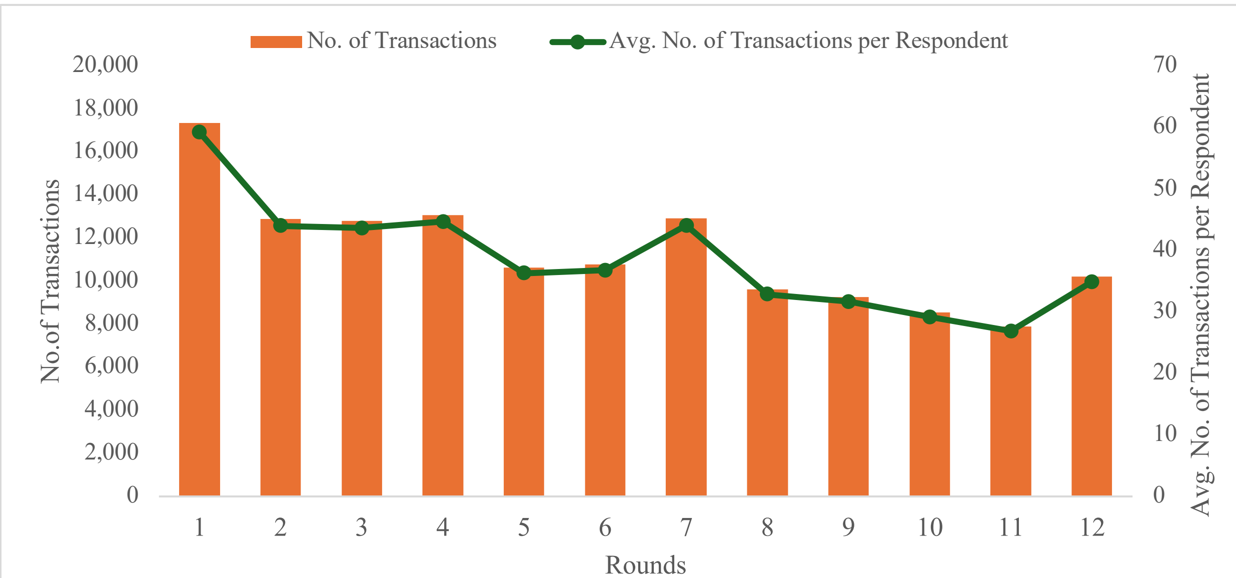


Many respondents engaged in more than one income-generating activity. Participation in income generation was widely distributed across the sample, with 83% of respondents participating in at least one income-generating activity. However, around 11% identified themselves as the primary earner within their household.

4.2 Transaction Intensity and Cash Flow Patterns

The transaction records revealed a high frequency of transactions over the study period. Over 12 rounds of data collection, respondents cumulatively recorded 135,902 transactions, averaging approximately 40 per respondent per fortnight. Respondents also reported an average of 11 distinct "transaction types"[4] per round.

Figure 4.3: Round-wise Distribution of Transactions and Average Transactions per Respondent



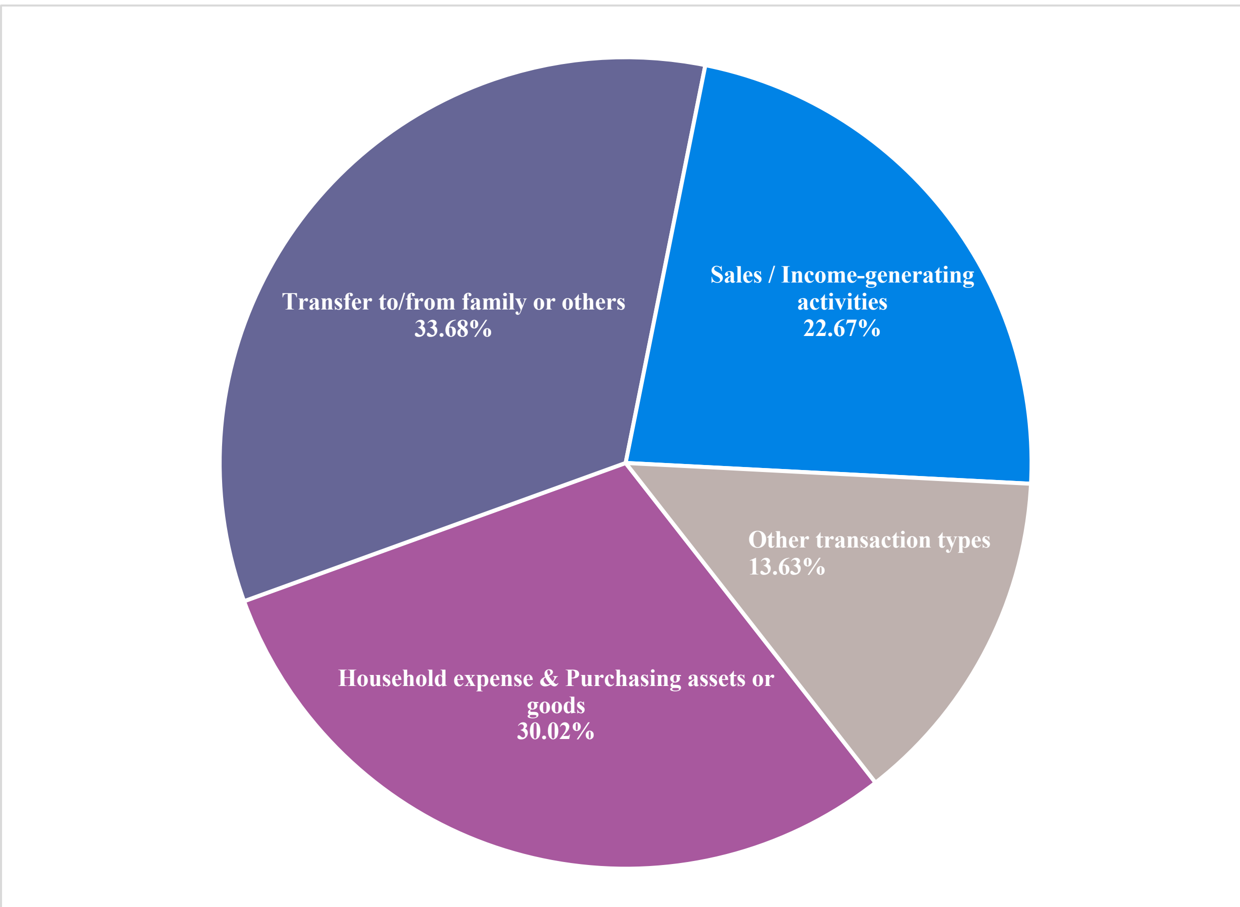
Transaction volumes varied across rounds. As seen in Figure 4.3, the highest transaction volume was recorded in Round 1, with 17,337 transactions,[5] after which transaction counts remained between approximately 9,000 and 13,000 for most rounds. Transaction volume declined during the later rounds before increasing again in the final round. While transaction intensity fluctuated over time, the diversity of transactions remained relatively stable. Respondents cumulatively and consistently reported between 10 and 12 transaction types over the course of 12 rounds, suggesting that changes in transaction volumes reflected changes in the frequency of transactions rather than changes in the range of "transaction types" undertaken.

[4] "Transaction types" refer to the broad purpose or nature of a transaction, such as Sale of produce, Household expenditure, Loan Repayment, Making savings, or Transfers to family or others.
[5] The increased transaction count in Round 1 may have been influenced by the timing of the mustard harvesting season. The higher transaction count may also reflect heightened respondent engagement during the introductory round or fatigue subsequently.

4.2.1 Composition of Cash Flows

The transaction records captured both inflows and outflows of money. Approximately 67% of all recorded transactions were outward, while 33% were inward. Transactions were concentrated within a relatively small number of broad "transaction types", as shown in Figure 4.4. Household expenses and purchases of assets or goods accounted for 30% of all recorded transactions, while transfers to family members and others accounted for a further 25%. Together, these two "transaction types" represented more than half (63.7%) of all recorded transactions.

Figure 4.4: Split of Transactions across Transaction Types



Interestingly, the source of funds influences how money is allocated towards different categories of expenses. Income generated through economic activities was mostly used for business expenses (33.7%), whereas other inflows were primarily used for essential expenses (44.9%).

4.2.2 Categorisation of Counterparties

Each recorded transaction identified the counterparty with whom the respondent transacted. Across the study period, respondents transacted with a wide range of counterparties. While this level of detail captures the diversity of respondents' financial interactions, analysing each counterparty individually would make it difficult to identify broader patterns. Accordingly, the counterparties were grouped into four broader counterparty categories.

The first category, family members, comprises relatives by birth or marriage, including the husband, children, parents, siblings, and extended family members. The second category, non-family individuals, comprises people known personally to the respondent outside the household, such as friends, neighbours, village members, and acquaintances. The third category, commercial counterparties, comprises businesses and other market actors, including wholesalers, retailers, customers, employers, and service providers. The fourth category, non-categorised counterparties, is a residual category comprising delegated transactions in which another household member selected the counterparty on the respondent's behalf, as well as a small number of transactions for which the counterparty could not be categorised consistently. A complete list of the counterparties and their categorisation is provided in Appendix A.3.

Figure 4.5: Distribution of transactions across Counterparty types

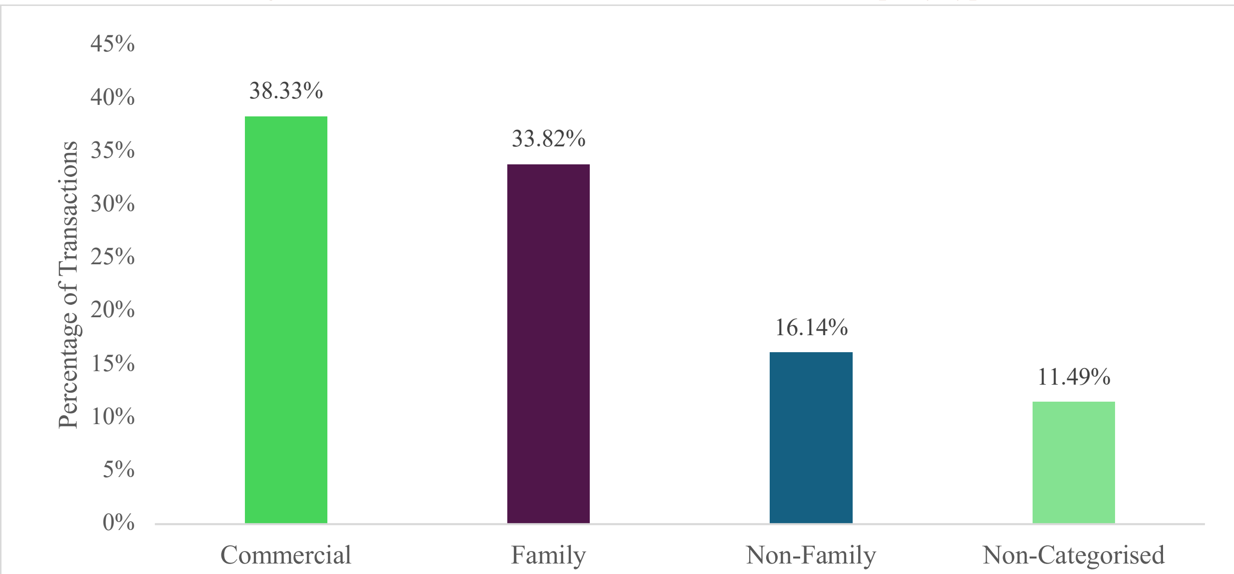


Figure 4.5 presents the distribution of transactions across the four counterparty types. Commercial counterparties accounted for 38.3% of all recorded transactions, followed by family members (33.8%), non-family individuals (16.4%), and non-categorised counterparties (11.5%). At the more disaggregated level, children constituted the single largest counterparty (18.7% of all transactions), followed by wholesalers and retailers (11.7%), customers (10.4%), and aggregated receivers[6] (9.9%).

For the analysis presented in this chapter, the four counterparty types are further grouped into two analytical categories based solely on the nature of the association between the respondent and the

[6] Aggregated Receiver is an aggregation for non-relational counterparties. It captures transactions involving multiple buyers, customers, or recipients who were not individually identified and were therefore recorded under a common category as part of the survey design to simplify data collection and recording.

counterparty. Relational counterparties comprise family members and non-family individuals with whom the respondent has a pre-existing relation. Non-relational counterparties comprise commercial counterparties and the relevant non-categorised counterparties, where no such prior personal relationship is indicated.

When grouped into these two analytical categories, approximately half (49.96%) of all recorded transactions involved relational counterparties, and the remaining half (49.82%) involved non-relational counterparties. This balance suggests that respondents' transactions were distributed almost equally between socially embedded exchanges and market-based transactions.

Table 4.1 examines the association between counterparty type and the primary reasons respondents reported for choosing counterparties. Familiarity, proximity, and social obligation were the most frequently reported reasons for transactions involving family members and non-family individuals. In contrast, transactions involving commercial counterparties were more commonly associated with product quality, price, convenience, and doorstep service. Delegated transactions formed a distinct residual category because respondents generally did not select the counterparty themselves.

Table 4.1: Primary Reported Reasons for Choosing Counterparties categorised by Counterparty Type

Counterparty Category	Primary reasons cited for choice (in order of frequency)
Family	Familiarity, proximity, personal or social obligation
Non-family (relational)	Familiarity, product quality, proximity, technical expertise, social obligation
Commercial	Product quality, better price, doorstep service, proximity, convenience
Non-categorised	Did not choose the seller (delegated transaction)

4.3 Concentration of TCs

Examining transactions at the TC level revealed a high degree of concentration. The 23 most frequently occurring TCs accounted for approximately 80% of all recorded transactions, indicating that most transactions can be categorised into a relatively small number of recurring classes.

Figure 4.6: Top five transaction classes by share of total transactions

As shown in Figure 4.6, which highlights the five most frequently occurring TCs, the largest TC was outward transfers to family (Child), accounting for 18.2% of all recorded transactions and reported by 82.6% of respondents. Household expenses and purchases undertaken through wholesalers or retailers constituted the second-largest TC, accounting for 10.7% of transactions and reported by all respondents. Other frequently occurring classes included sales to customers and acquaintances, household expenditure through delegated or unspecified counterparties, transfers involving husband and other family members, and savings held either at home or through self-help groups and rotating savings and credit associations (ROSCAs).

4.3.1 Transfers and the Circulation of Resources Within Relational Networks

Transfers accounted for many of the TCs that occurred frequently. The largest TC was outward transfers to children, representing 18.2% of all recorded transactions and reported by 82.6% of respondents. Other prominent TCs included inward transfers from husbands (3.2% of all transactions, reported by 90.6% of respondents) and outward transfers to other family members (2.6% of all transactions, reported by 76.3% of respondents).

Most transfers are reported without a specific purpose. Among outward transfers, 85.1% were recorded as having no specific reason, while 3.7% were associated with life events, 3.0% with festivals, and 1.5% with religious events. Similarly, 75.8% of inward transfers were reported as having no particular reason. Transfers linked to life events accounted for 13.8% of inward transfers, followed by festivals (6.7%) and religious occasions (1.9%).

The absence of a stated purpose could indicate that transfers, once received, are used across a range of "transaction types", including household expenses, savings, education, health expenditures, transfers to others, and meeting expenses as they arise. Transfers, therefore, represent a flexible component of household cash flows, moving resources between family members and households without being tied to a specific use.

4.3.2 Household Expenditure

Household expenditure constituted the largest expenditure category in the transaction records and appeared in several of the most common TCs. Household expenditure through wholesalers and retailers accounted for 10.7% of all transactions and was reported by all respondents. Additional household expenditure classes included transactions involving aggregated receivers (4.7%) and transactions where respondents reported not knowing the seller[7] (6.8%).

These TCs show that household expenditure occurred through both direct purchases and intermediated transactions. Intermediaries were involved in 27% of all household expenditure transactions. Among household expenditure transactions involving an intermediary[8], children accounted for 66.4% of intermediaries, followed by husbands (16.7%), other immediate family members (6.8%), and parents-in-law (5.4%). Siblings and neighbours accounted for a much smaller share.

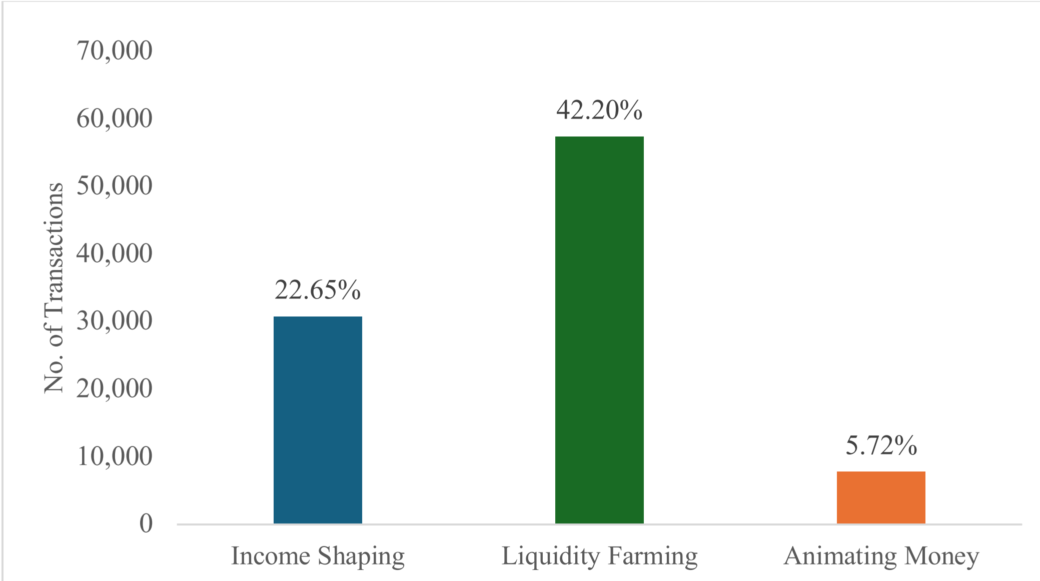
4.4 Money Management Practices (MMPs)

Moving beyond the earlier frame of analysis, i.e., TCs, when we look at the data through the MMP lens, approximately two-thirds (68%) of all transactions get categorised under one of the three MMPs—income shaping, liquidity farming, and animating money. Appendix B captures the detailed conditions and decision rules for the categorisation. As shown in Figure 4.7, liquidity farming accounted for the largest share of all transactions (42.2%), followed by income shaping (22.7%) and animating money (5.7%). Overlap between practices was limited, with only about 3% of transactions exhibiting characteristics of more than one practice. Most transactions, therefore, were mapped clearly to a single MMP.

[7] "Seller unknown" was recorded when respondents reported an expenditure but could not identify the final seller, typically because the purchase was undertaken through an intermediary (by another person on their behalf).

[8] An intermediary is the person through whom an outward transaction was facilitated (e.g., a child sent to pay a shopkeeper) and is conceptually distinct from a transfer made to that same person as the end recipient (counterparty). The survey was designed to distinguish these separately. That is, a child intermediating their mother's grocery payment is not also double-counted under 'transfers to children'.

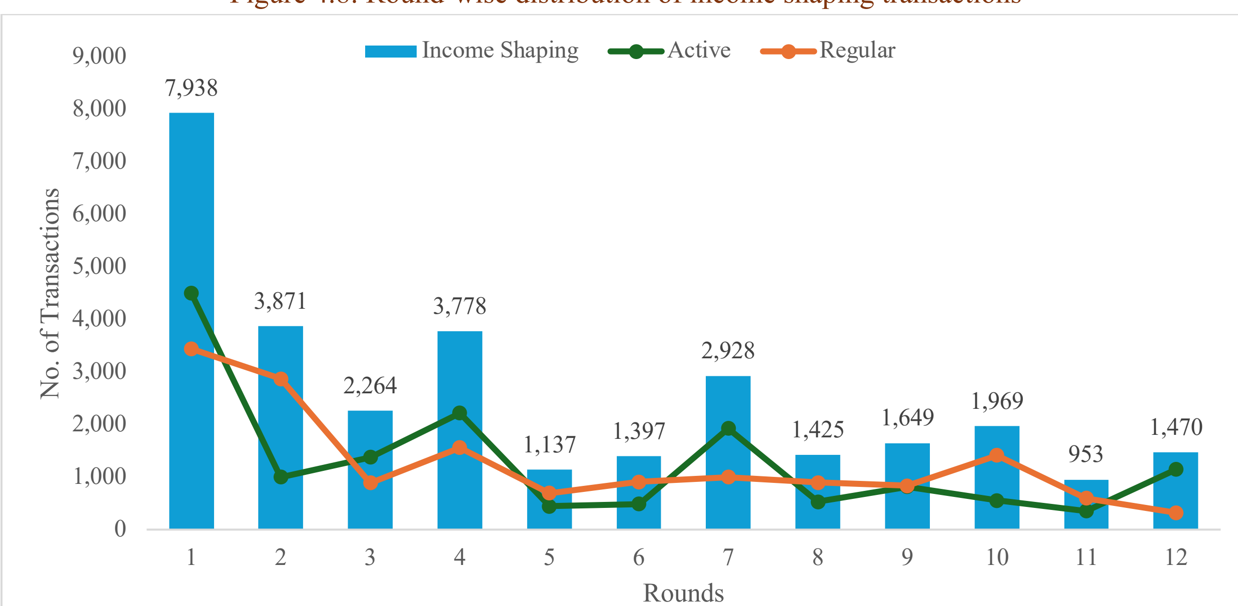
Figure 4.7: Distribution of transactions across MMPs



The distribution of practices also differed by transaction direction. By definition, income shaping applies exclusively to inward transactions and accounted for 69.1% of inward MMP-categorised transactions. Liquidity farming was overwhelmingly outward, with 90.7% outward transactions compared with 9.3% inward transactions. Animating money was more evenly distributed between inward and outward flows, accounting for 47% inward and 53% outward transactions. These differences point to distinct ways in which respondents manage income, relationships, and savings.

4.4.1 Income Shaping: Navigating expenses through Regular and Active Shaping

Figure 4.8: Round-wise distribution of income shaping transactions



Income shaping accounted for 30,779 transactions, representing 22.7% of all recorded transactions. Income shaping was further categorised into two related practices: regular income shaping, which refers to the management of regular income flows, and active income shaping, which captures deliberate efforts to manage the quantum and timing of earnings through additional work, time, or sales. These transactions were almost evenly distributed between active (50% of income shaping transactions) and regular (50%) forms. Both occurred throughout the study period, though transaction volumes fluctuate between rounds. Differences in round-wise patterns suggest that respondents shifted between relying on regular income flows and actively increasing earnings in response to changing circumstances, as illustrated in the detailed round-wise distribution in Figure 4.8 above.

Income-Generating Activities and Active Income Shaping

Income-generating activities map significantly to active income shaping, consistent with the round-wise fluctuations observed across the study period. The pattern reflects the unstable and irregular nature of respondents' income flows: sales of services were mapped primarily to active income shaping (46%), while sales of produce (31%), goods through trading (44%), and value-added products (24%) showed similar patterns. That a substantial share of income-generating activity falls under active income shaping suggests that respondents were frequently making deliberate efforts to increase earnings in anticipation of known but irregular expenditure demands, rather than drawing on stable, regular income sources. This was particularly evident during periods of higher demand, such as festivals, functions, and wedding seasons, which are also times with increased expenditure needs. These patterns are consistent with the broader livelihood profile of respondents: 61.8% depend on seasonal or occasional income-generating activities, and 22.5% report no fixed income frequency.

Loan Receipts, Savings Withdrawals, and Regular Income Shaping

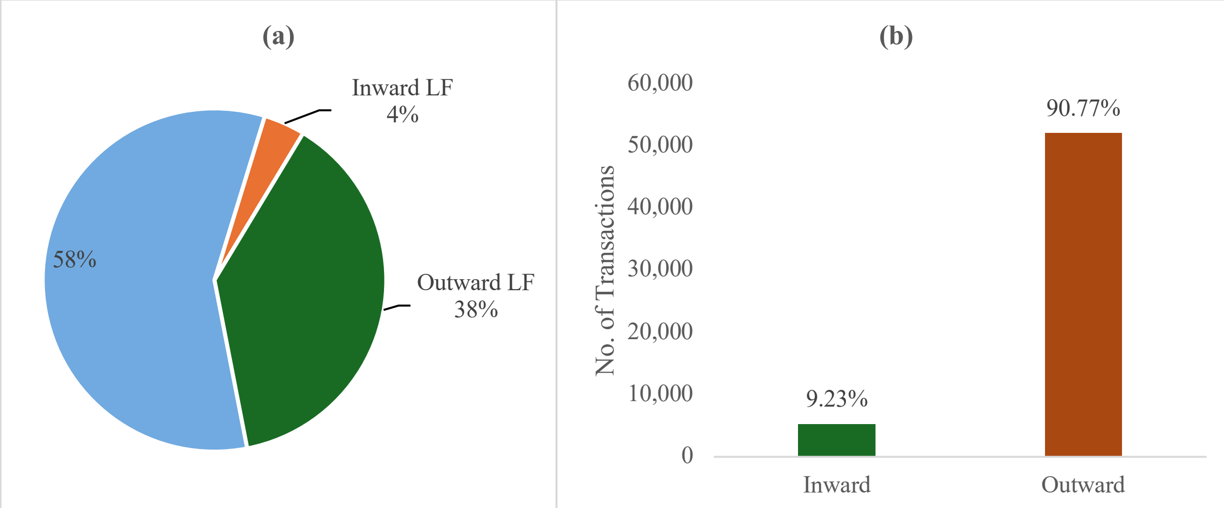
Loan receipts (82%), savings withdrawals (54%), and payouts from savings or insurance products (50%) were most frequently categorised as instances of regular income shaping. This pattern suggests that respondents viewed borrowing and savings withdrawals as regular sources of inflow for managing their cash flow requirements between income receipts.

These findings suggest that gaps between income receipts were a structural feature of respondents' financial lives rather than exceptional events. Borrowing and savings withdrawals were routinely used to bridge these gaps, and relational lending networks provided a dependable source of liquidity. Accordingly, these transactions were categorised under regular income shaping because they formed part of the ongoing management of anticipated cash flow needs, irrespective of the expenditure that prompted them.

4.4.2 Liquidity Farming: Outward, Sustained, and Dominant

Liquidity farming accounted for 65% of all MMP-mapped transactions and, as shown in Figure 4.9(a), approximately 42% of all recorded transactions, making it the most prevalent MMP in the dataset.

Figure 4.9(a): Share of liquidity farming transactions in total transactions
Figure 4.9(b): Inward and Outward liquidity farming transactions



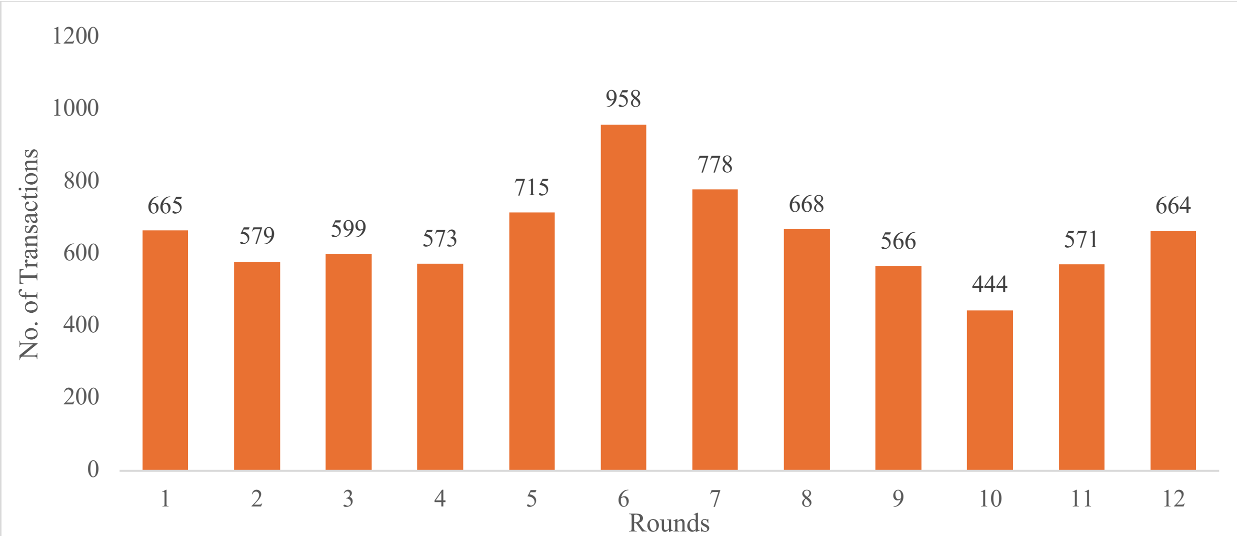
As seen in Figure 4.9(b), more than 90% of liquidity farming transactions (57,363) were outward flows, and only 5,293 were inward flows. This pattern was observed consistently across all twelve rounds of the study. Sustained outward resource flows, therefore, characterised the practice, while inward flows occurred less frequently and were concentrated at particular times and circumstances.

The distribution of liquidity farming across "transaction types" further illustrates its prominence. We were able to categorise 88% of Transfers to family members and others, 92% of loans provided, and 95% of loan repayments as liquidity farming. Thus, liquidity farming was also evident in expenditure-related transactions. In this context, expenditure was not solely directed towards meeting immediate consumption needs but could also serve to maintain and strengthen social relationships and networks of mutual aid that may later provide financial or practical support. Among expenditure, 53% of education expenditure transactions and 43% of household expenditure transactions were categorised as liquidity farming. This reflects the extent to which expenditure-related transactions were embedded within pre-existing social relationships, with counterparties and intermediaries mostly chosen based on familiarity, social obligations or reciprocity rather than purely on market-based considerations. In some cases, expenses were incurred on behalf of individuals outside the respondent's own household. These patterns suggest that expenditure-related transactions were not solely a means of meeting consumption needs but also served to sustain and reinforce relationships that could be mobilised for support in times of need.

4.4.3 Animating Money: Designating Resources for Future Use

Animating money accounted for 7,780 transactions, representing 5.7% of all recorded transactions. Within the MMP framework, animating money refers to assigning funds to a specific purpose and separating them from general household cash flows until they are needed.

Figure 4.10: Round-wise distribution of Animating Money transactions



Animating money was distributed relatively evenly between inward and outward transactions. Of all animating money transactions, 46.9% were inward, and 53.1% were outward. This relative balance between inward and outward transactions reflects both the movement of resources into designated pools of money and their subsequent withdrawal. Although animating money accounted for a relatively small share of overall transactions, it was consistently observed across all 12 rounds of the study, with some variation in intensity, as illustrated in Figure 4.10.

4.4.4 MMPs and Relational Counterparties

Overall, 63% of all MMP-categorised transactions involved relational counterparties, compared with 37% that involved non-relational counterparties. Relational transactions were more likely to be mapped to an MMP: 85% of transactions involving relational counterparties mapped to an MMP category, compared with 50% for non-relational transactions.

The distribution of practices differed across the two counterparties categories. Among transactions involving relational counterparties, 70% were categorised as liquidity farming, compared with 48% among non-relational counterparties. Correspondingly, 71% of all liquidity farming transactions involved relational counterparties. The association between liquidity farming and relational transactions is therefore particularly strong.

This pattern extends beyond liquidity farming. More than half (55%) of income shaping transactions involved relational counterparties, indicating that income generation is also embedded in existing social relationships. Animating money was more evenly distributed between the two categories, although it accounted for a larger share of MMP transactions involving non-relational counterparties (15%) than those involving relational counterparties (5%). Together, these suggest that, irrespective of the analytical lens, the social embeddedness of households remains a prominent feature, observable through the network of counterparties they interact with. We discuss the implications of the findings later in the report.

Additionally, when studying the income shaping activities, specifically, on the sale of produce and services, the importance of relational counterparties is evident, since 24.6% of the respondents reported that they would have sold the produce or services outside their relational network only for a higher price, whereas 9.7% of respondents mentioned that they would not have sold to a non-relational counterparty. We will discuss the implications in greater detail in the next chapter.

4.4.5 MMPs by Earning Status and Participation in Household Decisions

The average number of MMP-categorised transactions per respondent showed limited differences when measuring the frequency for liquidity farming and animating money by earning status. As shown in Table 4.2, earning and non-earning respondents recorded similar average numbers of liquidity farming and animating money transactions. As one would expect, Income shaping, by contrast, differed markedly by earning status: earning respondents recorded a substantially higher average number of income shaping transactions than non-earning respondents, and this difference was statistically significant.

Table 4.2: Average Number of MMP Transactions per Respondent by Earning Status

MMP	Non-earning respondents (mean)	Earning respondents (mean)	p-value
Liquidity farming	192.3	188.5	0.907
Animating money	15.8	12.4	0.315
Income shaping	7.2[9]	60.4	0.009**

*Note: p-values from two-sample t-tests comparing means across earning status. ** denotes significance at the 1% level.*

The absence of a significant difference in the average number of liquidity farming and animating money transactions indicates that non-earning respondents engaged in these two MMPs to an extent statistically indistinguishable from earning respondents. Despite not generating income directly, non-earning respondents cultivated relational networks for liquidity and set aside resources for future use at rates comparable to their earning counterparts.

Importantly, earning status did not correspond directly with respondents' household roles. Among respondents who did not identify as earning members of their household, 28% identified themselves as the household head, compared with 39.5% of earning respondents. While this proportion was somewhat lower among non-earning respondents, more than a quarter nonetheless occupied this role despite not generating income directly. This suggests that participation in household decision-making, as reflected by respondents' identification as the household head, did not depend solely on earning status. Accordingly, the analysis was extended to examine whether

[9] Income shaping is closely associated with income generation; however, non-earning respondents may also record income shaping transactions through loans, withdrawals from savings, or other financial inflows used to meet household or personal expenditures. The non-zero mean for non-earning respondents, therefore, captures the management of such inflows rather than participation in income-generating activities.

the pattern of MMPs differed among earning respondents who were either the household head or the primary earning member.

Table 4.3: Average Number of MMP Transactions per Respondent by Combined Earning and Household Decision-Making Status

MMP	Other respondents (mean)	Earning respondents who were either the Household Head or primary earner (mean)	p-value
Animating Money	12.98	13.07	0.09
Income shaping	41.53	69.49	27.96
Liquidity farming	188.06	191.14	3.08

*Note: p-values from two-sample t-tests comparing means across earning status. ** denotes significance at the 1% level.*

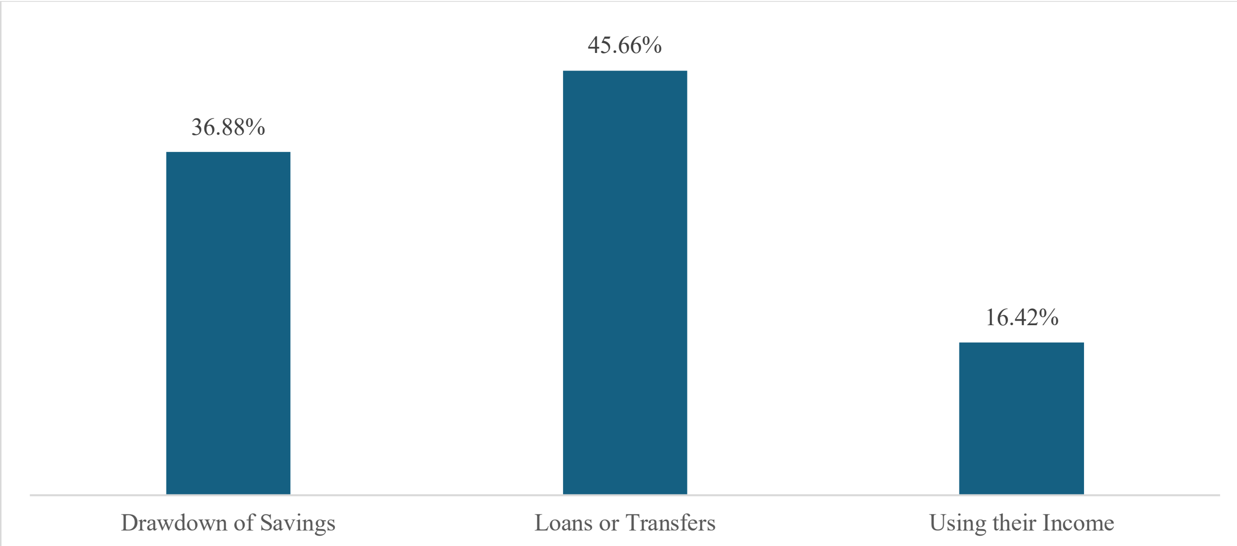
The same pattern was observed when respondents were grouped according to whether they were both earning members and either the household head or the primary household decision-maker (Table 4.3). Respondents in this group recorded substantially more income shaping transactions than all other respondents, again reflecting the close association between income shaping and engagement in income-generating activity. By contrast, engagement in animating money and liquidity farming remained broadly similar across the two groups. We return to the implications of these findings in Chapter 5.

4.5 Managing Unplanned and Unexpected Expenses

The preceding analysis showed that liquidity farming constituted the dominant MMP in the dataset and that a substantial share of financial activity was organised through relational networks. The importance of these relationships becomes particularly evident when respondents face unplanned or unexpected expenditures.

Among reported unexpected expenditures, illness was the most common trigger, accounting for 35% of cases, followed by regular expenses that arose without a specific planned purpose (28%) and social events (15%). Unexpected expenditure, therefore, extended beyond exceptional shocks and included regular financial pressures and social obligations that required resources at short notice.

Figure 4.11: Sources of funds used to meet unplanned and unexpected expenses



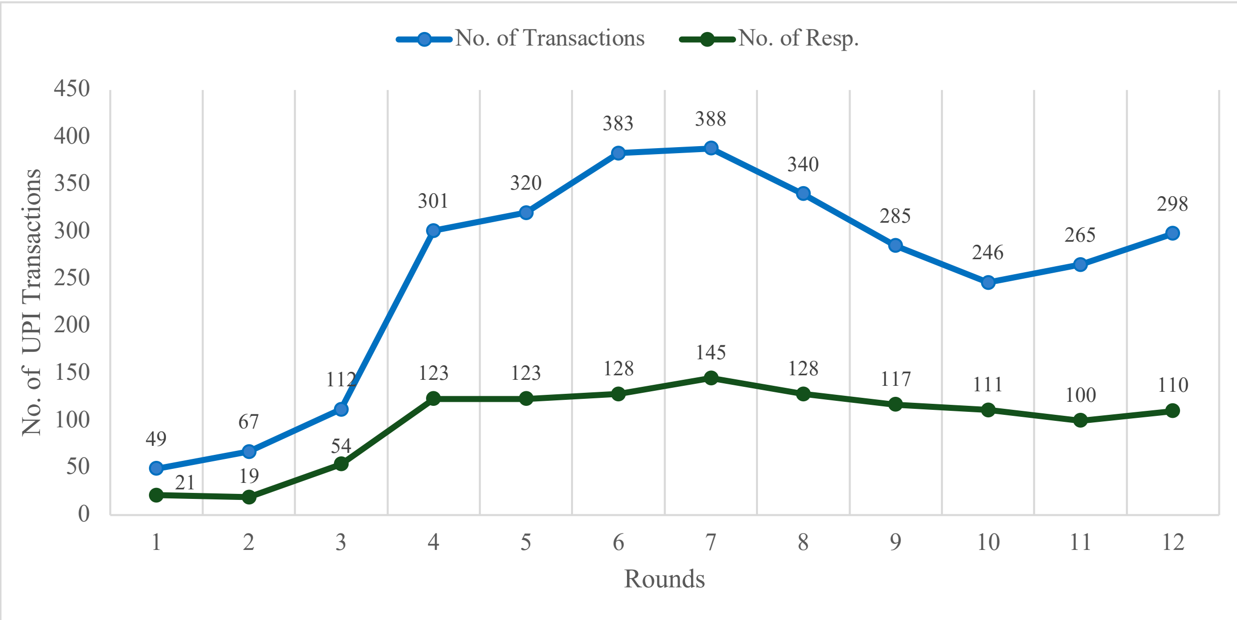
The sources of funds used to meet these expenses reveal a clear pattern. As seen in Figure 4.11, nearly half of the respondents (45.7%) relied on loans or transfers, while 36.9% drew down savings. Only 16.4% reported meeting these expenses directly from current income (See Appendix C for the detailed breakdown of reported sources of funds). Formal financial institutions and moneylenders did not feature prominently among the reported sources of funds. Instead, respondents primarily relied on resources readily accessible through savings or existing social and financial relationships.

These findings are more readily understood when considered alongside the earlier evidence that the majority of liquidity farming transactions were outward. Respondents more frequently provided transfers, loans, and other forms of support than they received them, suggesting that tending to reciprocal relationships did not depend on an immediate quid pro quo. Rather, liquidity farming appears to have been valued as an ongoing practice of maintaining social ties and contingency planning. Although relatively few contingencies arose during the study period, limiting opportunities to observe subsequent reciprocation, this pattern indicates that respondents invested in relationships as part of their money management, with value extending beyond immediate financial need.

4.6 Digitisation and the Migration of MMPs

The central objective of this study was to examine whether respondents' financial practices lend themselves to digitisation, and whether patterns of digital migration can be observed at the levels of transactions, TCs, or MMPs. Understanding these patterns is important not only for analysing financial behaviour but also for informing the design of digital financial services intended for LISE households.

Figure 4.12: Round-wise distribution of UPI transactions and respondents



Over the study period, 233 of 293 respondents (79.5%) conducted at least one UPI transaction. A total of 4,620 UPI transactions were recorded out of 135,902 transactions observed across all rounds. While UPI accounted for only 3.4% of all recorded transactions, adoption was widespread, with 4 out of 5 respondents reporting using UPI at least once during the study period. The number of UPI transactions and respondents using UPI increased substantially during the onboarding and training phase (Rounds 3-8) and reached a peak towards the end of the period of active assistance (Rounds 7-8) and remained substantially higher than pre-training levels even after active assistance was withdrawn (see Figure 4.12 for a detailed breakdown of these trends). The findings below examine this migration at three levels: individual transactions, TCs, and MMPs.

4.6.1 Which Transactions Migrated to Digital?

The distribution of UPI transactions across TCs reveals that digital migration did not occur uniformly across financial activities. Household expenditure, utility payments[10], and transfers accounted for a substantial share of recorded UPI transactions, indicating that frequently occurring transactions were among the earliest to migrate to digital channels.

The single largest UPI transaction class was outward household expenditure directed to wholesalers and retailers, accounting for 627 transactions and involving 120 respondents. Utility payments made through mobile channels accounted for an additional 455 transactions and were reported by 120 respondents. Standardised payment amounts characterised these “transaction

[10] Household expenditure refers to payments for everyday consumable goods, such as food, groceries, and other household necessities, purchased from wholesalers and retailers. It excludes utility payments, which are treated as a separate TC because they comprise recurring payments for services such as electricity, mobile recharges, and similar bills.

types", along with clearly identified recipients and relatively low coordination requirements, making them well-suited for digital execution.

Transfers within family networks were the next-largest group of UPI transactions. Inward transfers from husbands accounted for 351 transactions and were reported by 97 respondents, while outward transfers to husbands accounted for 301 transactions reported by 80 respondents. Transfers involving siblings and other immediate family members also appeared prominently among the most common UPI TCs. Together, these findings indicate that digital migration is not limited to commercial transactions but extends to the circulation of resources within households and networks of mutual aid.

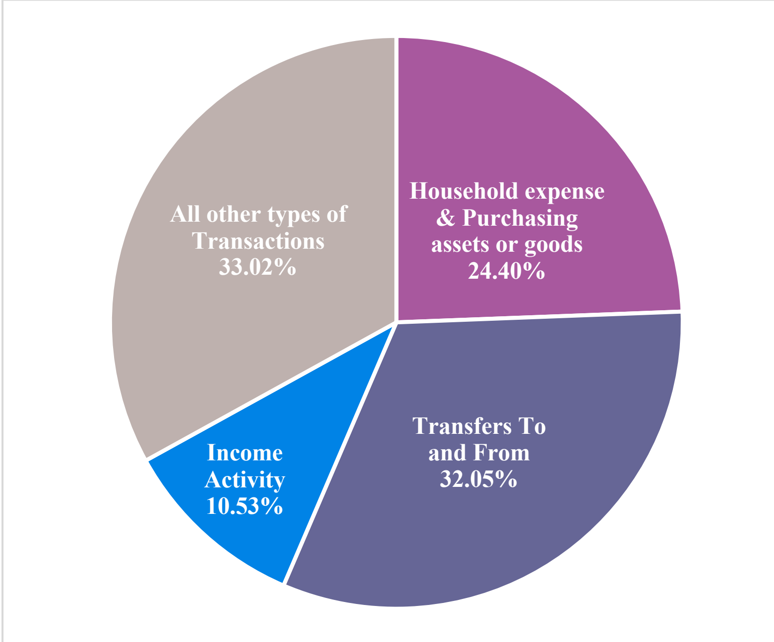
Several TCs also exhibited relatively high levels of digitisation when measured against their total transaction volumes. More than half of all utility payments (51.3%), loan receipts from siblings (51.5%), loan repayments received from siblings (66.7%), and loans provided to siblings (71.6%) were conducted through UPI. Given that the sample comprised predominantly married women and siblings were not recorded as members of respondents' households, these transactions are likely to have involved siblings living outside the household. UPI may therefore have been preferred for these transactions, whereas cash transactions with siblings were recorded mainly during customary or ritualistic occasions when in-person interaction was likely.

The evidence, therefore, points to a selective pattern of migration. Commercial payments and utility transactions were among the earliest transaction classes to migrate, and relational transactions followed closely behind. Digital adoption did not appear confined to market exchange; rather, it was incorporated into both commercial and relational financial activities.

4.6.2 Digitisation and the Persistence of Relationship Management

The composition of UPI transactions broadly reflected the overall distribution of transaction types observed during the study (Figure 4.13). Transfers accounted for the largest share of UPI transactions (32.1%), followed by household expenditure and purchases of assets or goods (24.4%), while income-generating activities represented a comparatively smaller proportion (10.5%).

Figure 4.13: Split of transactions across transaction types for UPI transactions



As discussed in the previous section, many of these TCs, including family transfers, loans, and loan repayments, were already embedded within reciprocal relationships that respondents relied upon for access to liquidity and support. This suggests that digitisation occurred by incorporating an additional payment mechanism into pre-existing financial practices rather than by creating new patterns of financial exchange.

The migration of these transactions to digital channels, therefore, appears to represent continuity rather than substitution. The same relationships through which money, credit, and support circulated continued to structure financial activity after digitisation. The changes occurred in the mechanism for transferring resources. UPI reduced the importance of physical proximity and facilitated the quick movement of funds, but the pre-existing relational networks remained central.

This finding is particularly relevant when considered alongside the discussion of liquidity farming in the previous chapter. Many of the transactions that migrated to UPI—family transfers, loans, and loan repayments—were the same TCs through which respondents maintain and access relational sources of liquidity. Digitisation, therefore, appears to extend the operational reach of these networks of mutual aid rather than replace them with impersonal or purely market-based forms of exchange.

4.7 Interpreting the Purpose of Money Management

The findings presented in this chapter establish that the respondents are deliberate managers of money who make intentional financial decisions. They earn income through multiple income-generating activities while also drawing on diverse sources of inflows, make decisions across a diverse range of "transaction types", move resources through both relational and commercial counterparties, and do so at a volume and regularity that point to sustained financial engagement rather than intermittent participation.

Resources repeatedly move outward through transfers, lending, delegated expenditure, reciprocal exchanges, and other transactions involving relational counterparties. Liquidity farming, the most prevalent MMP in the dataset, indicates that a substantial share of transactions, across cash and digital channels alike, is directed toward maintaining and shaping the relationships through which resources circulate, rather than toward retaining those resources under individual control.

Household expenditure provides further insight into the purpose of money management. TC analysis indicates that the classification of expenditure varies systematically according to the counterparties. 79% of expenditures involving family members as counterparties were mapped to liquidity farming, compared with 56% for neighbours and 47% for village members. These findings suggest that household expenditures conducted through relational counterparties are frequently associated with the same money management practices that characterise transfers, lending, and other outward resource flows. Meeting household needs, therefore, appears to involve more than the acquisition of goods and services alone. Consistent with this interpretation, respondents cited familiarity, proximity, and social obligation as their primary reasons for selecting these counterparties in nearly 98% of relational transactions. The findings therefore suggest that the counterparties through whom expenditure is conducted are not incidental to the transaction itself, but form part of the broader social and financial relationships within which money management takes place.

The function of these relational networks extends beyond everyday transactions. As discussed earlier, when respondents faced illness, social obligations, or other unexpected demands, nearly half (45.66%) relied on loans or transfers from within their relational networks, drawing on the same counterparties with whom they transact regularly. The data, therefore, point to the presence of a system of support that operates through relationships having a social character rather than formal financial instruments and is well-suited to managing the kinds of needs that arise in the course of low-income financial life. This should not, however, be understood as reducing liquidity farming to an instrumental exchange of money for future financial assistance. As discussed earlier in the report, the relationships maintained through these transactions involve family members, neighbours, village members, and other counterparties whose significance in respondents' lives extends well beyond any single transaction or moment of need, providing access not only to liquidity and financial support but also to cooperation, flexibility, and other forms of non-material assistance that matter in the management of everyday life. The prominence of liquidity farming, therefore, points to the importance of relationships themselves as a constitutive part of respondents' financial lives, rather than merely as channels through which money flows when required.

Understanding women's financial activity, therefore, requires attention not only to the acquisition and allocation of resources but also to the relationships maintained through their movement. The nature of this process and its implications for how women's financial agency is conceptualised are explored in the following chapter.

Chapter 5: Situating MMPs in the context of Women's Economic Empowerment

The preceding chapters established that women play an active role in managing the financial lives of low-income households. They shape household incomes, mobilise liquidity by cultivating networks, respond to contingencies, coordinate expenditures, and maintain social relationships that enable households to access support during periods of stress. Critically, these activities occur irrespective of women's earning status. Non-earning women participate just as actively in financial management and identify themselves as primary decision-makers within the home.

These findings challenge the traditional interpretation of women's intra-household roles. Existing literature recognises that women manage routine expenditures and savings, but remains focused on narrower aspects of transactions, exploring who spends, on what, and in what quantities (Kamath & Dattasharma, 2015; Ghosh & Vinod, 2017; Bahl, 2023; Tiwari & Dubey, 2024). While useful for mapping consumption patterns, this distributive lens reveals little about the strategic functions these activities serve, which remain hidden in such measurements. Specifically, it obscures how financial management is used to navigate uncertainty, sustain relationships, and build resilience.

Household financial management in LISE households extends well beyond resource allocation to encompass the continuous management of chronic insufficiency, instability, and illiquidity. Women are not merely deciding how money is spent; they are ensuring that money exists when needed. This distinction fundamentally changes how we should view agency and empowerment.

To explore these implications, this chapter discusses our empirical findings from the previous chapter within the broader Women's Economic Empowerment (WEE) literature (specifically, those predominantly anchored in the discipline of economics). It argues that while dominant frameworks provide valuable insights into individual bargaining power, they are less equipped to account for agency exercised through uncertainty management and the cultivation of social relationships. This chapter proposes an alternative frame that positions household financial management and the production of resilience at the centre of discussions on agency, empowerment, and digital financial product design. However, before introducing such an analytical frame, it is important to discuss the prevailing discourse in WEE literature.

5.1 Misalignment of Women's Economic Empowerment Literature and LISE Household Realities

Contemporary discourse around women's economic empowerment is largely organised around individual agency, bargaining power, and formal economic participation. Dominant frameworks, such as those articulated by Jayachandran & Voena (2026), define empowerment both as a person's current power and the process through which those previously denied strategic life choices acquire it. Within this paradigm, a woman's bargaining position within the household is treated as a direct function of her independent economic leverage.

The determinants of this leverage are well established within the literature, with a focus on labour market participation, asset ownership, access to formal financial resources, inheritance rights, and viable outside options. The underlying logic is that individuals with independent means of support can negotiate intra-household allocations more effectively, resist unfavourable arrangements, or exit them altogether. Consequently, formal employment and asset ownership occupy privileged positions in empowerment strategies.

Alongside this focus on leverage sits an analysis of structural barriers. Interventions routinely target formal institutional constraints, which Bordoloi et al. (2025) identify as workplace policies, occupational segregation, employer bias, and the structural undervaluation of women's work. It is argued that such formal constraints are complemented and reinforced by semi-formal constraints, such as self-reinforcing gender norms that encourage women to voluntarily take on domestic caregiving responsibilities.

The issue of gender norms is taken on by Field et al. (2026), who focus particularly on the role of the male breadwinner archetype[11] in limiting women's economic participation. While they acknowledge the historical role of biological differences in shaping divisions of labour, they argue that contemporary constraints are increasingly sustained through institutional reinforcement[12] and self-policing.

Together, these perspectives have some merit in articulating concerns about women's dignity and capacity for self-determination around the world. Yet, they also fall short in describing the full picture, especially in light of our work in this study. This is because their core proposition appears to be that "removing structural constraints leads to increased economic participation, which builds stronger bargaining power and ultimately results in greater individual autonomy." Firstly, this is a problematic claim because it conflates the idea of a "constraint" with the idea of a "norm". Constraints simply limit action. Norms, on the other hand, regulate action. There is a deeper purpose that norms serve in society, in terms of cohesion and cooperation, that the literature on WEE does not directly address or account for. We will return to this point in the next sub-section. Secondly, and more pertinent to our study, the claim's foundational assumptions are informed by a singular and exclusive perspective on women's intra-household agency, that is, a bargaining perspective, and this does not align with the lived realities of LISE households.

The first misalignment concerns the nature of power itself, which, according to WEE literature, is viewed as an individual's ability to maximise personal preferences or achieve independence. Thus, agency is presumed to reside in autonomy and empowerment and is therefore already unanchored from family or community networks. However, in resource-scarce environments, survival is

[11] This archetype refers to the "male breadwinner norm", which assigns men to market work and women to domestic duties and care work.

[12] By institutional reinforcement, Field et al. (2026) refer to labour laws that constrain women's decisions to participate in the labour force, the threat of backlash or intimate partner violence that women are faced with for non-compliance with the gender norm, as well as the shaping of attitudes by religions that place emphasis on distinct roles for men and women, and educational institutions that reinforce gender stereotypes.

fundamentally organised through relationships. LISE households rely on dense networks of mutual support, reciprocal obligations, and the collective safety nets they create to manage contingencies. For example, when faced with contingencies, they rely on relational networks. Another example of this mutual dependency is evident in respondents' willingness to accept lower prices within their relational networks. Under these conditions, "dependence" as framed by the WEE literature and "agency" are not binary opposites. The social relationships that impose obligations are also the channels that provide critical access to resources, information, and life-saving liquidity.

The second misalignment concerns the nature of the economic problem facing households. Bargaining models assume an atomised individual trying to maximise their choices by controlling resources; i.e., the existence of those resources is a given. As such, whoever brings in the resource becomes the ultimate arbiter of who holds the bargaining power, and it is presumed that usually they arrogate it to themselves. However, it is hardly the case that the resources are always generated by the men of the household. Our data favours a more nuanced view. A substantial proportion of non-earning respondents identified as primary decision-makers, describing financial choices as collaborative rather than unilateral. This suggests that intra-household influence is not merely a byproduct of wage-earning. Instead, women may derive influence from a generative set of activities that create the conditions under which resources become available in the first place. This is not to say that men do not, but to say that these aspects are unaccounted for in the discussed WEE literature. When households face chronic uncertainty, power stems not from the ability to distribute wealth but from the capacity to build household resilience.

Essentially, by treating formal labour force participation and independent asset ownership as the primary benchmarks of empowerment, the WEE literature largely ignores non-market forms of agency. Our findings show that women exercise deep strategic influence and protect household well-being often entirely outside the formal wage labour market, suggesting an incompatibility between the dominant perspective in WEE literature and how "power" manifests on the ground.

5.2 Household Financial Management as the Production of Resilience

A household that can manage a sudden health shock without a distress sale of assets or navigate a lean harvest without skipping meals possesses systemic capabilities that income metrics fail to reflect. As discussed previously, through active income shaping, women supplement and stabilise household cash flows. Through liquidity farming, they strategically save and borrow within their community. Through animating money, they provide for contingencies.

Understanding these practices requires adopting the concept of relational agency, which, as Thomas et al. (2025) argue, emerges through collective welfare, social cohesion, and managed interdependence rather than being expressed solely through individualised autonomy and personal advancement. Individuals pursue financial goals not in isolation, but through deep relationships with others.

Kusimba's (2018) work extends this insight directly into financial ecosystems. Studying practices within informal financial networks, she argues that agency emerges not primarily through the accumulation or individual isolation of money, but through the ability to use money to establish oneself as a connected and trustworthy member of society. Financial transactions in low-income communities are therefore rarely just economic exchanges; they are mechanisms through which social relationships are forged, maintained, and leveraged. The data collected as part of the project underscores this social logic.

The findings suggest that women play an active role in maintaining this social infrastructure. By managing day-to-day liquidity flows, they maintain the networks of trust upon which households' resilience depends. This perspective challenges the assumption that collective household welfare and women's empowerment are inherently in conflict. Within bargaining frameworks, prioritising family survival over personal advancement is often pathologised as a symptom of low bargaining power. In reality, activities that enhance household resilience simultaneously elevate a woman's standing within the household and in the community. Her influence is derived from her capacity to coordinate relationships, sustain networks of reciprocity, and navigate interdependence. The WEE literature has frequently attributed women's tendency to derive power from actions oriented towards household resilience and relational agency to the influence of prevailing social norms. Even though social norms are routinely framed in WEE literature as structural barriers to be eradicated, they simultaneously dictate the social behaviour that makes local trust enforceable and mutual obligations binding. Empowerment, therefore, cannot be achieved by pitting individual agency against social norms. Social norms are slow-moving, sticky, prone to backlash, ethically complex, practically challenging, subject to unforeseen consequences, and only partly manipulable by interventions (Guiliano, 2026; Moscona et al., 2026). In practice, women exercise agency through the strategic navigation of norms, selectively invoking, adapting, or even circumventing them to achieve their household's goals[13].

The discussion above echoes Albert Hirschman's distinction between trait-making and trait-taking approaches to development. Trait-making approaches attempt to forcefully transform social realities to fit external, idealised normative frameworks. Conversely, trait-taking approaches begin with existing social realities as a baseline and seek to design interventions that operate effectively

[13] For example, interventions that incorporate an understanding of the challenges of going against the norm into their design have been successful without inviting backlash. For instance, training women in intra-household communication skills was found to be instrumental in helping them face opposition to their employment from their husbands (Kala & McKelway, 2025). Similarly, invoking cultural and religious narratives to justify women's economic engagement has also proven successful (Field et al, 2026, Bordoloi et al., 2025). Roomi et al. (2018) discuss how Pakistani women entrepreneurs strategically used figures from religious texts, cultural practices based on religious teachings and tribal traditions to justify and legitimise their business activities. Kusimba (2018) examines Kenyan women who invoke gender norms to secure access to financial resources.

within them.[14] While norms may be prevalent across countries, understanding the historical and cultural contexts in which they emerged and are observed is necessary to trace their perpetuation and compliance. For instance, interventions focused on improving women's "ability to communicate assertively yet cooperatively" or "persuading men to share power" can empower women by strengthening their power within their marriages and households (Jayachandran & Voena, 2026), while eliminating the need to atomise women. For the purposes of our study, the core question becomes whether assuming a woman from an LISE household to be an atomised individual, competing for bargaining power, appropriately captures their realities. We posit that the answer is "no". As such, to enable providers to design appropriate financial products, we should not design for the archetype that the WEE literature prescribes for women, but for an archetype of a woman deeply embedded in her cultural context and communities, and especially not one who is bargaining or competing for resources within the household.

5.3 Implications for Digital Financial Services Design

This conceptual pivot has immediate implications for the design of digital financial products. Historically, formal fintech platforms are designed around the financial logic of middle- and high-income users, assuming an individualistic, private, and asset-accumulation-driven model of finance. When fintech developers simply scale down these products for low-income users, they strip out the social mechanics that make lower-income financial management function properly and in context. By treating money as an isolated, digitised asset locked behind an individual password, standard DFS strategies risk cutting LISE women off from their greatest life (and not merely economic) asset: their relational networks.

To achieve sustained adoption and usage among women in low-income households, digital financial infrastructure must transition from individualistic tools to relationally aware platforms. Where traditional design focuses on individual assets and financial insulation, a relationally aware system embeds itself in the existing network of relations. Insofar as this also entails a reverse-embedding to some extent, since social relationships will have to be embedded in digital systems, this kind of design approach introduces a paradox. While relationally aware design may improve relevance and adoption, formalising informal arrangements also risks altering the very flexibility and discretion that make them valuable. The challenge is therefore not simply to digitise existing social networks, but to do so in ways that preserve their adaptive, highly flexible qualities. UPI, in this context, is uniquely situated, since it does not attempt to override the logic of the transaction, thus preserving relational markers in decision-making, while also providing a level of flexibility that was already present in the analogue world, and discretion to use cash.

[14] To cite an example reinforcing the importance of cultural context, the work of Rajah and Talesara (2025) finds that the breadwinner norm, which expects men to earn more than women, is not prevalent across several states in India, even as another study finds it to be widely prevalent in the United States (Bertrand et al., 2015).

Chapter 6: Concluding Remarks

The Digitising Women's Money Management (DWMM) project began with the question: can the financial practices of women from low-income households be digitised? Behind this question, however, lay a deeper concern. Much of the contemporary discourse on digital financial inclusion assumes that the primary challenge is one of access. Once individuals possess a bank account, a smartphone, and a digital payment application, adoption is expected to follow. Yet persistent gaps between access and usage suggest that the challenge may be more fundamental. Digital financial services must not only be available; they must also fit within the financial and social realities of the people expected to use them.

The study therefore focused not only on digital transactions, but also on the pre-existing financial practices within which those transactions are embedded. Over six months of longitudinal observation covering more than 135,000 transactions, the project documented how women from LISE households manage income volatility, respond to contingencies, pursue financial goals, and maintain the relationships on which household well-being depends – first, in a predominantly analogue environment, and then in a setting where the digital option is available but not being forced upon the women.

Several findings emerge clearly. First, managing money amid instability, insufficiency, and illiquidity of incomes requires continuous adaptation. Women actively shape income streams, mobilise liquidity through social relationships, and allocate resources across competing priorities. These activities are the features of everyday financial life.

Second, the findings reinforce the deeply social character of financial management. A substantial share of transactions occurred with relational counterparties, and respondents' reasons for choosing them frequently centred on familiarity, trust, obligation, and reciprocity. Financial transactions therefore serve purposes beyond the movement of money. They sustain relationships, reinforce social ties, and help cultivate the networks that households rely upon during periods of need. Rather than existing alongside and in opposition to financial lives, social relationships are integral to them.

Third, the study demonstrates that women occupy positions within these networks of mutual aid regardless of their formal earning status. The reasons for these networks to exist extend beyond income generation and beyond the allocation of household resources.

The study also examined the extent to which these practices migrated to digital channels when an assisted opportunity to use UPI was made available. From an initial digital usage rate of just 10 per cent, adoption increased substantially to 80 per cent over the study period, demonstrating that digital technologies can find a meaningful place within the financial lives of women from LISEs. However, the pattern of migration was neither uniform nor random across transaction types. Certain forms of transactions appeared more amenable to digitisation than others. In particular, person-to-person transactions within existing social networks were more frequently digitally mediated than other transactions, despite the widespread availability of merchant payment infrastructure. This was particularly evident in inter-household transactions with siblings. This observation suggests that the value proposition of digital payments may extend beyond convenience in commercial transactions and may instead lie, at least in part, in their ability to facilitate existing social and relational financial practices. In other words, digital adoption appears strongest not when technology introduces entirely new behaviours, but when it reinforces and extends behaviours that already exist.

These observations lead to a set of conjectures regarding the potential future architecture of financial products. They are presented as conjectures deliberately. While the three-phase design of the study—moving from an unassisted baseline to an onboarding support period, and finally to an unassisted tracking phase—allows us to observe the stickiness and sustainability of digital adoption, the exploratory nature of the dataset requires further validation before stronger causal claims can be made.

The first conjecture concerns the structural framing and marketing of digital payment products. Much of the contemporary discourse around UPI and digital payments emphasises merchant transactions and the replacement of cash in commercial settings. Yet the findings suggest that relational transactions constitute an equally important, and perhaps underappreciated, source of value. If digital payments are frequently used for intra-family and social network transfers, then a deliberate shift in product design and communication strategies toward person-to-person use cases may strengthen adoption and sustained usage. Future financial infrastructure may therefore benefit from highlighting how digital payments support and extend the operational reach of existing relationships rather than merely focusing on replacing cash at the merchant point of sale.

The second conjecture extends beyond payments to the wider digital financial services ecosystem, particularly products related to credit, savings, and risk mitigation. The digital transaction trails generated by widespread UPI migration offer a unique opportunity to map social networks and develop proxies for the strength of those relationships. While this value proposition is already well understood in the context of individual credit underwriting, the findings reveal that LISE households demonstrate a natural tendency toward community-level risk pooling and cross-subsidisation during periods of need, whether in response to health shocks, livelihood disruptions, or other contingencies. Given this existing social infrastructure, a potentially fruitful direction for future product design is to explore group insurance, collective savings mechanisms, or other forms of shared risk management that anchor financial security within pre-existing social structures.

At the same time, a note of caution is warranted. The social arrangements observed in this study derive much of their effectiveness from flexibility, discretion, and informality. Digitising these arrangements through formal systems risks altering the very adaptive characteristics that make them valuable. The challenge for future fintech development is therefore not simply to replicate existing practices through technology, but to understand which aspects of those practices should be digitally augmented and which should remain untouched. Successful digitisation requires preserving the adaptive qualities that allow these arrangements to function while selectively enhancing the aspects that technology can improve. To resolve this dilemma, similar studies must be replicated across contexts to ensure that a meaningful, broad-based understanding of LISE households underpins the development of such products. Additionally, it is also crucial to study the unintended consequences, since theories of change tend to presume linearity, but reality seldom complies.

Ultimately, the central contribution of this report is not a definitive template for designing digital financial services. Rather, it is the proposition that financial inclusion efforts must begin with a deeper understanding of how people already manage money. Women from LISE households are not passive users waiting to be integrated into formal financial systems. They are active financial managers operating in environments completely alien to modern-day financial products. The practices they employ have evolved in response to their realities and continue to perform critical economic and social functions, including creating the conditions under which resources become available when needed.

If digital financial services are to become meaningfully embedded in their lives, they must engage with these realities rather than seek to replace them. The path towards deeper financial inclusion lies not in asking how LISE households can be made to conform to the assumptions embedded within existing financial products or empowerment literature, but in asking how financial products can be designed to empower them in the sophisticated, relational ways in which they already manage their financial lives.

References

Bahl, Manya. 2023. "A Comparative Study to Assess the Financial Decision-Making Among Working Women in India and Singapore." *International Journal of Social Science and Economic Research* 8 (6): 1352–62.

Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. "Gender Identity and Relative Income within Households." *The Quarterly Journal of Economics* 130 (2): 571–614.

Bordoloi, Mridusmita, Surabhi Awasthi, and Sharati Roy. 2025. "Impact of Social Norms on Women's Economic Empowerment in India." Policy Brief, Institute for What Works to Advance Gender Equality (IWWAGE), LEAD at Krea University.

Cole, Shawn, Xavier Giné, Jeremy Tobacman, Petia Topalova, Robert M. Townsend, and James Vickery. 2009. "Barriers to Household Risk Management: Evidence from India." Staff Reports 373, Federal Reserve Bank of New York.

Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven. 2009. *Portfolios of the Poor: How the World's Poor Live on $2 a Day*. Princeton University Press.

Field, Erica M., Madeline McKelway, and Alessandra Voena. 2026. "Gender Norms and Development." *NBER Working Paper 34832*. National Bureau of Economic Research.

Field, Erica, Kate Vyborny, Mahnaz Waseem, and Farah Said. 2022. "Women's Mobility and Labor Supply: Experimental Evidence from Pakistan." *ADB Economics Working Paper Series* No. 655. Asian Development Bank, Manila.

Ghosh, Saibal, and D. Vinod. 2017. "What Constrains Financial Inclusion for Women? Evidence from Indian Micro Data." *World Development* 92: 60–81.

Giuliano, Paola. 2026. "Sticky Traditions: Origin, Persistence, and Evolution of Cultural Norms." *NBER Working Paper* No. 35125. National Bureau of Economic Research.

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91 (3): 481–510.

Heyer, Amrik, and Ignacio Mas. 2011. "Seeking Fertile Grounds for Mobile Money: Towards a Framework for Analyzing Enabling Environments." *Enterprise Development and Microfinance* 22 (1): 30–44.

Hirschman, Albert O. 1967. *Development Projects Observed*. Brookings Institution Press.

Jayachandran, Seema, and Alessandra Voena. 2026. "Women's Power in the Household." *Journal of Economic Literature* 64 (2): 447–97.

Johnson, Susan, and Froukje Krijtenburg. 2018. "'Upliftment,' Friends and Finance: Everyday Concepts and Practices of Resource Exchange Underwriting Mobile Money Transfer in Kenya." *Journal of Modern African Studies* 56 (4): 575–601.

Kala, Namrata, and Madeline McKelway. 2025. "The Power of Persuasion: Causal Effects of Household Communication on Women's Employment." *NBER Working Paper* No. 34321. National Bureau of Economic Research.

Kamath, Rajalaxmi, and Abhi Dattasharma. 2016. "Lessons from the Ramanagaram Financial Diaries." *Development and Change* 47 (1): 130–56.

Kusimba, Sibel B., Yang Yang, and Nitesh V. Chawla. 2015. "Family Networks of Mobile Money in Kenya." *Information Technologies & International Development* 11 (3): 1–21.

Kusimba, Sibel. 2018. "'It Is Easy for Women to Ask!': Gender and Digital Finance in Kenya." *Economic Anthropology* 5 (2): 247–60.

Mas, Ignacio, and Gayatri Murthy. 2017. *Money, Decisions, and Control*. CGAP.

Mas, Ignacio. 2015. *Money Resolutions, a Sketchbook*. CGAP.

Moscona, Jacob, Nathan Nunn, and James A. Robinson. 2026. "Searching for Fish in Trees (緣木求魚)? Economic Development When Context Matters." *NBER Working Paper* No. 34810. National Bureau of Economic Research.

Neelam, Amulya, and Sowmini G. Prasad. 2024. "Rethinking Financial Management for Low-Income Households." Position paper, Dvara Research, July 2024.

Prasad, Lekshmi, K. J. Joseph, and Kiran Kumar Kakarlapudi. 2024. "Towards Inclusive Finance in India: A Comparative Analysis of Achievements, Disparities, and Implications." *Economic and Political Weekly* 59 (51).

Rajah, Kailash, and Ishaana Talesara. 2025. "Breadwinning Norms: Experimental Evidence from India." Working paper, Massachusetts Institute of Technology.

Roomi, Muhammad Azam, Saadat Rehman, and Colette Henry. 2018. "Factors Affecting Women Entrepreneurs' Success: A Study of Small and Medium Enterprises." *Journal of Innovation and Entrepreneurship* 7 (1).

Thomas, Catherine C., Patrick Premand, Thomas Bossuroy, Soumaila Abdoulaye Sambo, Hazel Rose Markus, and Gregory M. Walton. 2025. "How Culturally Wise Psychological Interventions Can Help Reduce Poverty." *Proceedings of the National Academy of Sciences* 122 (46).

Tiwari, Shivakar, and Amaresh Dubey. 2024. "Economic Growth and Urban Poverty in India." Working paper, July 2024.

Appendices

APPENDIX A.1: List of Income-generating Activities

Income-Generating Activities	Sub-Activities
Sale of value-added goods	Fabrics
	Finished clothing and footwear
	Furniture and furnishing
	Pottery
	Sculptures
	Jewellery and accessories
	Toys
	Other handicrafts
	Personal care
	Home care
	Agri and industrial tools
	Packaged food items
	Food and beverages
	Religious items
Sale of goods through trading	Kirana store
	Fancy store
	Groceries and other provisions
	Vegetables
	Fruits
	Livestock and Poultry
	Milk
	Other dairy products
	Meat
	Fish and other aquatic products
	Fabric, clothing, and footwear
	Jewellery and accessories
	Personal care
	Medicines and other health-related products
	Stationery
	Books, Newspaper and magazines
	Paint and hardware
	Kitchenware and other homeware
	Electronic appliances
	Furniture and furnishings
	Pottery
	Sculptures
	Toys
	Other handicrafts
	Other home décor items

	Food and beverages
	Religious items
	Energy products
Sale of produce	Vegetables
	Fruits
	Food crops
	Cash crops
	Spices
	Oil seed crops
	Other agri-produce
	Dairy products
	Livestock produce – non-dairy
	Fish and other aquatic products
	Honey
	Silk
Sale of services	Construction related
	Painting
	Automobile repair or service
	Weaving
	Plumbing
	Electrical
	Tailoring or stitching
	Carpentry
	Gardening
	Domestic help
	Cooking
	Caregiving
	Other household help
	Salon
	Medical professional
	Driving
	Transport services
	Veterinary
	Other Livestock Related Services
	Photocopy, printing, and browsing
	Photography and videography
	Teaching and training
	Other Repair
	Business correspondent
	Sakhis
	Insurance agent
	Other Intermediaries
	Rental services

	Payments Intermediary
	Purchase or Sales Intermediary
	Agriculture-related
	MGNREGA
	Government job
	Private job
	Money lending
	Professional Services
	Book Keeper
	Livestock related

APPENDIX A.2: List of Transaction Types

Direction	Transaction Types
Inward	Sale of assets or goods
	Sale of value-added goods
	Sale of goods through trading
	Sale of produce
	Sale of service
	Receipt of loan
	Receipt of loan repayment
	Receipt of payout from savings or insurance
	Drawdown of savings
	Transfer from family, government or others
Outward	Utility payment
	Household expense & Purchasing assets or goods
	Health expense
	Education expense
	Payment for services
	Loan repayment
	Providing loan
	Making savings
	Insurance
	Fees for banking or government services
	Business expense
	Transfer to family or others

APPENDIX A.3: List of Counterparties

Counterparty Type	Counterparty
Family	Extended Family Member
	Husband
	Other Immediate Family Member
	Unrelated family member
	Child
	Sibling
	Family or Others
	Parent-in-law
	Parent
Non-Family	Neighbour
	Acquaintances-Remaining
	Village Member
	Friend
	Savings with Self Help Groups (SHGs), ROSCAs, Savings groups, or Chit funds
	Village-Level Group or Collective
	Co-borrower
	Moneylender
	Religious institutions
	ASHA worker
Commercial	Customer
	Wholesaler or Retailer
	LPG
	Private hospital
	Aggregated Receiver
	Electricity
	Financial Institution
	Government
	Pharmacist
	Mobile
	Fees for banking or government services
	Government saving schemes
	Lab
	Market seller
	Vendors-Remaining
	Educational institution
	Service Professional
	Employee
	Online platform
	Water
	TV

	Employer
	Government savings schemes
	Wage Labourer
	Professional
	Computer Centre
	Medical practitioner
	Insurance company
	Insurance agent
	Government service centres
	Market Buyer
	Tuition Centre
	Government hospital
	Lessor Farmer
	Other financial institutions
	Own retail store
	Lessee Farmer
	DTH
	Rent
Non-Categorised	Cash-at-home
	Others
	Don't Know
	Cash savings
	Other Intermediaries
	Other category
	Payments Intermediary
	Purchase or Sales Intermediary

APPENDIX B: Transaction Data Categorisation to MMPs

I) Income Shaping

Income shaping transactions are categorised into two categories: regular and active. Broadly, the variables and logic are as follows:

For Inward Transactions categorised as regular income shaping, a mix of the following features:

1. Regular income shaping comprises transactions in which regular inward flows of money are used to meet expenses. Salary or wage receipt, pension receipt, receipt of loan repayment, and transfer from family, government or others are categorised this way when the transaction reflects a regular or recurring inflow ("General Practice" of the respective income source being answered 'Yes'), together with the inward flow of money being used to meet household or business expenditure needs.
2. Receipt of payout from savings or insurance and drawdown of savings are also categorised this way when the payout or drawdown reflects a planned, recurring instalment or maturity of a savings, pension or insurance instrument, and the funds are used to meet regular or anticipated expenditure needs, rather than an ad hoc or one-off need.

For Inward Transactions categorised as active income shaping, a mix of the following features:

3. Active income shaping comprises transactions involving changes in effort, time spent, or quantity sold, undertaken specifically to meet an anticipated or actual expenditure need. Sale of assets or goods, sale of value-added goods, sale of goods through trading, sale of produce, and sale of services are categorised this way when the reason for carrying out the transaction (purpose of sale) indicates that the quantity sold, the effort applied, or the time spent working was increased or otherwise adjusted specifically to raise money for an expenditure need.
4. Receipt of loan is categorised this way when the stated purpose of the loan (purpose of loan) indicates that it was taken out specifically to meet an anticipated or actual expenditure need, rather than reflecting a regular or planned use of funds.
5. Other inward flows, such as receipt of payout from savings or insurance, drawdown of savings, or a transfer from family, government or others, are also categorised this way when the reason for carrying out the transaction indicates that it was drawn upon on an ad-hoc basis specifically to meet an anticipated or actual expenditure need, rather than reflecting a regular or planned use of funds.

II) Liquidity Farming

Broadly, liquidity farming includes both inward and outward transactions and centres on relationship-driven exchange. Broadly, the variables and logic are as follows:

Inward Transactions categorised as liquidity farming, a mix of the following conditions was applied:

1. Sale transactions (sale of assets or goods, sale of value-added goods, sale of goods through trading, sale of produce, sale of service) where the reason for dealing with this particular buyer ("Why Counterparty") reflected a social or relational motive, such as fulfilling a personal or social obligation, familiarity or long-term relationship, expecting future favours or assistance, reciprocating past generosity, supporting the buyer, improving social standing, or belonging to the same community were categorised as Liquidity Farming. For all five sale types, this was combined with a further check ("If Not Counterparty") to determine whether the item would have been sold for a higher price elsewhere or not sold at all.
2. The inward flow of money is used for social or family-oriented purposes, such as spending on festivals, life events or religious occasions, gifts, non-religious donations, or transfers to family or others (sale of assets or goods, receipt of loan, receipt of loan repayment, receipt of payout from savings or insurance, drawdown of savings, transfer from family, government or others). For sale of assets or goods and receipt of loan, this also includes proceeds used to provide a further loan.
3. For receipt of loan, the reason for borrowing from this particular lender ("Why Counterparty") reflects a relational motive, such as familiarity or long-term relationship, having supported the lender in the past, the lender belonging to the same community, wanting to demonstrate repayment ability, reciprocation, supporting a co-borrower, or borrowing in order to access a group loan for oneself. This is sometimes combined with how the loan was disbursed (purpose of loan), such as through salary or wage deductions, delivery of goods or services through the respondent's own business, or payment in goods or services.
4. Receipt of loan is also categorised this way when the lender is identified as a financial institution or a village-level group or collective, and the stated reason is flexibility in how the loan would be collected.
5. For receipt of loan repayment, the reason for having lent to this borrower ("Why Counterparty") reflects a relational motive, such as familiarity, fulfilling a personal or social obligation, reciprocating past generosity, expecting future favours, improving social standing, contributing to the community, investing in the borrower's business, or supporting the borrower.
6. Receipt of payout from savings or insurance is categorised this way when the Counterparty is specifically an insurance agent and the reason for using that agent ("Why Counterparty") reflects a relational motive, such as familiarity, obligation, reciprocity, future favours, supporting the agent's business, or shared community, or when the transaction sub-category identifies the source as savings held with Self Help Groups, ROSCAs, other savings groups, or chit funds.

7. Drawdown of savings is categorised this way when the transaction sub-category identifies an informal or community-based arrangement, such as Self Help Groups, ROSCAs, savings groups, chit funds, or a money-guard arrangement, or when it identifies a formal savings instrument, such as a savings account, fixed or recurring deposit, post office or government scheme, investment, pension, or endowment/LIC plan, combined with a trust-based reason for using that provider ("Why Counterparty"), such as familiarity, safety of money, or supporting the provider's business.
8. Transfer from family, government or others is categorised this way when the transaction sub-category or Counterparty identifies the respondent as acting as a payments or purchase/sales intermediary, or identifies the transfer as coming specifically from close family, such as a child, parent, parent-in-law, sibling, or other immediate or extended family member, or specifically from other relations, such as a friend, neighbour, village member, employer, employee, trader, customer, farmer, moneylender, or community group.

For Outward Transactions categorised as liquidity farming:

9. Utility payment, household expenses & purchasing assets or goods, health expense, education expense, payment for services, and making savings are categorised this way when the payment was made "for others", specifically to assist using the respondent's own technical expertise, or when it was made "through an intermediary" identified as the respondent's husband. Loan repayment and insurance are categorised this way when the payment was made "for others" for the same technical-expertise reason. However, these two transaction types do not carry a separate "through an intermediary" condition.
10. Household expense & purchasing assets or goods is categorised this way when the reason for choosing this particular seller ("Why Counterparty") reflects a relational or business motive, such as obligation, familiarity, expecting future favours, reciprocity, supporting the seller, improving the seller's business prospects, social standing, community ties, securing store credit, or shared community. Health expense, education expense, payment for services, and business expense are categorised under the same relational motive, with the addition of deferred or instalment payment options as a further qualifying reason.
11. The counterparty being repaid or lent to falls within a broad list of relationships, including employer, farmer, family members, employees, traders, community groups, co-borrowers, unrelated family, or aggregated receivers, with the spouse consistently excluded (loan repayment, providing loan)
12. Providing a loan is also categorised this way when the reason for lending ("Why Counterparty") reflects a relational motive, such as familiarity, fulfilling a personal or social obligation, reciprocating past generosity, expecting future favours, improving social standing, contributing to the community, supporting the borrower, or enabling the borrower to access a group loan, combined with whether the respondent would have lent elsewhere on better terms or not lent at all ("If Not Counterparty").
13. Providing a loan is further categorised this way when the respondent's stated purpose (purpose of loan) is simply recorded as undecided.
14. Making savings is categorised this way when the transaction sub-category identifies an informal or community-based arrangement, such as Self-Help Groups, ROSCAs, savings groups, chit funds, or a money-guard arrangement.

15. Making savings is also categorised this way when the stated reason (purpose of saving) reflects a relational motive, such as familiarity, fulfilling a personal or social obligation, reciprocating past generosity, expecting future favours, or shared community, combined with a formal savings instrument, such as a savings account, fixed or recurring deposit, post office or government scheme, pension, or endowment/LIC plan, or when the stated reason instead shows the funds were earmarked for social spending, such as gifts, donations, or transfers to family or others.
16. Insurance is categorised this way when the reason for choosing this particular agent or provider ("Why Counterparty") reflects a relational motive, such as familiarity, fulfilling a personal or social obligation, reciprocating past generosity, expecting future favours, contributing to the community's good, or supporting the agent's business.
17. Transfer to family or others is categorised this way when the Counterparty is a close family member, such as a parent, parent-in-law, sibling, or other immediate or extended family member, or a broader non-family relation, such as a friend, neighbour, village member, employer, employee, trader, customer, farmer, moneylender, community group, unrelated family member, or aggregated receiver, in both cases always excluding the spouse.
18. Transfer to family or others is also categorised this way when the stated reason for the transfer (purpose of transfer) reflects a relational motive, such as familiarity, fulfilling a personal or social obligation, reciprocating past generosity, expecting future favours, improving social standing, contributing to the community, or providing support or financial aid.
19. Transfer to family or others is further categorised this way when the transaction sub-category identifies it specifically as a donation, or when the "Events" variable identifies the occasion as a festival, life event, or religious event within the respondent's own or another household, a non-religious donation, charity, or non-event gift given to another household, or a group loan provided on someone else's behalf.

III) Animating Money

Broadly, animating money includes both inward and outward transactions and does not depend on the goals dataset. Broadly, the variables and logic are as follows:

For Inward Transactions categorised as animating money, a mix of the following features:

1. Sale of assets or goods, receipt of loan, receipt of loan repayment, receipt of payout from savings or insurance, drawdown of savings, and transfer from family, government or others are categorised this way when the inward flow of money is used either for making savings or for purchasing assets or goods.
2. Sale of assets or goods and receipt of loan are also categorised this way when the transaction reflects the "General Practice" of the respective savings or loan behaviour being answered 'Yes', together with the use-of-money feature above. Drawdown of savings is categorised this way when "General Practice" is 'Yes' on its own or combined with the use-of-money feature above.
3. Sale of assets or goods and drawdown of savings are categorised this way based on whether the asset or savings was originally acquired for the exact goal this transaction now serves, for one of several unclear goals, or for a completely different goal (purpose of asset purchase).
4. Drawdown of savings is also categorised this way when the reason for carrying it out was stated as 'To put away money and avoid temptation / To lock in funds', or when the Counterparty was a "money guard", i.e., a person entrusted to hold the money, essentially a single-party escrow.

For Outward Transactions categorised as animating money:

5. Providing a loan is categorised this way when the reason for carrying it out was stated as 'To put away money and avoid temptation / To lock in funds'.
6. Making savings is categorised this way when the reason for carrying it out was stated as 'To put away money and avoid temptation / To lock in funds', when the Counterparty was a "money guard", i.e., a person entrusted to hold the money, essentially a single-party escrow, or when the outward flow of money is used either for making savings or for purchasing assets or goods.

APPENDIX C: Sources of Fund for Unplanned and Unexpected Expenses

Sources of Fund	Frequency
Sale of assets	0.38%
Business or Employment Income	16.42%
Drawdown of Savings	36.49%
Loan or Transfer from Child	1.08%
Loan or Transfer from Parent	4.10%
Loan or Transfer from Parent-in-law	1.18%
Loan or Transfer from Siblings	1.46%
Loan or Transfer from Other Immediate Family Member	33.23%
Loan or Transfer from Extended Family Member	0.87%
Loan or Transfer from Friend	0.17%
Loan or Transfer from Neighbour	1.32%
Loan or Transfer from Village Member	0.83%
Loan or Transfer from Employer	0.28%
Loan or Transfer from Employee	0.07%
Loan or Transfer from Customer	0.03%
Loan or Transfer from Moneylender	0.17%
Loan or Transfer from Village-Level Group, Collective	0.87%
Loan or Transfer from Spouse	0.59%
Loan or Transfer from Government	0.21%

APPENDIX D: Data Collection Instruments

Demographic Survey

1. General Information

1.1. Surveyor ID

1.2. Date of the entry

1.3. Respondent ID

1.4. District name

1.5. Block code

1.6. Village/Pind code

2. Participant Profile

2.1. Age (18 to 28 years/29 to 38 years/ 39 to 48 years/ 49 to 58 years/ 59 and above)

2.2. Marital status (Married/ Unmarried/ Separated/ Divorced/Widowed)

2.3. Education (No formal education/ Primary/ Secondary/ Senior Secondary/ Graduate/ Postgraduate/Diploma)

3. Household Profile

3.1. Are you the head of the household? (Yes/No)

> No
> **3.1.a. What is your relationship with the head of the household?** (Spouse/ Daughter/ Daughter-in-law/Mother/ Sibling/ Niece/Sister-in-law/ Grand-daughter/ Grand-daughter-in-law/ Others)

3.2. Are you the primary earner in your household? (Yes/No)

3.3. Apart from you, how many members are there in your household? ___

The following questions (3.4 to 3.6) will be repeated for each household member.

3.4. What is the age? (Under 12/ 12-17/ 18-28/ 29-38/ 39-48/ 49-58/ 59-68/ 68 and above)

3.5 What is the gender? (Male/Female/Others)

3.6. Are they an earning member? (Yes/No)

4.1. What are the income-generating activities you and the members of your household are engaged in? (Sale of value-added goods/ Sale of goods through trading/ Sale of produce/ Sale of services/ Transfer from family or government/ Others/NA) [multiple selections allowed]

> 4.1.a Sale of value-added goods