Jurnal EMT KITA

Indonesian Journal for the Economics, Management and Technology

Print ISSN: 2579-7972; Online ISSN: 2549-6204

Volume 9 (4) October 2025, 1433-1441
Available *online* at
http://journal.lembagakita.org/index.php/emt

Article History: Received: 23 July 2025, Revision: 30 July 2025, Accepted: 5 August 2025, Available Online: 1 October 2025.

DOI: https://doi.org/10.35870/emt.9i4.5136

From Harvest to Homework: Exploring Household Financial Planning and Accounting Practices in Rural Educational Investment

Fitriana Rakhma Dhanias [1*], **Arif Widyatama** [2], **Eko Prasetyo** [3]

[1*,2,3] Universitas Brawijaya, Malang City, East Java Province, Indonesia.

Email : fitriana.dhanias@ub.ac.id [1*], arif.widyatama@ub.ac.id [2], eko.prasetyo@ub.ac.id [3]

Abstrak. *Di pedesaan Indonesia, pendapatan yang terbatas dan tidak stabil menjadi tantangan signifikan bagi keluarga yang berupaya membiayai pendidikan anak-anak mereka. Studi ini mengeksplorasi bagaimana ibu rumah tangga di rumah tangga pertanian mengalokasikan sumber daya keuangan menggunakan strategi akuntansi rumah tangga informal untuk memastikan keberlangsungan pendidikan. Dilaksanakan di Desa Kuncir, penelitian ini menggunakan metode studi kasus kualitatif yang melibatkan wawancara semi-terstruktur dan observasi langsung terhadap lima ibu di pedesaan. Temuan penelitian menunjukkan bahwa, meskipun tidak adanya perangkat keuangan formal, para peserta secara konsisten mempraktikkan penganggaran terstruktur melalui uang tunai yang dialokasikan, sistem amplop, dan kelompok tabungan bergilir. Perempuan menunjukkan otonomi dalam pengambilan keputusan keuangan, mengelola arus pendapatan secara strategis agar selaras dengan jadwal pembayaran sekolah, dan memprioritaskan pendidikan di atas pengeluaran lainnya. Perilaku adaptif ini menunjukkan bentuk akuntansi rumah tangga yang terlokalisasi namun efektif, yang dibentuk oleh nilai-nilai budaya dan keterbatasan sumber daya. Studi ini berpendapat bahwa sistem keuangan informal tersebut berfungsi sebagai alternatif fungsional bagi praktik formal dan harus diakui dalam perancangan program pembangunan pedesaan dan literasi keuangan. Wawasan ini berkontribusi pada wacana yang lebih luas tentang perilaku keuangan yang bergender, ekonomi informal, dan ketahanan pendidikan dalam konteks berpenghasilan rendah.*

Kata kunci: *Akuntansi Rumah Tangga; Literasi Keuangan; Perempuan Pedesaan; Keuangan Pendidikan; Ekonomi Informal; Strategi Penganggaran; Indonesia.*

Abstract. *In rural Indonesia, limited and unstable income poses a significant challenge to families striving to fund their children's education. This study explores how housewives in farming households allocate financial resources using informal household accounting strategies to ensure educational continuity. Conducted in Kuncir Village, the research employed a qualitative case study method involving semi-structured interviews and direct observations with five rural mothers. Findings reveal that, despite the absence of formal financial tools, participants consistently practiced structured budgeting through earmarked cash, envelope systems, and rotating savings groups. Women demonstrated autonomy in financial decisions, strategically managing income flows to align with school payment schedules and prioritizing education over other expenses. These adaptive behaviors indicate a localized yet effective form of household accounting, shaped by cultural values and resource constraints. The study argues that such informal financial systems serve as functional alternatives to formalized practices and should be acknowledged in the design of rural development and financial literacy programs. The insights contribute to the broader discourse on gendered financial behavior, informal economies, and educational resilience in low- income contexts.*

Keywords: *Household Accounting; Financial Literacy; Rural Women; Educational Finance; Informal Economy; Budgeting Strategies; Indonesia.*

Introduction

Access to quality education remains a significant challenge in many rural areas of Indonesia, particularly for children from low-income farming households. Education is a key driver of socioeconomic mobility; however, the costs associated with education including tuition fees, uniforms, transportation, and supplementary materials pose considerable challenges for families with unstable and seasonal incomes. In these contexts, mothers are often tasked with managing household finances, making critical decisions regarding expenditure priorities. The decisions they make on income allocation directly influence children's ability to attend and remain in school. Understanding how housewives manage limited financial resources is essential for advancing educational equity in rural areas. In Kuncir Village, where agriculture is the primary source of livelihood, seasonal and unpredictable earnings affect a household's ability to maintain stable financial planning. Without access to formal financial institutions or structured accounting tools, mothers often resort to informal and intuitive methods of budgeting and saving.

Although these strategies are often overlooked in formal economic analyses, they play a crucial role in ensuring educational needs are met. The resilience and financial creativity of these women exemplify effective household-level financial governance in resource-constrained environments. Despite lacking formal training in accounting, many women instinctively apply principles such as expense tracking, fund allocation, and goal-oriented saving (Yulianti & Ihsan, 2016). This study aims to understand how housewives in low-income rural farming households allocate financial resources for their children's education. While external solutions, such as state subsidies or non-profit interventions, are commonly proposed, these external supports are often insufficient or inconsistent. Consequently, households rely on internal mechanisms to prioritize educational spending. Analyzing these household-based strategies will provide valuable insights into financial resilience and commitment to education among rural families (Putri, 2022). Institutional solutions such as government assistance, school fee waivers, or credit facilities are often out of reach for these families. Bureaucratic barriers, geographic isolation, and limited literacy frequently impede access to such resources (Tambunan, 2009). Therefore, understanding the internal logic of household financial decision-making is critical. An informal, often undocumented system of accounting emerges within this gap between formal financial systems and local practices. This study seeks to explore this dynamic, examining the role of informal financial practices in educational investment. Previous academic literature has recognized the importance of household financial strategies in low-income environments. Yulianti and Ihsan (2016) emphasize the role of basic financial practices in empowering families, noting that simple planning and expense tracking can improve decision-making. Putri (2022) further explains that household accounting serves not only as a budgeting tool but also as a mechanism for negotiation and conflict resolution within the family. These studies highlight the significance of informal accounting in contexts where formal financial systems are either inaccessible or unreliable, and they point to the potential of integrating household financial literacy into broader development programs.

Several empirical studies have explored the role of women in managing household finances in Southeast Asia. Much of this research focuses on the dual burden faced by women, who must balance economic activities with caregiving responsibilities. While these studies recognize the importance of women's roles, they often overlook the technical aspects of financial decision-making, particularly with respect to long-term goals such as education. Additionally, there is limited exploration of how these strategies function in areas characterized by seasonal income and agricultural uncertainty (Firdausy, 1999; Singh et al., 2001). This research builds on these foundations by focusing specifically on rural housewives in Indonesia who engage in informal accounting practices to fund their children's education. Unlike studies that focus on entrepreneurial women or urban contexts, this paper centers on non-income-generating mothers who manage finances primarily for consumption and education. The aim is to fill the gap by documenting not only what strategies are employed but also how and why they are implemented under fluctuating financial conditions. Fieldwork conducted in Kuncir Village revealed that while formal budgeting tools are rarely used, households still engage in structured financial behavior. Common strategies include earmarking a portion of harvest income for tuition, participating in rotating savings groups (arisan), and adjusting consumption to align with school payment schedules. These practices reflect fundamental accounting principles, albeit applied informally. Yet, existing literature has not systematically analyzed these practices through the lens of household accounting or connected them directly to educational outcomes (Yulianti & Ihsan, 2016; Putri, 2022).

This study seeks to fill that gap by offering a detailed analysis of how household accounting practices are employed by mothers in rural agricultural communities to support their children's education. The research seeks to answer: What informal financial strategies are used? How do these strategies reflect accounting principles? What constraints shape the decision-making process? And how do these practices affect educational access and continuity? By focusing on the intersection of gender, education, and informal finance, this study contributes to the growing body of literature on financial inclusion, rural development, and gendered economic practices. It expands understanding of how financial decisions are made within households that largely operate outside the reach of formal financial systems. The findings have implications for both academic research and policy development, particularly regarding women's empowerment, rural education, and financial literacy programs (Duflo, 2012; Ashraf et al., 2010). This study challenges conventional assumptions that equate accounting with formal systems and institutional record-keeping. It repositions household accounting as a dynamic and context-sensitive practice that deserves greater attention from both scholars and policymakers. By documenting and analyzing these practices, the study not only validates the financial agency of rural women but also proposes that their methods offer viable models for resource management in low-income settings (Carney, 2020; Collins et al., 2009).

Literature Review

Household Accounting in Low-Income Contexts

Household accounting in low-income environments often operates outside formal frameworks, relying instead on informal and undocumented methods to manage finances. In settings where access to banks, financial planning tools, or institutional support is limited, families particularly women develop adaptive systems to monitor income and expenses. These systems include verbal planning, earmarked cash, envelope budgeting, and periodic informal savings. Yulianti and Ihsan (2016) highlight that such informal budgeting systems provide significant support for household decision-making by promoting financial discipline and enhancing awareness of spending priorities. These findings align with Collins et al. (2009), who, in their influential study *Portfolios of the Poor*, demonstrate how low-income households around the world manage complex financial lives using informal tools that replicate formal accounting practices. Moreover, informal accounting is increasingly recognized as part of the broader financial capability framework, which focuses on knowledge, behavior, and decision-making under constraints (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014). The practices observed in low-income Indonesian households reflect high levels of adaptive financial capability, even when conventional financial literacy is low. Such practices underscore the importance of informal mechanisms in managing finances effectively despite limited access to formal systems.

Gender and Financial Management

In many rural Indonesian households, women play a pivotal yet often overlooked role in managing financial resources. While men may dominate income generation through agricultural labor, women frequently assume responsibility for household budgeting, savings, and the allocation of funds for both daily and long-term needs. Firdausy (1999) and Singh et al. (2001) emphasize that rural women, despite limited formal education or access to financial institutions, operate as the de facto financial managers of their households. These roles, while underrepresented in mainstream economic analyses, are critical for the financial resilience of households. This gendered pattern of financial control is reflected in global literature.

Duflo (2012) argues that women's empowerment, particularly through financial control, is closely linked with improved outcomes in child health and education. Similarly, Ashraf et al. (2010) show that when women are given control over savings instruments, household consumption shifts toward long-term welfare investments, such as education. Women's financial decisions, especially regarding children's education, reveal an embedded sense of stewardship and strategic foresight that balances immediate needs with future-oriented goals. Their central role in "invisible accounting" (Carney, 2020) should be acknowledged in both research and policy.

Informal Economy and Educational Investment

The informal economy, characterized by its flexibility and adaptability, provides an essential foundation for rural households' financial behavior. Informal financial tools such as rotating savings and credit associations (ROSCAs), locally known as *arisan* are widely used by women to pool resources and manage lump-sum payments for school-related expenses. Putri (2022) and Tambunan (2009) demonstrate that these mechanisms are deeply embedded in community trust, serving not only as financial instruments but also as social support systems. Similar patterns are observed globally, where informal finance mechanisms like ROSCAs are extensively used in sub-Saharan Africa and South Asia to meet educational, health, and business goals (Gugerty, 2007; Anderson & Baland, 2002). These tools provide liquidity, discipline, and peer accountability qualities often missing in formal financial services available to the poor. Education is often regarded as a moral obligation, with families treating school-related expenses as non-negotiable. Tambunan (2009) describes this as "moral budgeting," where financial decisions are guided not only by economics but also by cultural values and a deep commitment to children's futures. Studies by Banerjee and Duflo (2011) and Narayan et al. (2000) confirm that education remains one of the few long-term investments that low-income families consistently prioritize, even during times of financial distress. In this way, the informal economy functions as both a practical and ethical framework for educational investment, shaped by collective norms and intergenerational aspirations.

Research Methodology

Research Location and Data Collection

This study was conducted in Kuncir Village, a rural area in Indonesia predominantly inhabited by farming families. The selection of this location was driven by its representativeness of rural Indonesian contexts, where household incomes are typically seasonal and unstable. The research focused on five housewives from farming households, who were selected using purposive sampling. The inclusion criteria required participants to have at least one child currently enrolled in school and to be actively involved in managing the household's financial matters. Data were collected using qualitative research methods, specifically semi-structured interviews and direct observations.

The interviews sought to explore the participants' approaches to managing household income, budgeting for educational expenses, and utilizing informal accounting strategies. Observations supplemented the interview data by providing insights into household dynamics, record-keeping practices, and daily routines related to financial decision-making. The data were recorded using audio devices (with participants' consent) and supplemented with handwritten field notes. Transcriptions were manually coded for thematic patterns that aligned with the study's research objectives. The primary aim of the data analysis was to understand how household accounting principles whether explicitly recognized or not were operationalized in day-to-day financial strategies that support children's education.

Measurement of Key Variables

While the study employed a qualitative approach, several key variables were conceptually defined to guide both data collection and analysis. These variables include:

1) Household Income Stability: Measured by participants' descriptions of seasonal earnings, frequency of cash inflows, and reliance on agricultural cycles.
2) Budgeting Strategy: Reflected in the presence or absence of financial planning mechanisms, such as envelope systems, verbal allocation, notebooks, and mental budgeting for specific expense categories.
3) Education Fund Allocation: Measured by the proportion of income allocated to educational needs, including tuition fees, uniforms, transportation, and school supplies. This was gauged through participant estimates and the review of related receipts or notes.
4) Savings Behavior: Defined as any proactive effort to reserve money or resources for future use, including participation in arisan (rotating savings groups), cash reserves, or in-kind savings such as withholding part of harvest yields.
5) Decision-Making Structure: Examined through accounts of intra-household negotiations, gender roles in financial decisions, and instances of joint versus individual authority over spending choices.
6) Constraints and External Influences: Documented via participant testimonies on challenges such as price volatility, unexpected obligations, cultural norms, and limited access to formal credit.

These conceptual variables were not subjected to statistical testing. Instead, they served as anchors for thematic coding and pattern recognition. Each variable was interpreted in relation to its role in influencing educational expenditure priorities.

Estimation Strategy

Given the qualitative nature of the study, the estimation strategy adopted was analytical rather than numerical. The data analysis process followed a thematic analysis approach, involving three iterative steps: open coding, axial categorization, and selective interpretation. The goal was to extract a conceptual model that explains the relationship between informal financial practices and education-related financial outcomes. A simplified conceptual framework was developed to represent the internal logic described by participants. In this framework, Educational Investment is understood not only as financial expenditure but also as the intentional prioritization of education in budgeting decisions.

Each independent factor contributes to or constrains the household's ability to consistently allocate resources for schooling.
For instance:

1) Low Income Stability (due to seasonal farming) may prompt households to defer non-essential expenses and secure tuition payments by delaying crop sales.
2) Effective Budgeting Strategies (such as earmarked envelopes) help maintain discipline and reduce the likelihood of reallocating educational funds to other purposes.
3) Savings Behavior, particularly through community-based tools like arisan, acts as a buffer and enables households to make lump-sum payments during school enrollment or mid-semester obligations.
4) Decision-Making Structures that empower women correlate with a quicker response to educational emergencies, as women typically serve as financial stewards in the household.
5) Constraints, such as social obligations or a lack of financial literacy, limit the effectiveness of budgeting and saving strategies.

Through this framework, the study provides a qualitative yet systematic explanation of how household accounting practices enable educational access for children in low-income rural settings. While causality cannot be conclusively established due to the methodological limitations, the conceptual model above is grounded in recurring themes and detailed descriptions provided by the participants. This framework offers a basis for future quantitative hypotheses and policy interventions tailored to the complex realities of rural financial decision-making.

Results and Discussion

Results

Descriptive Statistics

The descriptive findings from interviews with five rural housewives in Kuncir Village highlight critical aspects of household financial management related to children's education. On average, participants reported a monthly income fluctuating between IDR 1,000,000 and IDR 1,500,000, with income variability largely dependent on harvest seasons. Education-related expenditures consistently accounted for approximately 25–30% of the monthly household budgets, with tuition fees, uniforms, and transportation costs being the most frequently cited expenses. All participants confirmed the absence of formal accounting records. However, each household utilized informal tracking methods such as verbal budgeting, envelope systems, or simple notebooks to monitor expenses. Savings behavior was highly structured around *arisan* (rotating savings groups) or harvest-based planning, with specific amounts allocated immediately after receiving income. Regarding decision-making, financial control typically resided with the wife, particularly for routine matters. However, in three out of five households, major financial decisions such as funding children's education or taking out loans were made jointly with the husband. When asked about their long-term financial planning, participants demonstrated an implicit understanding of education as a path to social mobility, even in the absence of formal planning tools. Constraints mentioned by the participants included income unpredictability, prioritization of social obligations (e.g., ceremonies, community dues), and limited access to formal financial institutions or credit. Despite these challenges, participants demonstrated strong commitment to education as a non-negotiable expense, often reducing personal consumption to meet school-related payments.

Empirical Results and Discussion

The empirical analysis revealed several key themes regarding how rural housewives manage and prioritize educational funding through informal accounting practices. These themes were consistent across interviews and strongly aligned with participants' stated goals and constraints. Overall, the findings suggest a positive association between informal accounting practices and consistent educational funding. While this association was not statistically tested due to the qualitative nature of the study, it was evident through thematic consistency. Four out of five participants explicitly stated that their financial strategies evolved over time to become more structured in response to their children's educational needs. The most significant empirical finding relates to the role of earmarked budgeting. In all cases, participants made a deliberate mental or physical division of funds specifically for school-related expenses. This finding aligns with Yulianti and Ihsan (2016), who highlighted the effectiveness of basic budget tracking in promoting financial discipline. For example, Participant 2 described how she "separates rice harvest sales into three envelopes: daily needs, school, and emergencies," a method that reflects zero-based budgeting practices common in formal accounting.

Another significant pattern concerns the use of *arisan* and informal loans. Participants frequently engaged in *arisan* as a rotating savings mechanism to meet lump-sum school payments. This finding supports Putri (2022), who emphasized the dual function of such mechanisms as financial tools and social capital. Participant 4 noted that her *arisan* group intentionally timed its payouts with school payment cycles, demonstrating a shared understanding of education-related financial demands within the community. Decision-making roles also followed consistent patterns. While women generally held autonomous control over educational spending, they deferred to their husbands for decisions involving asset sales or borrowing. This division of labor suggests a gendered structure in household governance, echoing findings by Firdausy (1999) and Singh et al. (2001), who noted that women often hold managerial roles without executive authority in household economies. A unique finding in this study was the adjustment of agricultural sales strategies to fund education. Participant 3 described selling crops in smaller quantities at different times to better manage cash flow. This strategy represents a micro-level adaptation that integrates financial management with agricultural practices an intersection seldom discussed in the literature. Compared with urban-based studies, this result underscores the significance of local context in shaping financial behavior. The justification for these practices is rooted in participants' perception of education as an investment. All five participants referred to school fees not merely as costs, but as obligations that cannot be deferred, reflecting a cultural framing of education that aligns with Tambunan's (2009) concept of "moral budgeting." This framing signifies that educational expenditures are guided by values, not just economic considerations.

Contrasting findings from urban settings, where household financial planning is often disrupted by consumerism or credit misuse, the rural households in this study displayed frugality and purpose-driven financial allocation. This challenges generalizations in some development literature, which portrays informal households as disorganized or irrational in their financial decision-making (La Porta & Shleifer, 2008). Instead, the study suggests that these households follow an internal logic of prioritization that, though undocumented, is methodical and accountable. This research extends the work of Babbitt et al. (2015), who explored rural female entrepreneurs' preferences for formalizing their financial practices. While this study does not directly address formalization, it supports their conclusion that rural women are more likely to adopt disciplined financial behaviors when such practices align with deeply held social values, such as ensuring children's education. Finally, the constraints faced by participants reflect systemic barriers rather than individual limitations. Inaccessibility to formal credit and lack of financial literacy were recurring themes. However, these challenges were mitigated by the women's ingenuity in using informal financial systems to meet their goals. This duality reinforces Roy's (2009) argument to reframe informality not as a deficit, but as an adaptive system shaped by necessity and creativity. In summary, the empirical findings illustrate that informal household accounting in rural Indonesia is not merely reactive but strategic. It is informed by cultural norms, structured around agricultural cycles, and oriented toward long-term educational outcomes. These practices, though lacking formal recognition, fulfill essential accounting functions such as planning, control, and reporting. As such, they merit further exploration and validation in both academic and policy contexts.

Discussion

In rural Indonesia, household financial management often relies on informal methods due to limited access to formal financial institutions and the unstable income experienced by many farming families. The findings of this study demonstrate that housewives in Kuncir Village use various informal strategies, such as envelope systems, simple record-keeping, and participation in rotating savings groups (arisan), to manage their finances. These approaches align with the work of Gugerty (2007) and Collins et al. (2009), who emphasize the significance of Rotating Savings and Credit Associations (ROSCAs) as mechanisms to manage finances in low-income communities. In this context, arisan functions as a way to pool funds, which can be used for urgent needs, including education, in an organized and community-based manner.

The study also highlights the central role of women in household financial management, consistent with the findings of Ashraf, Karlan, and Yin (2010) and Duflo (2012) regarding women's empowerment through control over financial decisions. Their research indicates that when women have control over household finances, investments in children's health and education increase. In Kuncir, housewives often take the primary responsibility for allocating funds for their children's education, although major decisions such as selling assets or taking loans typically involve consultation with their husbands. This division of roles underscores the significant gender dynamics in financial decision-making, which, as Firdausy (1999) and Singh et al. (2001) suggest, reflects the managerial roles that women often occupy within household economies. Furthermore, although the women in Kuncir lack formal accounting education, they intuitively apply basic accounting principles, such as goal-based budgeting and expense tracking. This is in line with the findings of Yulianti and Ihsan (2016), who argue that simple budgeting systems significantly support household financial well-being. Therefore, even without formal accounting knowledge, housewives in this village manage their resources effectively to ensure their children's education remains a priority. The decision to prioritize education above other needs also reflects the concept of "moral budgeting," as described by Tambunan (2009). In this context, education is seen as an obligation that cannot be postponed, and this perspective is reflected in how funds are earmarked for educational purposes, even when facing financial pressure from other areas. Education is viewed not just as an expenditure but as a moral and social investment in the children's future, aligning with the views expressed by Banerjee and Duflo (2011), who argue that poor families tend to protect education expenses even during financial shocks.

Additionally, effective financial management within these farming households is also tied to financial resilience in the face of uncertain incomes. As noted by Lusardi and Mitchell (2014), low levels of financial literacy do not prevent individuals from developing adaptive financial management skills. In this case, the housewives in Kuncir use structured and creative strategies to manage seasonal income fluctuations and ensure their children's education remains uninterrupted. This demonstrates that, although they operate outside formal financial systems, they are still able to engage in effective and disciplined financial planning. Thus, this study confirms that, although many rural households lack access to formal accounting systems, they still maintain an organized and effective financial management system. These informal financial practices, as described by Carney (2020) in her study of "invisible accounting," show how this unpaid financial labor, though not formally recorded, plays a crucial role in sustaining educational opportunities for children in low-income families. Therefore, policies aimed at improving financial literacy in rural areas should not only focus on formalizing financial systems but should also take into account and support these existing informal mechanisms, as they are deeply embedded in local realities.

Conclusion

This study aimed to investigate how rural housewives in Indonesia allocate financial resources for their children's education through informal household accounting practices. Employing a qualitative methodology based on semi-structured interviews and field observations in Kuncir Village, the research gathered insights from five housewives of farming households. The study found that, despite facing significant financial instability and limited access to formal financial institutions, these women developed structured and purposeful strategies to prioritize educational expenditures. Key findings include the consistent use of earmarked budgeting, participation in community-based savings groups like arisan, and a high level of autonomy in financial decision- making among women. Furthermore, participants strategically adjusted the timing and volume of agricultural sales to manage cash flows aligned with school payment schedules.

These practices reflect informal yet disciplined forms of financial planning that serve as functional alternatives to formal accounting systems. The practical implications of this research suggest that policy initiatives aimed at improving financial literacy and educational access in rural areas should build upon, rather than attempt to replace, these existing informal mechanisms. By revealing the coherence and intentionality behind rural women's financial strategies, this study challenges prevailing assumptions that equate informality with disorder or inefficiency. It contributes to the growing literature on gendered financial behavior, informal economies, and rural development, particularly by positioning rural women not merely as passive actors but as adaptive financial managers. Further research could expand the sample size, explore variations across regions, or introduce quantitative metrics to assess the long-term outcomes of these strategies. In sum, this study affirms that household-level financial decision-making, even when informal, plays a critical role in sustaining educational investment and should be recognized as an integral component of inclusive development policy.

References

Anderson, S., & Baland, J. M. (2002). The economics of ROSCAs and intrahousehold resource allocation. *Quarterly Journal of Economics, 117*(3), 963–995. https://doi.org/10.1162/003355302760193931.

Ashraf, N., Karlan, D., & Yin, W. (2010). Female empowerment: Impact of a commitment savings product in the Philippines. *World Development, 38*(3), 333–344. https://doi.org/10.1016/j.worlddev.2009.05.010.

Atkinson, A., & Messy, F. A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. *OECD Working Papers on Finance, Insurance and Private Pensions, No. 15*. https://doi.org/10.1787/5k9csfs90fr4-en.

Carney, M. (2020). Invisible accounting: Understanding women's unpaid financial labor. *Gender, Work & Organization, 27*(3), 325–343. https://doi.org/10.1111/gwao.12380.

Collins, D., Morduch, J., Rutherford, S., & Ruthven, O. (2009). *Portfolios of the poor: How the world's poor live on $2 a day*. Princeton University Press.

Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature, 50*(4), 1051–1079. https://doi.org/10.1257/jel.50.4.1051.

Firdausy, C. M. (1999). Women entrepreneurs in small and medium enterprises in Indonesia: Their motivations and main constraints. In *Women Entrepreneurs in SMEs in the APEC Region* (pp. 85–110). APEC.

Gugerty, M. K. (2007). You can't save alone: Commitment in rotating savings and credit associations in Kenya. *Economic Development and Cultural Change, 55*(2), 251–282. https://doi.org/10.1086/508716.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5.

Narayan, D., Patel, R., Schafft, K., Rademacher, A., & Koch-Schulte, S. (2000). *Voices of the poor: Can anyone hear us?* Oxford University Press for the World Bank.

Putri, R. E. (2022). Financial management strategies among low-income households: A study of rural Indonesian women. *Asian Social Science Review, 15*(1), 67–83.

Singh, S., Reynolds, R., & Muhammad, S. (2001). A gender-based performance analysis of micro and small enterprises in Java, Indonesia. *Journal of Small Business Management, 39*(2), 174–182.

Tambunan, T. T. H. (2009). Women entrepreneurship in Indonesia: A policy perspective. *International Journal of Business and Social Science, 4*(1), 23–29.

Yulianti, N., & Ihsan, H. (2016). The effectiveness of household budgeting in promoting family financial well-being. *International Journal of Economics and Financial Issues, 6*(S7), 283–289.