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Women's Control Over Income and Household Spending Decisions

A Rapid Review

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INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

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ABSTRACT

Often-cited studies show that when women influence or control household spending decisions, they tend to spend in ways that improve the welfare of their household. However, these studies are decades old, and the most recent review of this evidence was published over a decade ago (see Doss 2013). We present a rapid review of this literature since 2013 on women's relative bargaining power over household resource allocation and its relationship with key well-being outcomes. Specifically, we review the evidence to answer the following questions: 1) Does women's control over income within the household influence household expenditure patterns?; 2) Does the source of women's income matter for spending decisions?; and 3) Does the amount of women's income matter for spending decisions?

We employ a rapid review approach to identify research published since 2013 that focuses on how women who have influence or control over spending decisions allocate those resources and associations with well-being outcomes. Utilizing key search terms and clear selection criteria, we identified 46 papers. Most studies represent sub-Saharan Africa. They employed a range of methods and represented a mix of observational and experimental (or quasi-experimental) designs. Most studies did not specify the source of income, but we did identify those focused on income from agricultural or off-farm activities, remittances, and cash transfers.

Our review of the literature since 2013 has generally found evidence that is consistent with the research prior to 2013, but more convincing as there has been an increase in causal evidence published. Compared to men, women prioritize spending on investments in children, their education, food – including more diverse and nutrient-dense foods – and on healthcare regardless of income source. Overall, women's influence over resource allocation decisions tend to promote equitable distribution of money to boy and girl children. We see mixed results around how women prioritize investing in savings compared to men; several studies indicated women prioritize savings more than men but do so for different reasons, although one study in a matrilineal society indicated that women prioritize food budgets at the expense of building savings. And finally, there is consistent evidence that the share of household budgets spent on adult goods or vices (primarily alcohol and tobacco) reduces when women have higher relative bargaining power over how these resources are allocated. Few studies considered how the amount of money influenced women's ability to allocate it, suggesting that women may be able to influence spending over smaller amounts of resources compared to larger expenditures.

To address gaps identified in the literature, future studies could look across income from different sources to understand whether women have greater influence or control over certain income streams compared to others, or how the source of income may influence how the money is allocated. They could also explore the relative amount of income women can control and how women's control over income fluctuates as total household income changes. We recommend a systematic evidence review to assess the different levers influencing women's relative bargaining power over resource allocation within a household and understanding the outcomes of women's bargaining power.

Keywords: Gender, control over income, intrahousehold bargaining power, women's empowerment

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ACRONYMS

CCT	Conditional Cash Transfer
IFPRI	International Food Policy Research Institute
LMIC	Low- and middle-income country
RCT	Randomized Control Trial
UCT	Unconditional Cash Transfer
WEAI	Women's Empowerment in Agriculture Index

FULL NAMEINTRODUCTION

Often-cited studies show that when women control income, they tend to spend it in ways that improve the welfare of their household or family. These research studies reveal that when women's income increases and, specifically, their *control* over income increases, households spend more money on food (Kennedy and Peters, 1992), healthcare (Beegle et al. 2001; Wu and Li 2011; Richards et al. 2013), children's education (Quisumbing and Maluccio, 2003), and intergenerational care (Khemani 1999). Other evidence points to improved nutrition outcomes (Duflo 2003; Richards et al. 2013) and increased equality in outcomes between boy and girl children (Doss 2013) in households where women have higher bargaining power over resource allocation. Some studies present more nuanced findings where similar associations were found in one context but not another (Quisumbing and Maluccio 2003). And as such, it is an important topic for policymakers and researchers alike to understand the pathways through which women's increased bargaining power, and more specifically their control over income, leads to improvements in well-being outcomes. In 2013, Doss affirmed there was sufficient evidence to suggest women's access to and control over resources (i.e., their bargaining power over resource allocation) contributes to beneficial outcomes for children and households, however this evidence is now several decades old. There have been no recent reviews exploring the extent to which the body of literature on women's control over income to date broadly supports these findings and under what conditions.

Prior to 2013, there was insufficient evidence – particularly causal evidence – to understand the effective levers to strengthen women's bargaining power one decade ago (Doss 2013). However, since 2013 the literature on this topic has grown substantially. This is thanks in part to new measures of women's agency more broadly, such as the Women's Empowerment in

Agriculture Index (WEAI), that have been applied across a portfolio of interventions to better understand the mechanisms driving women's empowerment and the ways in which women's empowerment influences well-being outcomes. This research provides more causal evidence that interventions that use group-based approaches, provide resources to women, and build women's capacities (i.e., increase access to education or training opportunities, provide time-saving technologies or childcare, improve access to credit or land, or link to income-generating opportunities or markets) can increase women's instrumental and collective agency in some cases and contexts. However, few interventions achieve improvements in intrinsic agency or gender parity, with the exception of those projects that address harmful gender norms and that work with men (Quisumbing et al. 2024; Quisumbing et al. 2023a). Similarly, measures of women's empowerment or agency have been applied to explore the links between women's agency and other development outcomes more broadly. This research shows that women's empowerment is associated with improvements in children's diets and nutrition, household food security, and agricultural production outcomes (Quisumbing et al. 2023b). However, there remain significant evidence gaps on the linkages between women's empowerment, environmental outcomes, livelihood outcomes outside of agriculture, and other well-being outcomes such as life satisfaction (ibid).

While the above studies include women's control over income or bargaining power over resource allocation within the household as one aspect of women's instrumental agency (i.e., the power to enact personal goals and create new opportunities), few studies focus primarily on women's bargaining power over income as a vehicle for achieving other well-being outcomes. Doss (2013) called for more causal evidence, particularly at the individual level, to better understand the pathways through which various factors increase women's intrahousehold

bargaining power over resource allocation and to then understand how these pathways translate to improved well-being outcomes. To contribute to this goal, we present a rapid review of the literature since 2013 on women's relative bargaining power over resource allocation and its relationship with key well-being outcomes.

Intrahousehold Bargaining Power, Gender Norms, and Well-Being Outcomes

Over the last several decades, the economic literature has developed models of behavior to describe how households allocate resources. One example is the unitary model, where researchers treat a household like a singular unit, assuming members pool their resources, cooperate and act together to maximize the utility and efficiency of the household. This assumption also entails that the dynamics of intrahousehold bargaining do not affect the outcomes realized as a result of resource allocation (Doss 2013). However, this assumption has been challenged in the literature focused on intra-household bargaining and inequality (Alderman et al., 1995; Brown et al., 2017; Brown et al., 2021). As a result, various collective or bargaining models emerged, including both cooperative and noncooperative bargaining models (see Doss 2013 for a detailed description and history of these models).

Herein, we consider intra-household bargaining dynamics over resource allocation vis-à-vis cooperative or noncooperative behaviors. For example, cooperative behaviors might mean households pool their income and determine subsequent allocation of resources to maximize household utility (Manser and Brown 1980). But cooperative behaviors may break down due to a variety of factors, including, but not limited to, imbalance of power between household members or lack of information sharing between household members. In such models of non-cooperation, household members likely do not pool their income and rather spend these resources according

to their own preferences or in line with normative expectations of their gender (Lundberg and Pollak 1993).

Researchers have developed a large body of evidence examining intra-household power dynamics between men and women highlighting imbalances associated with lack of agency and gender norms that perpetuate inequality (Kevane 1998; Quisumbing and Maluccio 2003). In most cases, particularly in areas with patriarchal norms, women have less control over family income and have limited opportunities to generate their own income given a variety of constraints associated with heavy burdens from domestic and reproductive responsibilities, lack of mobility, and other normative restrictions (Kevane 1998; Njuki et al. 2022). Mixed methods research has described different spending patterns and dynamics around intrahousehold resource allocation, particularly when women do not earn income in low- and middle-income countries (LMIC). For example, Eissler et al. (2020) describe such patterns within rural households in Burkina Faso, where husbands allocate budgets to each wife or wives proportionate to their number of children. The women are then responsible for managing their allocated budget and harvest to care for daily expenses, including food preparation, children's fees, and their own personal expenses; and they utilize income they generate from selling harvests or poultry to supplement the budgets their husband gives them.

Broadly speaking, women have less influence in household decision-making, particularly around resource allocation, as social norms position men as primary household earners and decision-makers and women as primary care takers responsible for reproductive duties. A recent review of the literature indicated that household spending patterns then tend to align with men's spending preferences, which typically translate to less money spent on children's education and food expenditures and more money spent on vices (alcohol, tobacco) and entertainment

(Anderson et al. 2021). When women have greater control or say over how income is spent, studies have shown that this contributes to improved well-being outcomes as women typically spend money on children's education, healthcare, or more diverse foods for consumption (Anderson et al. 2021; Kennedy and Peters, 1992; Beegle et al. 2001; Wu and Li 2011; Richards et al. 2013; Quisumbing and Maluccio, 2003; Duflo 2003; Guzman et al. 2008). A recent meta-review focused on testing assumptions about women's empowerment in agriculture identified nine studies indicating women or female-headed households spent higher proportions of income than male-headed households on a variety of household goods, including food and children's education (Anderson et al. 2021). The literature acknowledges that women's ability to control income or household budgets may depend on several factors, including (but not limited to) the source (such as cash transfers, off-farm business activities, wage employment, agricultural labor, credits or loans), normative patterns of intra-household decision-making, the amount of income earned, and who earned the money, among other factors.

In the last comprehensive review of this literature, Doss (2013) argued for an increase in causal evidence to understand what levers were effective to address women's increase in bargaining power over resource allocation. In doing so, she reviewed the empirical evidence underlying the importance of improving women's bargaining power. But there has yet to be an updated review to understand the extent to which the literature to date agrees with or nuances these earlier conclusions that an increase in women's bargaining power translates to improve household and well-being outcomes. In this paper, we conduct a rapid review of the evidence since 2013 to answer the following research questions:

- Does women's control over income within the household influence household expenditure patterns (across key expenditure categories like food, health, education of children)?
- Does the source of women's income matter for spending decisions (e.g. cash transfers, agricultural labor, off-farm income earning activities)?
- Does the amount of women's income matter for spending decisions?

This paper is organized as follows. In the next section, we present the methods employed to conduct this rapid review, including a description of the literature search strategy and a description of the final list of included studies. The following section (Results) presents a synthesis of reviewed literature to answer the above research questions. The final section (Discussion and Conclusion) presents a summary of learnings from the review and points to key gaps in the evidence for future research.

METHODS

We conducted a rapid review to explore the extent to which the literature has continued to develop and nuance our understanding of how women’s control over income influences well-being outcomes. Rapid review is a method of literature review that employs a streamlined and accelerated systematic review process to produce evidence in a timely manner (Devane et al. 2024). Rapid reviews have a narrower scope, by focusing on specific research questions or populations, and use methodological shortcuts, such as the selection of fewer literature databases and more limited inclusion criteria, to accelerate the review process (ibid). Rapid reviews differ from scoping reviews in that they focus on a narrower set of research questions and they differ from full systematic reviews by simplifying the methods used to select literature for the review.

We selected seven databases to search: 1) Google Scholar, 2) Taylor and Francis, 3) Science Direct, 4) Scopus, 5) Web of Science, 6) International Food Policy Research Institute (IFPRI) Discussion Paper Series, and 7) World Bank Open Knowledge Repository. Table 1 presents the full list of search terms used in each database.

Table 1 Rapid review search terms	
<ul style="list-style-type: none"> • (gender or women) (income or cash) (agency or empowerment or control or decision) • (female and Women’s empowerment) (household spending or budget) (income or cash) • (gender or women) (household spending or budget) (agency or empowerment or control or decision) 	<ul style="list-style-type: none"> • (gender or women) (cash transfers) (agency or empowerment or control or decision) • (gender or women) (remittances or income or budget or wages) (agency or empowerment or control or decision) • (gender or women) (intra-household resource allocation) (agency or empowerment or control or decision)

Table 2 presents the full list of inclusion criteria that guided our selection of articles for this review.

Table 2 Selection criteria

- Papers published between 2013 and 2024
- Papers focus on low and middle-income countries¹
- The study focuses on the household or intrahousehold level
- Inclusion of qualitative, quantitative, and mixed-method studies
- Must present empirical data on how women spend (or prefer to spend) income from any type of source within their control

First, for each search term, we reviewed the first 40 papers that populated in the respective database. Once we exhausted the first 40 papers, we moved to the next search term. We reviewed the abstract of these first 40 studies that populated under each search term to determine if the study meets initial criteria (publication year, focus on LMIC, focus on the household or intrahousehold level). For articles that met these initial criteria, we then reviewed the article beyond the abstract to ensure it focuses on or presents data related to how women spend income (or prefer to spend income) (from any type of source) within their control. Articles that were duplicates (i.e., a working paper that was later published) were removed. We noted that many studies initially selected focused on how different income sources may or may not influence women's control over that income but did not go further to describe how women's control over income or resource allocation translated into differences in expenditure or well-being outcomes. This review selected the studies that also examined the outcomes associated with women's control or influence over income or resource allocation. We included quantitative, qualitative, and mixed-methods studies in this review. We acknowledge that the types of evidence provided by these studies differ and that the findings from these various methods may be complementary, given that quantitative and qualitative methods are often used to assess different research questions. For example, we expect that quantitative studies may provide causal evidence of the

¹ As defined by the World Bank in 2024: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

relationship between women's control over income and well-being outcomes, while qualitative evidence can provide evidence on why these relationships exist and the mechanisms through which they play out.

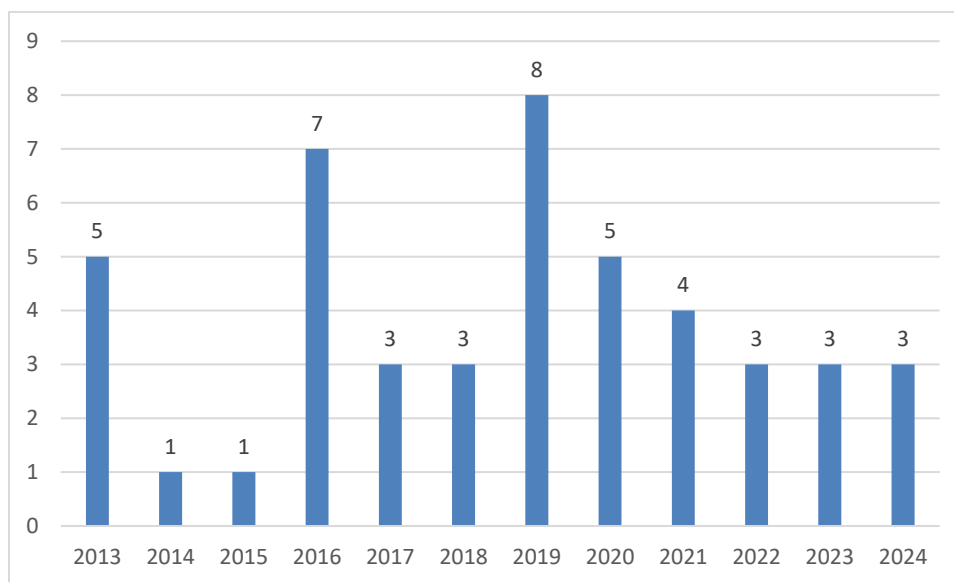
The selected articles were entered into a database collecting the following information from each article: Full reference citation, year published, region focus, country focus (if applicable), study type (observational, review, experimental or quasi-experimental), methods (qualitative, quantitative or mixed methods), the main findings (description of overall findings), indicators for outcomes (expenditure or well-being), the source of income referenced (cash transfer, agricultural income, off-farm/business income, remittances, unspecified), whether the income earner was identified, the level of analysis (household, business, or individual), how control over income or bargaining power was defined, and the types of decisions considered (joint or sole). See Annex 1 for details on the full set of studies included in this review.

RESULTS

1. Summary of Reviewed Articles

This search yielded a total of 46 articles that were included in this rapid review. Reviewed articles were published between 2013 and 2024 (Figure 1), and most were published between 2016 and 2020.

Figure 1 Number of articles published by year



Of the reviewed articles, 33 were quantitative, 5 were qualitative, and 8 used mixed methods. And of these, 31 were observational and 15 were experimental or quasi-experimental. These studies represent a broad geographic scope. Figure 2 presents the distribution of studies across geographic regions, with most studies emerging from sub-Saharan Africa.

Figure 2 Distribution of studies by region

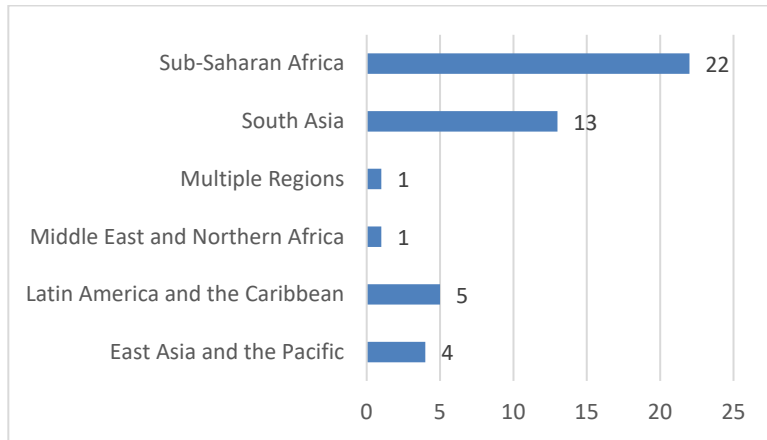


Table 3 presents the number of studies from each country by region. The largest portion of studies are from India, followed by Ghana, Tanzania, and Uganda.

Table 3 Countries represented by reviewed articles

East Asia and the Pacific	Latin America and the Caribbean	Middle East and Northern Africa	South Asia	Sub-Saharan Africa
Indonesia (2) The Philippines Vietnam	Ecuador Honduras Mexico (2) Uruguay	Tunisia	Bangladesh (2) India (6) Nepal (2) Pakistan Sri Lanka (2)	Benin (2) Burkina Faso (2) Cameroon Chad Ethiopia Ghana (3) Kenya Niger Sierra Leone South Africa Tanzania (3) Uganda (3) Zambia (2)

*One study covered three countries: Ghana, India, and Sri Lanka.

Finally, these studies discussed or analyzed women’s control over money or income from a variety of different sources, or in certain cases, an unspecified source. Most studies (19) did not specify the exact source of income referenced in the study. In several cases, study authors would treat the referent income as “total household income” without referencing all potential income sources or combining all income sources into one category. Seven (7) studies focused on women’s control over income from agricultural or business sources, 8 studies focused on cash

transfer income, 4 studies focused on money from various forms of finance (loan, credit, or microfinance), and 5 studies focused on money from remittances. As a note, we recognize that sources of finance (loans, credit, or microfinance) are different than income in that they include terms and responsibilities for repayment, and they are often used to generate income. However, we included these four studies because they discussed and compared expenditures or outcomes when women controlled or influenced how the money was spent compared to men. Finally, 3 studies analyzed hypothetical sources of income from an in-the-field behavioral game experiment. Additionally, 33 studies identified the earner of the referent income, whereas 15 studies did not.

2. Defining Women's Control Over Income

This review included studies that presented two types of results associated with women's control or influence over resource allocation or income: 1) evidence of associated outcomes and/or 2) evidence of associated expenditures. However, these studies take different approaches to defining women's control or influence over resource allocation or income and in their units of analysis. We briefly describe the different approaches employed and represented across this review.

Most studies (25) included in this review examined outcomes at an individual level, which is appropriate for understanding and exploring intrahousehold dynamics around decision-making and resource allocation. However, several studies do examine outcomes at either the household (11) or business (2) level. For example, Dharmadasa et al. (2020) compared household-level expenditures between male- and female-headed households that received remittances. Studies comparing outcomes at the household level based on headship gender often rely on an oversimplification of complex gender dynamics. This approach overlooks the nuanced

and complex nature of intrahousehold decision-making processes. As a result, these analyses offer limited insight into how women's influence or control over spending or resource allocation decisions may shape outcomes differently.

Additionally, there was a range in how studies included in this review considered or defined women's control or influence over resource allocation or income. We note that several studies relied on imperfect measurements of women's control over income, often relying on assumptions based on headship or business ownership or that earners indeed control their own income. Gummerson and Schneider (2013) assumed levels of influence or control over spending decisions as associated with men's and women's relative income contribution to the household budget. A few studies did not explicitly define women's control or influence over resource allocation or income, but rather relied on theory, proxy indicators, or general assumptions about women's control or influence over resource allocation. For example, Fafchamps et al. (2014) did not explicitly define women's influence or control over decision-making but rather relied on assumptions that women controlled or influenced decision-making over spending decisions in women-owned enterprises.

Many studies did use survey indices that assess survey respondents' perceptions of their and/or their spouses influence over a variety of household decisions or how a variety of decisions are made within a household (either sole or joint) to define women's control over income or relative bargaining power. Almost half of the studies (23) considered joint decision-making in their definition and approach to measuring or considering women's control over income and would assess different expenditure outcomes associated with women's relative level of influence over household decisions. However, almost half did not (20) consider joint decision-making; these typically either assumed that women had full control over their income or employed in-the-

field choice games measuring instances of women's sole decision-making compared to men. The remaining 3 studies did not specifically define how they measured or conceptualized women's control over income, so it is unclear or not applicable if they considered joint decision making. Studies relying on qualitative data typically defined women's control over income or relative bargaining power over resource allocation as self-reported perceptions of their own agency to make or influence decisions or make decisions with their spouse. A few studies (5) utilized survey instruments from the WEAI or alternative versions (such as the Women's Empowerment in Livestock Index, or others) to determine women's level of influence or control over income.

Finally, some studies explicitly examined women's reported control over income to determine how this influenced well-being outcomes or expenditures, whereas other studies examined women's relative level of influence over a variety of household decisions (such as investments in children's education, food purchases, minor or major household expenses) and its association with well-being or expenditure outcomes.

3. Women's Control Over Income

The 46 studies included in this review, covering the period between 2013-2024, provide new or updated evidence about how women spend the income they control. These new studies provide evidence consistent with research prior to 2013 in that women tend to allocate more resources towards education, food purchases and dietary diversity, healthcare, and children's needs more broadly than men. Women also spend less than men on adult goods, vices, or entertainment expenditures. And there is mixed evidence around how women may utilize income to either increase cash savings or reinvest into their own or other household members' businesses. Below

we describe the evidence by key outcome and synthesize the results of the updated literature in the following section.

Investments in Children

Several studies indicate that when women have greater influence or control over income or resource allocation decisions compared to men, there is higher spending on investments in children's welfare and well-being (D'Exelle and Ignowski 2022; Jayaraman and Findeis 2013; Doepke and Tertilt 2019; Haley and Marsh 2021; Porter 2016; Garikipati et al. 2016). Porter (2016) identified that women who received micro-loans significantly increased spending on children's needs (education, clothing, primarily) compared to when men received similar loans in Bangladesh and attributed this result to the fact that women are more aware of and responsible for children's needs compared to men. In India, Garikipati et al. (2016) found a positive association between women's borrowing activity and influence in household financial decision-making, particularly for health and education decisions around children, suggesting that women's ability to influence how borrowed money is spent could direct increased household spending on children's well-being.

Education

Studies indicate women with higher relative bargaining power or influence over spending decisions increased allocation of resources to children's education (Kaur 2022; Pajaron 2013; Afoakwa et al. 2020; Mabali et al. 2022), particularly increasing spending on daughters' education (Kaur 2022; Ringdal and Sjørusen, 2021; Afoakwa et al. 2020; Galdo 2024). For example, Galdo (2024) found positive effects on school participation and attendance for girl children when women have increased influence over spending decisions in Ethiopia. A study

from Ghana suggested that women's relative intrahousehold bargaining power over resource allocation was not associated with children's late school enrollment but did have a negative association with the probability of grade repetition, and that girl children tended to benefit more from mothers' increased bargaining power over resource allocation (Afoakwa et al. 2020). A between-subject lab experiment with married couples from Tanzania found that women's increased bargaining power over household resource allocation increases the equitable distribution of resources to boy and girl children's education but does not increase the amount invested in children's education overall (Ringdal and Sjørnsen 2021). The study also found interesting effects of time preferences between the spouses, such that spending on children's education decreases when the wife has full control over spending and is less willing to allocate resources to future needs than current needs (i.e., more impatient) than the husband, but this spending increases when the wife has full control over spending and is just as or less impatient than the husband, highlighting the importance of time preferences in household decision-making (Ringdal and Sjørnsen 2021)

In Sri Lanka, male-headed households that received remittance money were less likely to allocate this money towards children's education compared to female-headed households (Dharmadasa et al. 2020). Similarly, households in which men take credit were less likely to spend on educational expenses than households in which women take credit (Jayaram and Findeis 2013). In India, women who participated in a national welfare program that transferred cash directly into their bank accounts experienced an increase in decision-making influence over several categories of household decisions and spent more on children's education (Tagat 2020).

Household food purchases, dietary diversity, and nutrition outcomes

Several studies indicate an association between women's influence or control over income and spending decisions with higher household expenditures on food (Dharmadasa et al. 2020; Kamath and Dattasharma 2017; Gazeaud et al. 2023; Rink and Barros 2021; Gummerson and Schneider 2013; Mabali et al. 2022; Portes et al. 2019; Porter 2016), improved dietary diversity and children's diets (Lourme-Ruiz et al. 2016; Tagat 2020; Pangaribowo et al. 2019; Malapit et al. 2015; Egah et al. 2023a; Soh-Wenda et al. 2024; Larson et al. 2019), and better nutrition outcomes overall (Hartarto et al. 2024; Gaile et al. 2019).

Many studies identified that women allocate higher shares of spending towards food purchases than men when they influence household spending decisions or garner larger shares of household income. For example, in South Africa, a study found that when women earn larger shares of income, households spend more on food and less on alcohol compared to when men earn higher shares of income, except these effects diminish when there are more adults in the household (Gummerson and Schneider 2013). In Benin, Egah et al. (2023b) found that female-headed households were less exposed to food insecurity than male-headed households overall. The findings indicated that among male-headed households, those in which women contributed higher levels of income were also less exposed to food insecurity than those where women contributed lower levels of income, in part due to women's income contributing to food expenses more than men's income and that men's level of income increased with women's level of income. In a separate study, Egah et al. (2023a) found that women's relative control over resource allocation was associated with higher spending on food, particularly food of high nutritional value. An analysis of household financial diaries kept by poor women and men

household heads in India found results consistent with other studies – women spent cash on food items, whereas men spent on fuel and entertainment (Kamath and Dattasharma 2017).

Studies also indicate that when women have greater control over household spending decisions compared to men, women purchase higher-quality, nutrient-dense and more diverse foods. Tagat (2020) found that women in India who directly received cash transfers had higher levels of influence in decision-making around purchasing more nutritious foods. Using women's share of assets to estimate their intrahousehold bargaining power, Pangaribowo et al. (2019) found that women's share of assets is positively associated with expenditures on nutrient-dense foods, such as meat, fish and dairy, and a significant reduction in spending on adult goods in Indonesia. Similarly, evidence from Honduras also showed that households where women have influence or control over spending decisions have higher levels of dietary diversity (Larson et al. 2019), and Gaile et al. (2019) found that women's relative control over or influence over income and spending decisions in pastoral communities was associated with improved maternal and child nutrition outcomes in Tanzania. In Burkina Faso, women's agricultural and off-farm incomes were strongly associated with increased dietary diversity in Burkina Faso and this diversity was over and above what was produced at the household level (Lourme-Ruiz et al. 2016). Although this study assumes that women's earned income reflects their control over that income, the results suggest that when women earn and presumably control that income, they purchase more diverse foods for household consumption (Lourme-Ruiz et al. 2016). Evidence from Nepal indicated that children consume improved diets in households where women have higher relative control over income (Malapit et al. 2015). In Cameroon, Soh-Wenda et al. (2024) utilized the A-WEAI to examine how women's influence in decisions around household spending affected the nutritional quality of household food consumption, finding that while

women had lower overall control over spending decisions than men, there were positive associations between women's influence in spending and nutritional quality of household consumption.

Finally, women's relative influence over household spending decisions were associated with better nutrition outcomes for children (Hartarto et al. 2024; Gaile et al. 2019). Using data from the fifth wave of the Indonesia Family Life Survey, Hartarto et al. (2024) found that mothers' higher intrahousehold bargaining power was associated with long-term nutrition outcomes – specifically reduced prevalence of stunting and better anthropometric outcomes – and that boy children tended to benefit more than girl children. However, the authors note that these outcomes tended to be stronger when women made decisions jointly with their spouse or another household member.

Healthcare

A few studies indicate that women may prioritize spending on healthcare more than men, although this does not always translate to increased access to healthcare, particularly in contexts where norms dictate that men control spending related to healthcare. Wouterse (2016) found evidence that an increase in women's overall empowerment within the household – inclusive of her influence over spending decisions or control over income – is associated with significant increases in expenditures on household healthcare and decreases in expenditures on vices, such as cigarettes and alcohol in Niger. A working paper from Chad presented results indicating that female headed households spend more on food, health, and education compared to male headed households, who spent more on vices (alcohol and leisure activities) in Chad (Mabali et al. 2022). Another mixed-method study in Uganda described that while men typically control household spending for healthcare services, women would prioritize spending on healthcare

services (such as maternal health services) if they indeed did control or have greater influence over resource allocation for healthcare (Kaase-Bwanga 2021). Similarly, a qualitative study in Sierra Leone described the dynamics around intrahousehold decision-making for allocating resources towards healthcare in the context of the government's Free Health Care Initiative, finding that men maintain more decision-making power over budgets for healthcare services regardless of who earns the income to pay for those services. The study cites the following example of a man indicating that even if his wife *"takes out a loan from the [VSLA] scheme, she hands over the money to [him] and [he] negotiate[s] with the nurses for payment"* (Cornish et al. 2021, p. 30), but women prioritize spending money on healthcare more than men and often have to secure the budget – through income generating activities or securing a small loan – to cover the costs (Cornish et al. 2021). Porter (2016) found that expenditure on medicine significantly increased when women in Bangladesh received micro-finance loans compared to when men received similar loans.

Savings

The literature presents mixed results regarding how women may prioritize savings when they have relatively increased influence or control over spending decisions. A qualitative study of women microentrepreneurs in Ghana described how they would prioritize keeping their earned income for cash savings, partly in an effort to maintain pressure on their spouses to continue providing money for children's expenses, healthcare, and other household needs (Freidson-Ridenour and Pierotti 2019). Natali et al. (2016) assessed the results of the Government of Zambia's Child Grant Program, an unconditional cash transfer program directed towards women in households with young children, finding that women who received the cash transfer, particularly those who had lower baseline decision-making power, saved more cash and had

more livestock (another form of savings) than women who did not receive a transfer. Another evaluation of this same program had similar results in that women who received the cash transfer reported using this money to build their own savings (Bonilla et al. 2017). In Mexico, Portes et al. (2019) found that women's greater influence in decisions around how to spend income increases precautionary savings to offset risk. However, a study of women in a matrilineal society in India found that those who make financial decisions prioritize spending on well-being improvements, such as food for household consumption, at the expense of savings (Rink and Barros 2021).

Female Labor Supply or Business Investment

There is some evidence to suggest that when women receive direct transfers or have greater influence over household resource allocation, they reinvest that money into their own business or economic activities (Gazeaud et al. 2023; Natali et al. 2016; Bonilla et al. 2017; Somé 2016) or it enables increases in the female labor supply (Field et al. 2021; Galdo 2024). Two studies from Zambia found that women who received a cash transfer either reported spending cash on their own business or farming activities (Bonilla et al. 2017) or increased their investment in off-farm business activities (Natali et al. 2016) compared to those who did not receive a transfer. Somé (2016) highlighted how women in southwest Burkina Faso who earned incomes from agricultural activities reinvested those incomes to expand their agrifood-value chain activities and earn higher incomes.

Another study documented how increases in women's intrahousehold bargaining power led to increases in women's workforce participation. An experimental study in India tested the effect of transferring wages from a public workfare program directly into women's bank accounts compared to depositing it into their husband's bank accounts (the status quo) (Field et

al. 2016). The authors found a significant increase in women's labor force participation when they received the wages directly and that these gains were concentrated among women who did not previously work or whose husbands were least supportive of women working (Field et al. 2016). The authors attributed these effects to an increase in female bargaining power, "*and that [these] women were able to use their improved bargaining positions to push back against social norms internalized by men*" (Field et al. 2016, p. 2). Thus, by making it more difficult for men to influence or appropriate their wives' wages, women experienced more control over how to spend or save their own wages and this translated to an increase in women's workforce participation.

Vices and Adult Goods

Many studies highlight that when women have greater influence over how household budgets or incomes are allocated, the share of budgets dedicated towards vices or entertainment, such as alcohol, tobacco, and other expenditures, decreases (Pajaron 2013; Dharmadasa et al. 2020; Bonilla et al. 2017; Wouterse 2016; Gummerson and Schneider 2013; Mabali et al. 2022; Pangaribowo et al. 2019; Kamath and Dattasharma 2017). As quoted in Bonilla et al. (2017), a woman recipient of a cash transfer said about her and her husband's differing spending preferences, "*He just wants to drink his money; he doesn't want to use it at home. Maybe that is how God made him. He uses his money for beer, but I use it at home to solve various problems*" (Bonilla et al. 2017).

4. Does source or amount of income matter?

We further examined studies based on the explicit source of income to determine if any differences emerged. In this section, we describe in more detail the findings of studies that focused on specific sources of income, including cash transfers, money from loans or other forms

of financing, remittances, or agricultural or off-farm income sources. We note that many studies (19) either did not specify the income source or combined all income sources as ‘total household income’ described in the paper. These studies are described elsewhere in the paper but not referred to in this section. Additionally, very few studies discussed the relative amount of money referenced and if or how the amount influenced whether women were able to influence or control its spending. The few exceptions are noted throughout this section.

Cash Transfers

Several studies (8) included in this review considered how women use incomes from cash transfers, 5 of which were unconditional (UCT) and 3 were conditional cash transfers (CCT). Overall, these studies suggest that the mechanism to deliver the cash transfer and the extent to which husbands or other family members are involved in that process directly influence the extent to which women have influence or effective control over this spending and how they spend this income. For example, an RCT from Tunisia demonstrated that women who received a cash transfer were more likely to reinvest that money into their own business when their husband was not involved in the training compared to women whose husbands did participate in the training (Gazeaud et al. 2023). Additionally, some cash transfer programs have conditions, which may influence how the money is ultimately spent (Doepke and Tertilt 2019; Tagat 2020; Bergolo and Galvan 2018).

The evidence generated from these studies consistently show positive associations with women and young girls receiving cash transfers and household spending on certain well-being areas, such as education (Tagat 2020; Bonilla et al. 2017), household food consumption and dietary diversity (Gram et al. 2019; Tagat 2020; Bonilla et al. 2017), women’s socio-economic

well-being (Iqbal et al. 2020; Gazeaud et al. 2023), and investments in children overall (Doepke and Tertilt 2019; Bergolo and Galván 2018).

Several studies also examined the extent to which cash transfer programs enabled women to invest in their own savings, finding that women receiving the transfer had higher saving rates than those who did not receive a transfer (Doepke and Tertilt, 2019; Natali et al. 2016). Iqbal et al. (2020) implemented a longitudinal study of an UCT program in Pakistan finding that women who received the cash had higher socio-economic scores, were more likely to participate in voting, and experienced improved levels of mobility.

Several of these studies also assessed the extent to which cash transfer programs influenced women's overall levels of influence in intrahousehold decision-making and bargaining power. Bonilla et al. (2017) found that women recipients of a national UCT program did indeed have higher levels of self-reported influence over household decisions, but that men remained the primary decision-maker for the household. Bergolo and Galván (2018) found that women's participation in a CCT program in Uruguay improved their influence over household decision-making processes related to certain household expenditures.

Finally, one study highlighted that the amount of money women earned from a cash transfer program was so low that women were able to maintain control over it, suggesting that the amount of money does matter with respect to women's ability to garner control over it. In one study from Nepal, women received a 'negligible' sum from a cash transfer program and, therefore, their mothers-in-law allowed the women to keep and manage it according to their preferences (Gram et al. 2019). As cited in the study, "When asked if their receipt of the cash transfers had led them to experience greater household decision-making power, beneficiaries

usually answered with a degree of amusement: ‘*such a small amount of money won’t grant anyone any kind of power!*’” (Gram et al. 2019).

Financing: Loans, Credit, or Microfinance

This review identified four studies that specifically examined resource allocation from various forms of finance and compared the ways in which women were able to influence how this money was spent compared to men. Garikipati et al. (2016) found that only certain types of loans taken by women influenced their relative bargaining power over how that loan was spent. For example, the authors distinguished between two types of loans: ‘planned’ and ‘instant.’ ‘Planned’ loans, had no effect on women’s relative bargaining power, but the ‘instant’ loans did as they improved women’s relative bargaining power over how these were spent. The authors couch these results by explaining the nature of ‘instant’ loans in that they typically include “coercive enforcement methods” and “are considered socially debasing,” so the women who take them are essentially shouldering a burden for the household in return for relative levels of influence in decision making over how it was spent, which they were not afforded when taking the planned loans.

Kamath and Dattasharma (2017) found that women household heads in India who received micro-finance loans were significantly more likely to spend money investing in jewelry as a form of savings or investment compared to women household heads who did not receive micro-finance loans. A separate study from Bangladesh identified a positive association between women’s use of credit and household spending on children’s goods, education, durable goods (e.g., furniture or appliances), and housing, compared to men’s use of credit, which was negatively associated with household spending on food and positively associated with adult goods (such as clothing or footwear) (Jayaraman and Findeis 2013). In Bangladesh, Porter (2016) found that women who received micro-finance loans were significantly more likely to

spend money on food budgets, particularly on rice, compared to men who received micro-finance loans, but that spending on more diverse and nutritious foods increased with men receiving loans compared to women. Porter (2016) attributed these findings to align with patterns of food consumption as men tend to consume higher quality foods.

Remittances

Few studies included in this review focused on how women may allocate money received from remittances differently than men. Studies reviewed suggest that the gender of the migrant and those receiving the remittances influence the differing ways such income would be allocated. But overall, when women have relatively increased bargaining power over how remittance money is allocated, results from these studies suggest women spend more on investments in child welfare (Pajaron 2013), such as education (Kaur 2022) and nutrition and food expenditures (Dharmadasa et al. 2020) than their male counterparts, and that women migrants had greater influence over how remittance money is spent (Deere and Alvarado 2016).

A qualitative study from Punjab, India found that women in households with migrant husbands experienced differing levels of influence or control over how to spend remittance money depending on different demographic factors, such as age or presence of in-laws (Kaur 2022). For example, older women with migrant husbands described having greater control over remittance money, which helped them to have greater influence in household decision-making more broadly. In one such case, a woman explained this allowed her to divert a higher share of money to her daughter's education. On the other hand, younger women with migrant husbands had less influence on spending decisions; their husbands would dictate budget decisions over the phone and the money was transferred to in-laws (Kaur 2022). A study in Sri Lanka compared expenditures between female-headed and male-headed households that received remittance

money, finding that female-headed households spent a larger share of remittance income on food expenditure compared to counterpart male-headed households, who allocated fewer resources to education and more to *ad hoc* purchases, entertainment, and transportation options compared to female-headed households (Dharmadasa et al. 2020). Pajaron (2013) similarly found that female-headed households in the Philippines spent larger shares of remittance money on food and other household expenditures, whereas comparable male-headed households spent more on vices, such as alcohol and tobacco. However, the presence of an influential female decision-maker in either male or female-headed households was associated with an increased allocation of remittance money on investments in child welfare (Pajaron 2013).

Other studies examined the economic motivations for why men or women would migrate and send money home, examining how this dynamic might influence bargaining power over the allocation of remittance money. In Sri Lanka, De Silva (2013) found that remittances from women migrants were used to improve residences, purchase nonfarm assets, and acquire additional farmland, and remittances from men migrants were allocated to accumulating housing assets and new business investments. However, this study did not address intrahousehold levels of decision-making influence over how that remittance money was spent, so it is unclear the extent to which women held influence over how remittance money was spent. Evidence from Ecuador found that while men and women migrants were similarly as likely to use remittance money for asset accumulation, women migrants had greater influence over how remittance money is spent than men migrants, and that women receiving remittance money from men migrants were more likely to own the assets purchased with remittance money (Deere and Alvarado 2016).

Agricultural or Off-Farm Income

Few studies in this review examined how women allocate or influence spending decisions for income explicitly generated by agricultural or off-farm activities; many of the studies that referenced an unspecified source of income combined income from agricultural, wage labor, and off-farm activities. This section focuses only on the studies that were explicitly assessing income derived from agricultural or off-farm activities. Almost all the studies referenced in this section focus on whether or how women can control or influence spending decisions from their own earned income, whereas one study focused on nutrition outcomes associated with women's control over agricultural and off-farm income. There were no clear generalizable findings across this subset of studies, suggesting a need for more explicit research assessing women's control or influence over income derived specifically from agricultural or off-farm activities.

Three studies specifically focused on women micro-enterprise owners and how they managed incomes derived from their businesses. An experimental study in Ghana randomly gave cash or in-kind grants to male- and female-owned businesses and found that women microentrepreneurs with higher initial profits were only able to utilize in-kind transfers to further grow their business and spent cash on household expenditures and transfers to non-household members, while men invested both cash and in-kind grants in their businesses (Fafchamps et al. 2014). Freidson-Ridenour and Pierotti (2019) found that women microentrepreneurs in Ghana hide their business income to prioritize savings over business investments in part to maintain pressure on their spouse to continue providing for household and children's needs. A third study utilized experimental data from male and female-owned enterprises in Ghana, India, and Sri Lanka who received either business loans or grants, finding positive returns for male- but not women-owned enterprises. The authors found that women's lower profit margins were not

reflective of lower returns on investment but rather women's profits were typically invested into their husband's (or other household members') enterprise (Bernhardt et al. 2019).

Two studies explored women's influence or control over income derived specifically from agriculture. A mixed-method study from Kenya explored the factors contributing to women's relative control over income accrued from household banana sales in Kenya (Nyabaro et al. 2019). Decisions over how to spend banana income were made solely by men (31%), solely by women (28%), and jointly by husband and wife (41%), and factors such as the availability of off-farm income or women's education level significantly increased their level of decision-making over banana farm income allocation, while the total land owned and household headship reduced women's influence over banana income decisions. While the study does not specify the earner of off-farm income, the increase of off-farm income to a household budget increases the amount of banana income a woman controls and utilizes to pay for household expenses (Nyabaro et al. 2019).

Another qualitative study focused on the dynamics of women's control or influence over various agricultural income sources in Burkina Faso. Somé (2013) argues that women's economic development initiatives should place a special interest on women's control over income rather than just its generation, and, thus, the author explores the strategies women employ to exert more influence over how resources are allocated, using ethnographic case studies from women cotton growers in southwest Burkina Faso. Somé (2013) distinguished between different types of money rooted in cultural practices where income that is not 'healed' by a male head of household prior to being spent may be considered 'dangerous' (i.e., 'hot money'). Thus, women must navigate these practices to circumvent losing control of their earned incomes, while avoiding 'spiritually dangerous' income sources. Some women do so

successfully by engaging in activities to generate ‘cold money’ (i.e., money that does not need to be ‘healed’ or, in other words, reported to the male household head) such as raising pigs and thus maintain full control over how this money is spent. As such, these women reported leveraging these dynamics in their favor and investing earned incomes from “cold money” activities into new agricultural or agri-value chain activities, such as planting new valuable crops – sorghum – and selling processed products like sorghum beer or shea butter, further generating “cold money” that they can control.

Finally, one observational study from Burkina Faso focused on women’s control over income and its association with nutrition outcomes, finding a strong association between women’s earned income from agricultural and off-farm sources and household dietary diversity Lourme-Ruiz et al. (2016).

5. Factors Influencing Women’s Bargaining Power Over Spending and Strategies to Navigate Limited Bargaining Power Strategies

This review focuses on synthesizing new evidence since 2013 about how women spend money or allocate resources within the household. While it is not a review of the evidence about how to increase women’s influence in and control over intrahousehold bargaining power, several of the studies included in this review discuss factors enabling and limiting women’s relative control over intrahousehold resource allocation. This section presents the key themes that emerged from these studies regarding these enabling and limiting factors.

Gender Norms and Expectations

Several studies emphasized that men and women typically followed spending patterns aligned with their normative roles and expectations according to established gender norms. Such norms

follow that men are the primary household decision-maker and financial provider, whereas women are responsible for domestic and childcare duties, including food preparation. Studies in this review outlined the ways in which men would typically allocate resources differently from women, with men mostly prioritizing spending on investing in assets, business and agricultural growth, food and other household expenses as needed, in addition to vices or adult goods. However, they tend to spend less on food and household expense budgets than women when women would garner larger influences in spending decisions, given that women are normatively responsible for these areas (food preparation and household expenses). One study using mixed methods in Uganda examined how women's spending habits from their own income were shaped by these norms and expectations. It found that women tend to invest income they earn into the household and family well-being and not on personal needs, so as to fulfill normative expectations and not disrupt family cohesion (Haley and Marsh 2021).

Strategies to Garner or Maintain Control Over Income

Several studies highlight different strategies women may employ to garner or protect control over income given their relative disadvantage in intra-household bargaining compared to men. Two behavioral experiments tested how couples choose to disclose resources to one another (or not) (D'Exelle and Ignowski 2022; Fiala 2017). Results from these experiments, coupled with other experimental studies (Bulte et al. 2018; Nyabaro et al. 2019), suggest that women are more at risk of losing control over their own income when their husband becomes aware of it and are, therefore, more likely to not disclose income. On the other hand, men are less likely to lose control and, therefore, are more likely to disclose income to their spouses.

D'Exelle and Ignowski (2022) ran a behavioral choice experiment in Tanzania to test how men and women allocated funds to their spouse, children, and themselves based on whether

their spouse was informed of the hypothetical pot of money. Women responded more strongly in how much they allocate to their spouse depending on if their spouse was informed than compared to how men allocated money. But this disclosure had no effect on the amount of money women allocated to their children (D'Exelle and Ignowski 2022). These results suggest that women may risk losing control over income if her husband is aware of it, which influences women's lack of disclosure (D'Exelle and Ignowski 2022).

Fiala (2017) ran another behavioral game experiment in Uganda with men and women micro-enterprise owners and found that women participants who hid money from their spouses had higher economic outcomes compared to those who did not hide money from their spouses; and that the reverse was true for men participants (Fiala 2017). These findings suggest that women business owners often do not have control over their own money and must hide it from their spouse to control how that money is spent (Fiala 2017).

These results are similar to those found in other studies (Bulte et al. 2018; Nyabaro et al. 2019). An experimental study that embedded an in-the-field choice experiment among women who owned businesses in Vietnam found that while most women prefer not to hide their income from their spouse, those who attend trainings are more likely to hide income and this effect is stronger among the women whose husbands also attended the training (Bulte et al. 2018).

Another study from Kenya highlighted that as women are engaged in intrahousehold bargaining from an inferior position, they are less willing to participate in income-sharing as they have less leverage to influence household spending decisions compared to their husbands (Nyabaro et al. 2019).

Shifts in Power Dynamics Due to Earning Incomes

Several studies specifically described how women's relative bargaining power increased over income as intrahousehold power dynamics shifted when women were the recipients or earners of income, whether from providing remittance money or receiving a direct cash transfer. Deere and Alvarado (2016) found that when women assume the role of income provider by migrating and sending remittances, they increased their relative control over how that income was spent. A study from India found that women who received 'instant loans' had increased bargaining power in various types of household financial decisions, including how the loan money was spent, but that 'planned loans' had no impact (Garikipati et al. 2016). In a different quasi-experimental study from rural Bangladesh, women with better access to credit options enjoyed greater household bargaining positions over intrahousehold resource allocation (Porter 2016). Nyabaro et al. (2019) found that in small-scale banana producing households, women would control higher shares of the income from banana sales for household expenditures when the amount of household income from off-farm sources increased.

Some studies assessing cash transfer programs find evidence that delivering cash directly to women shifts their bargaining power within the household (Bonilla et al. 2017; Bergolo and Galván 2018), although these results may be context dependent. For one example, a mixed-method evaluation of Zambia's Child Grant Program indicated that women recipients of the cash transfer experienced greater influence over certain financial decisions, such as for household savings or investments, and, thus, being the direct recipient of the money shifted women's bargaining power, although this was mediated by entrenched gender norms that maintained men as primary decision-makers (Bonilla et al. 2017). Gazeaud et al. (2023) found evidence from a RCT in Tunisia that poor women who participated in a training alone and received a cash

transfer used those funds to reinvest into income-generating activities, whereas women who participated in the training with their husbands did not use this money to reinvest into their own economic activities, suggesting that by way of participation, their husbands diluted women's bargaining power over how the cash transfer funds were spent.

Complex Family and Power Dynamics

Other power dynamics may influence women's relative bargaining power over how income or household budgets are allocated. Two studies specifically cited complex family structures, particularly in South Asia, where in-laws hold important decision-making power within a household. In an in-depth qualitative study of women whose husbands had migrated, Kaur (2022) found that women's relative age and presence of in-laws (mostly male relatives) in India influenced the level of increased influence or control a woman would have in deciding how to spend remittance money. Older women and those without the presence of male in-laws had a relatively higher influence over how remittance money was spent on children's education compared to younger women and those with the presence of male in-laws, but still had to negotiate budget decisions with their migrant spouse (Kaur 2022).

Qualitative evidence from another study in Nepal highlighted the role mothers-in-law play in managing household budgets and resources, as women who participated in a cash transfer program had to offer their mothers-in-law the entire sum and defer to how their mother-in-law preferred to spend the money (Gram et al. 2019). Mothers-in-law were cited as the senior household member who were "entitled" to manage household budgets first before consulting with husbands on how to spend money, and elder sisters-in-law present another potential power player within households for controlling how income is spent.

DISCUSSION

This review synthesizes the results of 46 studies published since 2013 that examined expenditure and well-being outcomes associated with women's relative influence or control over spending decisions and resource allocation in LMICs. While these studies employed a range of methods and approaches to measure how women may prioritize or allocate resources differently than men, there has been an increased attention to experimental or quasi-experimental designs to provide more convincing and rigorous evidence linking women's control over income or resource allocation with well-being outcomes.

Additionally, while few studies still conducted analyses at the household or business-level that oversimplify complex intrahousehold gender dynamics, most of the studies do examine this question at the individual level, which helps researchers to compare outcomes between women and men or between different groups of women. Thus, the evidence since 2013 provides a more granular understanding of women's influence and control over resource allocation decisions within the household and how these are associated with different well-being outcomes. Many studies examine women's relative control or influence over spending decisions or resource allocation and assess how spending patterns change when women's level of influence increases or decreases. Very few studies look at women's sole decision-making (these are mostly concentrated in in-the-field choice experiments) but rather most studies account for joint decisions between men and women where women have influence in shaping certain decisions with men in a household and do not need to have sole control over decisions to alter spending patterns.

The results of this updated evidence are consistent with the research prior to 2013. Women do indeed spend more money on investments in children, their education, food –

including more diverse and nutrient-dense foods – and on healthcare than do men. Several studies support that girl children tend to benefit more when their mothers have higher relative bargaining power or influence over spending decisions, particularly in investments to their education. Overall, women’s influence over resource allocation decisions tend to promote equitable distribution of money to both boy and girl children. We also see some mixed results around how women prioritize investing in savings compared to men; several studies indicated women prioritize savings more than men but do so for different reasons, although one study in a matrilineal society indicated that women prioritize food budgets at the expense of building savings. And finally, there is consistent evidence that the share of household budgets spent on adult goods or vices (primarily alcohol and tobacco) reduces when women have higher relative bargaining power over how these resources are allocated.

We also examined the extent to which the source of income or amount of income mattered regarding how women allocated resources when they had control or influence over these decisions. These studies showed that generally, regardless of the income source, women allocate resources for children, food and nutritious diets, healthcare, and savings; households where women have more influence or control over resource allocation also spend less on adult goods and vices. However, the literature also shows that when women earn their own incomes or take financing, they may reinvest this money in part into their own economic activities, such as small-businesses or to maintain their own labor participation. We see that in certain instances – such as when women earn their own income, when cash transfers are directly deposited in women’s accounts, or when women migrants send remittances – power dynamics shift, enabling women to garner higher relative bargaining power over how those resources are spent. This is

context dependent, as some studies highlight complex intra-household family dynamics, such as the presence of in-laws, or strict social norms may still limit women’s ability to make decisions.

Few studies in this review considered how the amount of money influenced women’s ability to allocate it, suggesting that women have higher decision-making latitudes to allocate smaller amounts of resources as they choose. Other research beyond this review has addressed this topic, suggesting that women’s relative control over income decreases as the amount of that income increases (Anderson et al. 2021), but this literature does not discuss how this affects *how* and *to what* resources are allocated. A key gap in this literature is understanding how women’s allocation of resources may change if women were to control larger amounts of income or larger shares of household budgets.

Areas for Future Research

This review identified several evidence gaps that should be the focus of future research. Most of the research reviewed on this topic is concentrated in Sub-Saharan Africa. And while this research is important to establish the evidence base, it will be important to assess the extent to which these findings apply in other regions, where complex and entrenched gender norms differ compared to Sub-Saharan Africa.

Second, there was less research identified on how the source of women’s income may influence how much bargaining power women have on spending decisions and how women would spend money differently than men. In particular, few studies look explicitly at the extent to which women control income and spend income from agricultural and off-farm wage labor, beyond those that looked at “total household income” combined from multiple sources —key sources of income for women in rural areas of LMICs. There were no studies that looked across income sources to understand whether women have greater influence or control over certain

income streams compared to others, or how the source of income may influence how the money is allocated. We note that there were only 5 qualitative studies included in this review. More qualitative research may shed light on these nuances and on the mechanisms through which women's control over income influences well-being outcomes.

While many studies accounted for women's influence over spending decisions and the joint nature in which men and women may make decisions together, it is not clear the extent to which how much women's influence and over which decisions is necessary to truly influence outcomes or changes in spending patterns. It was not possible to estimate the magnitude of effects from these studies in this review, but future research should focus on designing comparable studies to understand more broadly the effects of women's control or influence over income spending decisions on well-being outcomes for households and for children. Qualitative research could also help better explain what is meant by women's influence over resource allocation decisions and how this translates to different spending patterns or outcomes.

As mentioned, there was also less attention to the amount of income managed or influenced by women's decision-making. Indeed, most of these studies focused on women's relative bargaining power over resource allocation irrespective of the amount of budget allocated. Similarly, none of the studies explored how the share of income controlled by women or the ways in which they spend income that they control changes as the level of overall household income changes. For example, even if women do not earn the income themselves, the share of budget they control may increase as household income increases. On the other hand, women's bargaining power over resource allocation may decrease, if household income declines, for example, due to climate shock. Future research could further examine these dynamics of

women's control over income changes with different sources or amounts of income or as household conditions change.

Finally, while this paper presents results of a rapid review with a more limited scope, it is not a full systematic evidence review of all peer-reviewed and grey literature studies published on this topic. We would recommend it to be a worthwhile effort to conduct a systematic evidence review on this research area, broadening the focus to understand the evidence (specifically causal evidence) to date on the different levers that influence women's relative bargaining power over resource allocation within a household, such as the source of income, the amount of income, social norms, experience with shocks, among others. Given that studies either look at spending decisions or well-being outcomes of women's control over income but not both, more research is also needed on the relationship between women's and men's resource allocation choices and well-being outcomes considering the different factors that influence women's relative bargaining power across different regions.

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ANNEX A

Article	Country Focus	Type of Study	Methods	Level of analysis	Source of Income	Did the study define who earned the income?	Did the study consider joint decision-making?	Main Outcomes	Did the study use the WEAI?
Afoakwah, C. et al. 2020.	Ghana	Observational	Quantitative	Individual	Income - unspecified	No	No	Educational attainment for boy and girl children	N
Bergolo, M. and Galvan, E. 2018.	Uruguay	Quasi-experimental	Quantitative	Individual	Cash transfer	Yes	Yes	Household expenditures	N
Bernhardt, et al. 2019.	Ghana, India, Sri Lanka	Experimental	Quantitative	Business	Business income	Yes	No	Investments into their own or household member businesses; household expenditures	N
Bonilla, J. et al. 2017.	Zambia	Experimental	Mixed methods	individual	Cash transfer	Yes	Yes	Investments into business, Savings, Education	N
Bulte et al. 2018.	Vietnam	Experimental	Quantitative	Individual	Financial assistance and hypothetical endowment	Yes	No	Choice of resource allocation	N
Cornish, H. et al. 2021.	Sierra Leone	Observational	Qualitative	Individual	Income - unspecified	Yes	Yes	Healthcare	N
D'Exelle, B. and Ignowski, L. 2022.	Tanzania	Experimental	Quantitative	Individual	Hypothetical fixed endowment	No	No	Choice of resource allocation	N
De Silva, S. 2013.	Sri Lanka	Quasi-experimental	Quantitative	Household	Remittances	Yes	No	Household expenditures, Investments in assets, land, and business ventures	N

Article	Country Focus	Type of Study	Methods	Level of analysis	Source of Income	Did the study define who earned the income?	Did the study consider joint decision-making?	Main Outcomes	Did the study use the WEAI?
Deere and Alvarado. 2016.	Ecuador	Observational	Mixed methods	Household	Remittances	Yes	No	Investments into assets	N
Dharmadasa, R., et al. 2020.	Sri Lanka	Observational	Quantitative	Household	Remittances	Yes	No	Household expenditures, Education, Health	N
Doepke, M. and Tertilt, M. 2019.	Mexico	Observational	Quantitative	Individual	Cash transfer	Yes	No	Household expenditures	N
Egah, J. et al. 2023a.	Benin	Observational	Quantitative	Individual	Income - unspecified	Yes	No	Exposure to food insecurity; Food purchases	N
Egah, J. et al. 2023b.	Benin	Observational	Quantitative	Individual	Income - unspecified	Yes	No	Household Food Security Exposure	N
Fafchamps et al. 2014.	Ghana	Experimental	Quantitative	Business	Business income	No	No	Investments into their own or household member businesses; household expenditures	N
Fiala, N. 2017.	Uganda	Experimental	Quantitative	Individual	Business loans and small fixed endowment (for choice game)	Yes	No	Choice of resource allocation	N
Field, E. et al. 2016.	India	Experimental	Quantitative	Individual	Income - wage labor	Yes	Yes	Household expenditures, Savings, Labor market participation, Access to finance	N

Article	Country Focus	Type of Study	Methods	Level of analysis	Source of Income	Did the study define who earned the income?	Did the study consider joint decision-making?	Main Outcomes	Did the study use the WEAI?
Friedson-Ridenour, S. and Pierotti, R. 2019.	Ghana	Observational	Qualitative	Individual	Business income	Yes	Yes	Household expenditures, Investments in assets, land, and business ventures	N
Gaile, A., et al. 2019.	Tanzania	Observational	Mixed methods	Individual	Income - unspecified	No	Yes	Dietary diversity, nutrition	Y
Galdo, J. 2024.	Ethiopia	Experimental	Quantitative	Individual	Income - unspecified	Yes	Yes	Educational attainment for boy and girl children	N
Garikipati, et al. 2016.	India	Observational	Quantitative	Individual	Finance - loan	Yes	Yes	Household expenditures, Health, Education, Ceremonial	N
Gazeaud, J. et al. 2023.	Tunisia	Experimental	Quantitative	Individual	Cash transfer	Yes	Yes	Household expenditures, Dietary Diversity, Assets, Personal Well-being	N
Gram, L et al. 2019.	Nepal	Observational	Qualitative	Individual	Cash transfer	Yes	Yes	Maternal health	N
Gummerson, E. and Schneider, D. 2013.	South Africa	Observational	Quantitative	Household	Income - unspecified	Yes	No	Household expenditures	N
Haley, C. and Marsh, R. 2021.	Uganda	Observational	Mixed methods	Individual	Income - unspecified	Yes	Yes	Household expenditures, Personal expenditures	N
Hartarto, R. et al. 2024.	Indonesia	Observational	Quantitative	Individual	Income - unspecified	No	Yes	Child Nutrition	N
Iqbal, T. et al. 2020.	Pakistan	Experimental	Quantitative	Individual	Cash transfer	Yes	No	Choices to investment in education, fertility preferences, civic participation	N
Jayaraman, A. and Findeis, J. 2013.	Bangladesh	Observational	Quantitative	Household	Finance - credit	Yes	N/A	Household expenditures, Education	N

Article	Country Focus	Type of Study	Methods	Level of analysis	Source of Income	Did the study define who earned the income?	Did the study consider joint decision-making?	Main Outcomes	Did the study use the WEAI?
Kaase-Bwanga, E. 2021.	Uganda	Observational	Mixed methods	Individual	Income - unspecified	Yes	Yes	Healthcare	N
Kamath, R. and Dattasharma, A. 2017.	India	Observational	Quantitative	Household	Income - unspecified	No	N/A	Household expenditures	N
Kaur, A.P. 2022.	India	Observational	Qualitative	Individual	Remittances	Yes	Yes	Education	N
Larson, J. et al. 2019.	Honduras	Observational	Quantitative	Individual	Income - unspecified	No	Yes	Exposure to food insecurity; Dietary diversity	Y
Lourme-Ruiz, A. et al. 2016.	Burkina Faso	Observational	Mixed methods	Individual	Agricultural income	Yes	No	Dietary and Agricultural Diversity, Nutrition	N
Mabali, et al. 2022.	Chad	Observational	Quantitative	Household	Income - unspecified	No	No	Household expenditures, Health, Education	N
Malapit, et al. 2015.	Nepal	Observational	Quantitative	Individual	Income - unspecified	No	Yes	Nutrition	Y
Natali et al. 2016.	Zambia	Experimental	Quantitative	Individual	Cash transfer	Yes	Yes	Savings, Investments into business ventures and assets	N
Nyabaro V, et al. 2019.	Kenya	Observational	Mixed methods	Individual	Agricultural income	No	Yes	Household expenditures	N
Pajaron, M. 2013.	The Philippines	Observational	Quantitative	Household	Remittances	Yes	No	Household expenditures, Education	N
Pangaribowo, et al. 2018.	Indonesia	Observational	Quantitative	Individual	Income - unspecified	Yes	No	Household expenditures	N
Porter, M. 2016.	Bangladesh	Quasi-experimental	Quantitative	Individual	Finance - loan	Yes	No	Household expenditures	N
Portes, et al. 2019.	Mexico	Observational	Quantitative	Household	Income - unspecified	No	N/A	Household expenditures, Savings	N

Article	Country Focus	Type of Study	Methods	Level of analysis	Source of Income	Did the study define who earned the income?	Did the study consider joint decision-making?	Main Outcomes	Did the study use the WEAI?
Ringdal and Sjurgen. 2020.	Tanzania	Experimental	Quantitative	Individual	Hypothetical fixed endowment	No	Yes	Education	N
Rink, U. and Barros, L. 2021.	India	Observational	Mixed methods	Individual	Income - unspecified	No	No	Household expenditures, Education	N
Soh-Wenda, B. et al. 2024.	Cameroon	Observational	Quantitative	Individual	Income - unspecified	No	Yes	Dietary diversity	Y
Some, B. 2013.	Burkina Faso	Observational	Qualitative	Individual	Agricultural income	Yes	Yes	Women's spending preferences	N
Tagat, A. 2020.	India	Observational	Quantitative	Individual	Cash transfer	Yes	Yes	Dietary Diversity	N
Wouterse, F. S. 2016.	Niger	Observational	Quantitative	Individual	Income - unspecified	No	Yes	Household expenditures, Health, Personal expenditures	Y

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