

Women's power in the household

Seema Jayachandran
Princeton University

Alessandra Voena
Stanford University*

June 30, 2025

Abstract

This review examines women's power within their households in low- and middle-income countries, synthesizing theoretical frameworks and empirical evidence on its measurement, determinants, and consequences. We define women's household power as their degree of influence over household choices, distinguishing this from broader empowerment concepts. We review economic models of household decision-making including unitary, collective, and bargaining frameworks and map these theoretical models to the main types of empirical studies. We describe and assess approaches to measuring women's power, such as structural estimation of consumption allocation, survey-based measures, and lab experiments. We review evidence on key determinants of women's power that research has analyzed, including income transfers, earning capacity, land ownership, divorce rights, and communication training. While some interventions like targeted transfers show mixed results, others like increasing women's control over their earnings and divorce rights show clearer impacts. We synthesize evidence on the effects of women's power, particularly on children's human capital. Few studies provide strong evidence that mothers invest more in children than fathers do; however, taken together, the evidence suggests such a pattern. The review concludes by identifying research gaps and methodological improvements to better understand intrahousehold power dynamics and inform policy.

*Prepared for submission to the *Journal of Economic Literature*. We thank Yailin Navarro, Javier Leal Gamba, and Fiker Negash for superb research assistance.

1 Introduction

Money and power are unequally distributed — between rich and poor countries, between households, and between men and women within the same home. This final inequality, playing out mostly behind closed doors, is the focus of this review. We examine how economic resources and decision-making power are divided between spouses in low- and middle-income countries. We provide an overview of the main theoretical frameworks in economics and review the empirical evidence on this topic.

In most opposite-sex couples, women have less power than their husbands, and much of the empirical research we discuss focuses on how to increase women’s power and the consequences of doing so. There are several reasons to care about women’s power in the household. The first is that power is valuable to people *per se* (Sen, 1999). Less inequality in power *is* less inequality in well-being, *ceteris paribus*. The second reason stems from the instrumental value of power. Women can use their power to close other gender gaps between themselves and their spouses, such as in access to health care. A third (potential) reason to value women’s power also pertains to how it is used, namely to achieve other outcomes valued by society. Specifically, we are referring to the view, which is influential in the literature, that mothers will invest more than fathers in children’s human capital, so their choices better reflect their children’s interests and generate positive externalities for society.

We define women’s power in the household as their degree of influence over the choices the household makes.¹ This definition implies that power is limited within the household. Our emphasis on the intrahousehold division of power diverges from some definitions that emphasize a woman’s level of resources and well-being. In focusing on power-sharing between spouses, we are also limiting the scope to married or cohabitating couples, and we further restrict our focus to opposite-sex couples, given the dearth of studies on same-sex couples in low- and middle-income countries.² We do not consider other household dynamics such as between unmarried women or girls and their family members, or other domains of power such as political power or power in the workplace.

Note that we have chosen to use ‘power’ when referring to a woman’s influence. ‘Empowerment’ is a more common term in the literature, but it is sometimes used as a synonym for a person’s current power and other times is defined as the process of an individual gaining power (Kabeer, 1999). In addition, ‘empowerment’ is often used to describe a person’s overall

¹By “degree of influence,” we mean more precisely the degree to which the person’s preferences influence the household’s choices, as we elaborate on in Section 2.

²We use ‘husband’ and ‘wife’ even when referring to unmarried cohabitating couples. Many of the issues we discuss could also be relevant between same-sex spouses, and a comparison between same-sex and opposite-sex couples would be informative about the relative importance of breadwinner status versus gender norms in creating intrahousehold inequality in power.

resources and well-being, while our focus is on her relative resources within her household. Thus, we use ‘power’ to avoid confusion with these other concepts.

Our focus on low- and middle-income countries (LMICs) emerges primarily in our review of the empirical evidence, though the theoretical frameworks we summarize are applicable across rich and poor countries. A few distinguishing features of the literature in LMICs are worth highlighting, as they shape our review. First, researcher-designed data collection is more common. Researchers can collect direct questions about intrahousehold power, revealed-preference (e.g., lab game) measures of power, or individual-level measures of consumption in their surveys, which general-purpose household surveys typically lack. Second, the LMIC literature has a greater focus on decision-making roles as a proxy for power, influenced by the Demographic and Health Surveys (DHS), an important series of surveys in LMICs that include such questions. Third, the use of randomized controlled trials (RCTs) within development economics has enabled researchers to generate useful variation to advance knowledge, for example by comparing treatment arms that give cash grants to men versus women.

In addition, the importance of considering intrahousehold dynamics when designing policy has arguably taken stronger hold in LMICs, especially for policies to improve children’s human capital. For example, Mexico’s pioneering conditional cash transfer program PROGRESA directed its payments to women from its inception, influenced by research in economics (Skoufias, 2005). This policymaker interest has, in turn, influenced research (Bobonis, 2009; Attanasio and Lechene, 2014).

Finally and importantly, there are also reasons to believe that women’s say in the household is especially low in LMICs. At lower levels of development, the structure of the economy favors men’s position as the family breadwinner, with power accruing to them as a result (Jayachandran, 2015). In addition, gendered employment and property laws, and in some cases traditional gender norms, limit women’s ability to acquire and control financial resources (Hyland, Djankov and Goldberg, 2020). Women in many LMICs also have limited *de jure* or *de facto* right to divorce (World Bank, 2024), and not having a viable outside option weakens their bargaining position within marriage. The acceptability of intimate partner violence, rooted in weak laws or in norms, further adds to the power imbalance between men and women in many LMICs (Shah and Barski, forthcoming).

Data on household decision-making from the DHS align with this perception that women’s power increases with development (at least among LMICs, which is where the DHS is fielded). Figure 1 shows that in poorer countries compared to wealthier ones, married women are less likely to participate in decisions about large household purchases, visiting their relatives, and even their own health care (though there is also substantial variation unexplained by

GDP per capita). Moreover, the level of women’s power is extremely low in many countries, with less than half of women reporting they have any say in fundamental family decisions. These facts motivate much of the research we review as well as our review itself.

Our goal with this review is to provide a broad introduction to the topic that explains the basic theory, provides a bridge from the theory to current empirical work, and summarizes the main active areas of research on the topic, with a focus on studies that provide strong causal evidence. Our article complements several excellent reviews on intrahousehold allocation such as [Browning, Chiappori and Weiss \(2014\)](#), [Chiappori and Mazzocco \(2017\)](#), [Baland and Ziparo \(2018\)](#), and [Almås, Attanasio and Carneiro \(2023\)](#) on household models and [Doss \(2013\)](#), [Donald et al. \(2020\)](#), [Chang et al. \(2020\)](#), [Desai et al. \(2022\)](#), and [Almås, Ringdal and Sjursen \(2021\)](#) on measurement, determinants, and consequences of women’s power.

The article is organized as follows. Section 2 lays out the main theoretical frameworks used in economics to study household decision-making. Section 3 maps the empirical literature to these frameworks. Section 4 reviews the literature on measuring women’s power, including quantitative findings, methodological approaches, and measurement challenges. Sections 5 and 6 synthesize the evidence on the determinants and consequences of women’s power, respectively. Section 7 concludes with our assessment of the literature and suggestions for future research.

2 Economic models of household decision-making

Household models typically focus on intrahousehold allocations, exploring how resources are shared between family members. Here, we summarize these contributions with an emphasis on how different policies may affect women’s power inside the household.

The models are often cooperative, meaning that family members can make binding agreements and cooperate. Non-cooperative models broadly assume instead that individuals are each optimizing, taking the others’ actions as given. Because family decisions often involve public goods and investments, assumptions about the degree of cooperation matter for outcomes.

2.1 Unitary models of the household

The most common way to model household decision-making is to use a unitary model, in which families act as a single unit.³ Consider a family with N members with aggregate resources $Y = \sum_{i=1}^N y_i$, given by the sum of the income of each member y_i . The household decides how to allocate Y across the private consumption x_i of each member and a public good Q .⁴ The household problem can then be written as:

$$\begin{aligned} \max_{x_1 \geq 0, \dots, x_N \geq 0, Q \geq 0} \quad & U(x_1, \dots, x_N, Q) \\ \text{s.t.} \quad & p \cdot \sum_{i=1}^N x_i + q \cdot Q \leq Y \end{aligned}$$

where p is the price of a unit of private good and q is the price of a unit of the public good.

The objective function $U(x_1, \dots, x_N, Q)$ represents the utility function of the family. The utility function could be the result of common preferences. This case, in which family members share a single utility function, does not allow for a concept of individual power. For power to be a relevant concept, it is essential to acknowledge that family members have their own preferences. The unitary framework accommodates individual preferences, albeit in a restricted way. The household objective function can be viewed as representing an aggregate of the utility function of each member, for example if decisions are made by an altruistic dictatorial decision-maker (Becker, 1974).⁵ For a model to be unitary when household members have individual preferences, the way in which individual preferences are aggregated should not depend on prices or individual income (Samuelson, 1956).⁶

We can begin by characterizing women’s power in the household through a simple problem

³The unitary model could be classified as cooperative, but in some sense the distinction is immaterial, as there is only a single agent — the household.

⁴Here we consider an allocation problem, abstracting from important issues of home and market production. See Chiappori and Mazzocco (2017) for an overview of models with home production.

⁵See page 1063:

“The ‘head’ of a family is defined not by sex or age, but as that member, if there is one, who transfers general purchasing power to all other members because he cares about their welfare.”

⁶See page 9:

“Of course, we might try to save the conventional theory by claiming that one titular head has sovereign power within the family and all of its demands reflect his (or her) consistent indifference curves. But as casual anthropologists we all know how unlikely it is in modern Western culture for one person “to wear the pants.” It is perhaps less unrealistic to adopt the hypothesis of a consistent ‘family consensus’ that represents a meeting of the minds or a compromise between them. (Perhaps Arrow will produce a proof that such a consensus is impossible.)”

in which family members have individual preferences and make efficient decisions. The household maximizes the weighted sum of each household member's utility function $u_i(x_i, Q)$:⁷

$$U(x_1, \dots, x_N, Q) = \sum_{i=1}^N \mu_i \cdot u_i(x_i, Q).$$

A person's power can be summarized as the weight μ_i , known as the Pareto weight, attached to their preferences in the household aggregate objective function, where $\sum_{i=1}^N \mu_i = 1$.

Define $x_i^*(p, q, Y)$ and $Q^*(p, q, Y)$ as the (Marshallian) demands for private and public goods that solve the utility maximization problem as a function of income and prices. These demands give rise to the intrahousehold allocation of resources, a key object of interest among economists of the family and development economists.

The crucial implication of unitary models is that these demands do not depend on the sources of income or on any policy. The 'power' of an agent i in this environment may be determined, for example, by the degree of altruism that family members have towards this agent (Becker, 1974). In sum, in a unitary model of the household, one can characterize power within the household as a fixed object that cannot be shaped by policy and does not reflect individual agency.

The key testable implication of the unitary framework is *income pooling*. This is the notion that demands do not depend on sources of income, or, equivalently, that controlling for Y , demands do not depend on any y_i . This result implies that household behavior should not be affected by who earns or receives income or holds wealth in the household.

2.2 Relaxing the unitary assumption

Departing from a unitary model can allow us to think about how power may vary between households and over time as the result of policies and institutions. Based on the large body of evidence indicating that the identity of income earners in a household matters for demand, a rich theoretical work has focused on models consistent with the lack of income pooling. Many of these models, notably collective models and most bargaining models, rely on the assumption that household decisions are efficient.

⁷In what follows, we assume for simplicity that preferences are well-behaved (strictly increasing, strictly concave and twice-continuously differentiable). Altruism in the form of caring preferences $u_i(x_i, Q) + \sum_{j \neq i} \eta_{ij} u_j(x_j, Q)$ in which household members care about the utility of each other with altruism parameters η_{ij} can straightforwardly be accommodated in this framework, with μ_i being a function of η_{ij} (Browning, Chiappori and Weiss, 2014).

2.2.1 Collective models of the household

In collective models, individual-specific income, wages, and other factors (‘distribution factors’ \mathbf{z}) can influence the Pareto weight (Chiappori, 1988; Chiappori, Fortin and Lacroix, 2002), which can be rewritten as $\mu(p, q, Y, \mathbf{z})$. Distribution factors are defined as variables that: i) do not affect the budget constraint; ii) do not affect preferences; iii) do not affect prices; iv) affect demand through the decision-making process. Hence, they are simply ‘instruments’ for the distribution of power within the household.⁸

A key implication of this framework is that a transfer of resources to a family member may have both an income effect and what we can call an ‘empowerment’ effect on household economic behavior:

$$\frac{\partial x_i^*(p, q, Y, \mu)}{\partial y_j} = \frac{\partial x_i^*(p, q, Y, \mu)}{\partial Y} \frac{\partial Y}{\partial y_j} + \frac{\partial x_i^*(p, q, Y, \mu)}{\partial \mu} \frac{\partial \mu}{\partial y_j}.$$

Similarly, a change in prices (notably, an increase in the female wage when leisure is a consumption good) will have a substitution effect and an income effect, as expected, and an empowerment effect, which captures how a change in prices affects the balance of power in the household. This important result modifies the fundamental conditions of household demand behavior, like Slutsky symmetry (Browning and Chiappori, 1998). The collective model literature has developed testable implications of the model, such as the \mathbf{z} -conditional demand tests and the distribution factor proportionality tests, that derive conditions under which, in a stable household decision-making process, demands can be rationalized by a collective model (Browning and Chiappori, 1998; Browning, Chiappori and Weiss, 2014).

2.2.2 Bargaining models

Unlike collective models, bargaining models make the decision-making process explicit, postulating that it follows a Nash bargaining process, in which partners have threat points V_i that represent their payoff if an agreement cannot be reached:

$$\max_{x_A, x_B, Q \geq 0} [u_A(x_A, Q) - V_A]^\alpha \cdot [u_B(x_B, Q) - V_B]^\beta \quad s.t. \quad p \cdot \sum_{i=1}^N x_i + q \cdot Q \leq Y$$

⁸An example of a distribution factor is the identity of the recipient of a government transfer (Lundberg, Pollak and Wales, 1996) or other shifter of the share of total income that one member receives. Another example might be a law that requires women to obtain their husbands’ consent for certain decisions.

where A and B denote the two partners who are bargaining, and the parameters α and β capture their respective bargaining skill, or the strength of their negotiating position.⁹

Manser and Brown (1980) and McElroy and Horney (1981) model bargaining as symmetric, implying that the bargaining skill $\alpha = \beta = 1$. Symmetry in bargaining means that, if the role of the parties was swapped (i.e., if husband and wife exchanged preferences and outside options), the outcomes of the bargaining would be unchanged. Relaxing symmetry allows power in the household to depend on each partner’s threat point and on their bargaining skill. It also recognizes the possibility that allocations may depend on personality traits that could potentially be influenced in an intervention that leaves threat points unchanged. In both of these papers, the threat point is represented by each party’s opportunity outside the marriage (i.e., divorce or separation).

An influential bargaining model is the separate spheres model (Lundberg and Pollak, 1993), in which the relevant threat points in couples’ bargaining are the equilibrium payoffs of a non-cooperative game between partners. In such a game, each party voluntarily supplies a subset of public goods, which are under-provided due to the lack of cooperation. Gender roles determine which public goods each partner provides in the non-cooperative state, reflecting specialization in the household — the separate spheres. Hence, couples bargain cooperatively, with the non-cooperative equilibrium only being relevant to decide how goods are allocated. Crucially, this model allows policy interventions to influence allocations even when they have no effect on divorce outcomes or when divorce is rare, as we see in many LMICs, because the threat points are internal to the marriage.

2.3 Deviation from efficiency

Building on findings from the lab and from the field (Udry, 1996; Ashraf, 2009; Schaner, 2015, for example), several papers have developed models that depart from the efficient paradigm to characterize the effects of frictions on household behavior.

Models in which family members act non-cooperatively, such as public contribution games, may result in inefficiently low levels of public goods provisions, as each partner does not internalize the benefit that the public goods have on the other. Under some conditions (notably, the presence of corner solutions and multiple public goods), in these models, spouses do not share resources, so access to resources and mutual altruism are the main form of power. Altruism between household members can mitigate or exacerbate the effects of

⁹We adopt ‘bargaining skill’ (Nash, 1950), as opposed to the more commonly used terms bargaining weight or bargaining power, to avoid confusion with the Pareto weight or the general notion of power. The term ‘skills’ highlights the potential malleability of this characteristic, but neglects the role of social norms that may discourage women from negotiating (Exley, Niederle and Vesterlund, 2020).

lack of cooperation (Baland and Ziparo, 2018).

A vast theoretical literature has explored other deviations from the fully efficient paradigm. For example, Anderson and Baland (2002) model women’s participation into a Rotating Savings and Credit Association as a strategy to shelter money from their husbands and be able to make bulky investments. Basu (2006) develops a model in which spouses’ choices have a direct impact on their intrahousehold power. Boone et al. (2014) develop a Nash equilibrium framework for contributions to public goods. Schaner (2015) models partners’ private and joint savings decisions when their discount factors differ. Heath and Tan (2020) propose a non-cooperative model in which power that is derived from unearned wealth would increase a person’s control over their earned income, increasing their incentive to work. Zhang (2024) studies the role of asymmetric information about income in intrahousehold allocations and develops a model to explain under what conditions partners strategically hide their income from each other. Gobbi (2018) and Lewbel and Pendakur (2022) explore the consequences of partial cooperation between partners. Ashraf et al. (2023) study strategic communication between partners over maternal health risk and their effect on fertility decisions. Buchmann, Dupas and Ziparo (2025) develop a signaling model in which spouses may make suboptimal choices to preserve their reputation within the family.

These models often share the central implication that spouses’ attempts to maximize their control over resources or, in general, their power may ultimately reduce the overall welfare of the household, by distorting investment and consumption choices. In many cases, the incentives to act strategically are strongest among the most disempowered family members, who may see greater benefits, for example from hiding their income (Zhang, 2024) or misrepresenting the costs they face (Ashraf et al., 2023).

2.4 Dynamics and commitment

What do household models say about what determines and what shifts the balance of power within couples? The key issue that arises is commitment (Mazzocco, 2007). When couples form, the distribution of power may be shaped by conditions in the marriage market. Yet, if couples can commit to future allocations, exogenous changes in partners’ circumstances after the union should not influence intrahousehold allocations (Chiappori and Mazzocco, 2017). Hence, efficient models with full commitment imply that policy interventions can only influence *newly-formed* couples. This implication can be seen by considering a dynamic extension to the collective model with full commitment:

$$\begin{aligned}
\max_{c^A, c^B} \quad & \sum_{i=1}^N \mu_i(\mathbf{z}_0) \sum_{t=1}^T \beta^{t-1} \cdot \mathbb{E}[u_i(x_{i,t}, Q_t)] \\
s.t. \quad & p_t \cdot \sum_{i=1}^N x_{i,t} + q_t \cdot Q_t \leq \sum_{i=1}^N y_{i,t} \quad \forall t \text{ and states of nature.}
\end{aligned}$$

where \mathbf{z}_0 represents the distribution factors expected at the time of marriage.

In these models, the ratio of marginal utilities of private consumption between household members remains fixed at the optimum and is determined by the ratio of their decision-making weights, which determine the allocation of resources ($\frac{\partial u_A(x_{A,t}, Q_t)/\partial x_{A,t}}{\partial u_B(x_{B,t}, Q_t)/\partial x_{B,t}} = \frac{\mu_B(\mathbf{z}_0)}{\mu_A(\mathbf{z}_0)}$ is stable over time). Once partners have committed to a given way to allocate resources given the distribution factors expected at the time of marriage \mathbf{z}_0 , policy changes or idiosyncratic shocks to one partner have no effect on the intrahousehold allocations and power.

Dynamic models with limited commitment account for the effect of policies on existing couples by characterizing how changes in *outside options* (denoted as $V_{i,t}$), which can vary over time and across states of nature, may lead to changes in power even after a couple has formed (Mazzocco, 2007). These models add *participation constraints* to the household problem, following the literature on partial insurance in village economies (Ligon, Thomas and Worrall, 2002). These constraints impose that, at each point in time and for every state of nature, the optimal allocation must make household members weakly better off than their outside option.

Dynamic models with limited commitment may help micro-found the impact of policy interventions: by influencing the outside option to intrahousehold decisions, whether that is internal to the marriage (e.g., a separate spheres equilibrium like in Lundberg and Pollak, 1996), or external (e.g., separation or divorce), policy interventions can lead to a reallocation of power. In contrast to the full commitment case, the distribution of resources between two partners is governed by the formula:

$$\frac{\partial u_A(x_{t,A}, Q_t)/\partial x_{t,A}}{\partial u_B(x_{t,B}, Q_t)/\partial x_{t,B}} = \frac{\mu_B + \sum_{\tau=1}^t \nu_{\tau,B}}{\mu_A + \sum_{\tau=1}^t \nu_{\tau,A}} = \frac{\mu_{t,B}^*}{\mu_{t,A}^*}$$

where $\nu_{\tau,i}$ is a strictly positive term when the participation constraints of household member i at time τ in a given state of nature binds, and equal to zero when the constraint does not bind. This formula implies that if the participation constraints never bind, we return to a full commitment problem, while if a constraint binds, the ratio of the marginal utilities persistently shifts to favor the consumption of the partner whose constraint is binding.

The key insight of the limited commitment model is that, unlike in the bargaining models we have described above, an improvement in the outside option of one party $V_{i,t}$ may affect power within the household (the allocation of resources) in some, but not all cases. Specifically, it would fail to matter if that person’s participation constraint is not binding because the outside option remains undesirable (e.g. if divorce is heavily stigmatized, or if the unconstrained allocation based on $\mu(\mathbf{z}_0)$ is already very favorable to one party).

What determines initial allocations? Static and dynamic collective models do not explicitly take a stance on what pins down the weight $\mu_i(\mathbf{z}_0)$, which determines the allocation of resources as long as participation constraints do not bind. [Becker \(1973\)](#) first characterized the distribution of gains from marriage as the result of the marriage market equilibrium. [Chiappori \(2017\)](#) and [Chiappori and Salanié \(2023\)](#) provide a comprehensive overview of the literature on matching in the marriage market. In sum, these models imply that features of marriage markets expected at the beginning of a partnership may influence how decision power is allocated at first. Over time, if family members do not fully insure each other, changes in outside options that lead to binding participation constraints can affect the allocation of power.¹⁰

For conditions in the marriage market to influence allocations in marriage, partners must be able to agree on how to share resources after marriage and commit to such a rule. [Pollak \(2019\)](#) highlights that when it is not possible to make binding agreements in the marriage market and during marriage, spouses renegotiate allocations over the course of the union based on contemporaneous threat points. When partners cannot commit to future allocations and parents have the property right over the marriage decision ([Tertilt, 2006](#)), marriage payments such as bride price and dowry could arise to help clear the marriage market ([Becker, 1993](#); [Grossbard, 2015](#)). Several studies have explored the theoretical implications of these traditional institutions on the distribution of resources in the family and on marriage outcomes ([Anderson and Bidner, 2015](#); [Ashraf et al., 2020b](#); [Corno, Hildebrandt and Voena, 2020](#); [Bau et al., 2023](#)).

Discussion The limited commitment model highlights that the circumstances that allow a policy to affect decision-making in the household in a persistent manner are complex. Families may be able to commit to future allocations, but not to the extent that members of

¹⁰An important caveat is highlighted by [Chiappori et al. \(2017\)](#): to the extent that partners can commit to future allocations, even in a limited way, improvements in outside options, such as more favorable alimony or property division laws, may be partly ‘priced in’ at the time of marriage, leading to lower initial weight for the partner favored by the law, to compensate the other partner for the less favorable rules. This result implies that policies could have substantially different impacts on newly-formed compared to existing couples.

an existing family can fully insure one another. Shifts in outside options due to a policy ought to be large enough to make the outside option credible for both men and women, depending on whether the option is external or internal to the marriage. Hence, the cultural, legal, and institutional environment in which a policy is implemented plays a fundamental role in determining whether such a policy is effective at shifting women's power.

2.5 The relationship between power and agency

Women's agency is a concept that features prominently in the empirical literature on women's power. Thus, it is noteworthy that the models above do not explicitly mention agency. In this subsection, we offer our thoughts on how power and agency, as well as decision-making, are related.

Outside of economics, women's power is often used to mean decision-making power. Kabeer (2005) defines power as "the ability to make choices." In her influential framework, Kabeer (1999) positions agency as a fundamental component of power; a person cannot have power without agency. Agency is defined as the "ability to define one's goals and act upon them" (Kabeer, 1999, p. 438). Sen (1999) frames agency similarly: an agent is "someone who acts and brings about change, and whose achievements can be judged in terms of her own values and objectives." Agency, so defined, encompasses the abilities to, first, formulate one's preferences or objectives and, second, bring about outcomes that align with those preferences. The "act upon them" part of agency is typically the focus in the literature on women's power.

Within the economics framework, power is the Pareto weight, or the person's allocation share. It is the extent to which the household's choices align with the person's preferences, regardless of whether she had agency over those choices. In this conceptualization, a person can have power without agency. This occurs if the household members who do have agency value the person's welfare. Consider a case of parents of young children who favor their sons over their daughters and give their sons more food, health care, and education and grant them more freedom of movement. Boys have more power in the family than girls do, even if both lack agency.

Can someone have a high degree of agency but limited power? In the framework of Kabeer (1999), and using her definition of power, the answer is, we believe, yes. Agency is one of the ingredients for power, but an individual also needs resources, such as financial resources and supportive societal norms and institutions.

The economics models described above do not explicitly model agency, but the answer on whether agency can exist without power is probably closer to no. If agency means shaping

decisions with intentionality, then someone with high agency will effect outcomes that are aligned with her preferences, i.e., she will have power.¹¹

Not only does agency imply power in the economics framework, it is also the determinant of power that is most amenable to policy influence. Policies can improve someone’s outside options or bargaining skill, giving them more direct say in the household. Someone’s power can also increase if others in the household become more altruistic toward them, but this is less often what policy aims to change. The upshot is that agency is a suitable proxy for power in most empirical work that aims to change the distribution of household power.

But the distinction between the outcome-based definition of power in economics models (i.e., allocation share) and an agency-centric (or process-plus-outcome-based) definition of power is important. The distinction exposes an important blind spot of the theoretical frameworks in economics. They allow for an instrumental value of agency for achieving a person’s preferred outcomes, but do not consider agency as an end in itself.

Meanwhile, a critique of the agency-focused definition of power — or, more precisely, how it is operationalized in the empirical literature — is that it overemphasizes *making* decisions rather than *influencing* decisions. Agency is often proxied with “making decisions,” a role that is neither necessary nor sufficient for power. For instance, a person who is able to effectuate their preferred outcome without bearing the cognitive and emotional burden of decision-making is (especially) agentic. An example would be a man who lets his wife decide what to cook, knowing that her choices will reflect his preferences. Characterizing women’s agency or power based on whether they actively make choices might often misrepresent their level of self-determination and how much weight their preferences get. We discuss this critique further in Section 4.2.

3 From theory to empirics

The empirical literature on women’s power that we review aims to quantify women’s power and understand its causes and effects. In this section, we map these types of studies to the theory laid out in Section 2. We defer most of the discussion on studies that quantify women’s power until Section 4 and mostly elaborate on the goals and key assumptions of studies aiming to assess its causes and effects.

Most of the empirical literature explicitly or implicitly uses the collective model as its framework for household decision-making, so we use the collective model notation introduced

¹¹Defining one’s goals, and more broadly having the will to influence outcomes, is also part of agency (Kabeer, 1999). Power, as we define it, is weakly but not strictly increasing in this ‘will’ component of agency: If a person’s desire to influence allocations increases, but she has no ability to influence them, then her power does not increase.

in Section 2. For simplicity, we exclude subscripts and denote the woman’s Pareto weight as μ and her private consumption as x .

3.1 Measuring women’s power

The goal of some studies is to estimate the average value of the Pareto weight μ in a population. These studies conduct statistical analyses to infer μ from the allocation of resources in the household. They typically use expenditures on private consumption or individual-level data available in certain household surveys, such as food consumption, as their measure of individual consumption, x .

A different set of studies measures μ at the household level for use in answering a causal research question about the determinants or consequences of women’s power. We describe and categorize these types of studies below.

3.2 Causes and effects of women’s power

3.2.1 The ideal empirical approach

The collective model implies that a path to improved outcomes for women, holding fixed the household budget and prices, is to increase women’s intrahousehold power. Empirically, if a policy increases women’s weight in household decisions, we should observe consumption patterns and other household choices that are more aligned with her preferences.

Establishing the full causal chain requires three components: measures of a credible distribution factor z , the woman’s Pareto weight μ , and an outcome, x . We now use a more expansive notion of x than before: x could represent the woman’s private consumption as in Section 2, but it could also be a different outcome that she values relatively more than her husband does (that is determined by the household’s choices). Besides having measures of the constructs, one also needs exogenous variation in the distribution factor to establish causality.

Instrumental variables estimation is a useful framework for thinking about the ideal empirical test. The first stage equation would instrument for the Pareto weight, μ , with the distribution factor, z :

$$\mu_i = \alpha + \beta z_i + \varepsilon_i$$

A (precise) null result in the first stage shows that the policy did not increase women’s power, while a strong first stage allows one to estimate the second stage equation to assess how μ affects the outcome x :

$$x_i = a + b\hat{\mu}_i + u_i$$

The exclusion restriction is that z does not affect x through any channel other than μ . In other words, the only way that the policy (or more broadly, the distribution factor) influences the outcome is by shifting intrahousehold power. Under this exclusion restriction, if $b > 0$, we can conclude that women have a stronger preference for x than men do.

3.2.2 What researchers do instead

The ideal approach is rarely implemented in practice. Even when the researcher has exogenous variation in z to leverage, several challenges remain. The first is a measurement problem: the data often lack a good measure of μ . If the proxy for μ does not accurately and precisely capture how z changes μ , there can be a weak first stage even when the hypothesized causal chain is correct or bias in the second stage estimate.

Second, there is often insufficient statistical power to measure the downstream outcomes of interest, x . This is usually due to sample size or follow-up data being collected too early for the effects to have materialized. For example, to detect an effect of women’s power on their health, one would need a large sample given that many other factors also affect health. Moreover, if the mechanism is better preventative health care or curative care in the case of a negative health event, one would not expect to see effects immediately.

Third, exclusion restriction violations are very common. More often than not, there are other channels besides the Pareto weight through which z could affect the outcome. For example, an increase in a woman’s income might affect her health not just because her share of income increased, but also because total household income increased, and in most cases, researchers do not have simultaneous exogenous variation in women’s and total income. Similarly, an intervention that improves her communication skills for bargaining with her husband might also help her navigate the health care system better.

What do researchers do in light of these challenges? We offer the following taxonomy of how studies proceed to understand the determinants of power and its consequences:

Category 1: Causes of women’s power, using a direct measure. One type of study uses a proxy for women’s weight in household decisions, μ as the outcome variable to study the sources of women’s power. These studies are estimating the first stage equation above. Does a certain policy (or non-policy determinant) increase women’s power?

Testing for impacts on women’s power might be the furthest point in the causal chain that the study can speak to due to insufficient statistical power to assess downstream outcomes, x . This is also the only of the four categories we lay out that does not need to impose the exclusion restriction.

Most data sets do not include a measure of intrahousehold power. The remaining categories of studies take a different approach that does not rely on having a measure of μ . They estimate the ‘reduced-form’ relationship between the outcome and the (hypothesized) shifter of power:

$$x_i = a + \delta z_i + \varepsilon_i$$

This equation tests a very broad hypothesis: does the shifter increase women’s well-being or (whatever the outcome is)? Research that is not focused on intrahousehold allocation or women’s agency might estimate the same regression. What distinguishes the analyses we are describing is that they assume the pathway from z to x operates through women’s Pareto weight.

While the studies in the three categories below all use the same empirical model, they differ in their research focus and assumptions. Some aim to understand the causes of women’s power (Category 2), some are investigating the effects of women’s power (Category 3), and others are focused on how households make decisions (Category 4). All require the exclusion restriction to hold, and they rely on different additional assumptions that stem from not having a measure of μ .

Category 2: Effects of women’s power. Here the statistical analysis is being used to learn what women value. For example, do women spend more on children than men do? The outcome x needs to be an important one; otherwise, the research question would be uninteresting. The key additional assumption, given that μ is not observed, is that z increases μ — that there is a first stage. A lot rests on the validity of this assumption. In the case of a null result, we might wrongly conclude that women’s power did not affect the outcome, while, instead, the distribution factor did not affect women’s power. For example, when a program gives transfers to women, their husbands might nonetheless take control of the funds.¹²

Category 3: Causes of women’s power, proxied by a downstream outcome. Here the analysis aims to establish whether a certain policy (or other shifter) increases women’s power. The most direct way to answer the question is estimating the first stage (Category 1), but regressing x on z is used as a substitute strategy. The key assumption now differs: women must have a stronger preference for x than men do, so that when they gain power, x will increase. This changes the considerations when choosing which outcomes to analyze.

¹²While the problem is easiest to see in the case of a null result, even when the null is rejected, it is valuable to know if there is a first stage. If there is no first stage, the change in the outcome must have been due to a channel other than power.

It becomes less important that x is an important outcome, and more important that it is ‘assignable’ — something that can be assumed to be valued by the woman more than her husband. The interpretive challenge here is that a null result might reflect incorrect assumptions about gendered preferences (e.g., women do not have less son preference, men get utility from spending on clothing for their wives) rather than no change in power.

Some studies position themselves in both Categories 2 and 3. They might describe their analysis as testing “whether z increases women’s power and, in turn, x .” This description is, in fact, accurate. The reduced-form regression offers a joint test of both a cause and an effect of women’s power, or, equivalently, of the first stage and second stage hypotheses. This framing still leaves the interpretative challenge that, with a null result, we do not know whether the first stage hypothesis, the second stage hypothesis, or both failed to hold.

Category 4: Tests of the unitary model. While not the main focus of our review, another research question using the same estimating equation is whether the unitary model accurately describes household decision-making.¹³ Papers test the validity of the unitary model by assessing if income pooling can be rejected (women’s share of income affects x), or, more broadly, if a distribution factor shifts x .

In principle, any change in consumption would reject the unitary model, but studies impose a more stringent test of whether consumption changes in a way that favors the person whose Pareto weight increases. This requires the outcome to be assignable to one person.

For these studies, interpreting the empirical results as supporting or rejecting the unitary model rests on the assumptions from both Categories 2 and 3: that women value the outcome more than men do, and that the presumed shifter actually increased women’s Pareto weight (plus the exclusion restriction).

Categories 2 to 4 all rest on the assumption that the policy (or other shifter) influences the outcomes only through women’s power, but most policies aim to improve outcomes through multiple mechanisms. For example, a cash transfer given to women might improve children’s nutrition both because the household has more money and because the mother’s power increased.

It is not a policy flaw to operate through multiple mechanisms, but this characteristic

¹³Browning, Chiappori and Weiss (2014) provide a deep dive into several papers that test income pooling, most of which reject that households act unitarily. More recently, researchers have tested income pooling through randomized experiments with variation along two dimensions: whether a household receives an income transfer (variation in Y) and which household member is the recipient (variation in y_i). The estimates using this strategy are mixed, and often underpowered, but generally fail to reject income pooling (Haushofer and Shapiro, 2016; Benhassine et al., 2015; Akresh, de Walque and Kazianga, 2025; Armand et al., 2020).

does limit the type of knowledge about women’s power that analysis of the policy provides. We can learn whether or not the policy increased women’s power, thereby confirming or ruling out power as a possible mechanism through which the outcome changed. However, we cannot extrapolate the findings to predict the effectiveness of policies that activate a subset of the mechanisms. Having clarity about what we can learn is helpful, for instance because it highlights the importance of directly measuring and analyzing impacts on women’s power in this literature.

4 Measuring women’s power in the household

Several studies aim to quantify the distribution of power in the household, or μ . These range from papers that structurally estimate the models laid out above to descriptive papers that introduce new direct measures of power.

Measuring power in the household is inherently difficult given the generally unobservable nature of individual-level preferences and of many individual-level outcomes, such as private consumption. We begin by surveying articles that study intrahousehold allocations and then move to papers that examine women’s *agency* in the household.

4.1 Measuring the intrahousehold allocation of resources to women

4.1.1 Consumption allocation

An active area of the literature attempts to measure the intrahousehold allocation of resources among families, particularly in LMICs.¹⁴ These studies reinforce the notion that intrahousehold inequality is sizable, and that poor individuals often live in non-poor households (De Vreyer and Lambert, 2021; Brown, Ravallion and van de Walle, 2019).

Inferring each spouse’s power from their share of private consumption is challenging because the shares also depend on their individual preferences and, in more complex models, the productivity return to their consumption (Dubois and Ligon, 2011). Consider a unitary or collective model such as the ones presented in Section 2. In the household utility maximization problem, the ratio of the Pareto weights determines the relative marginal utility of household members’ consumption at the optimum and ultimately the allocation of resources:

$$\frac{\partial u_i(x_i^*, Q^*)/\partial x_i^*}{\partial u_{-i}(x_{-i}^*, Q^*)/\partial x_{-i}^*} = \frac{\mu_{-i}}{\mu_i}.$$

¹⁴Example of papers that have measured intrahousehold allocations or the decision weight in wealthy countries include Browning, Chiappori and Lewbel (2013) (Canada), Lise and Seitz (2011) (UK), Cherchye, Rock and Vermeulen (2012) (Netherlands), Voena (2015) (US), Lise and Yamada (2019) (Japan).

The optimal private consumption of a household member would be strictly increasing in that member’s weight, but differences in the marginal utility of consumption between partners would also influence their consumption allocation. For this reason, the literature has often relied on structural models and additional information to attempt to separate power from preferences. Through this approach, studies typically estimate a population-level measure of women’s power (in some cases conditional on some observable variables) rather than a household-level measure.

Dunbar, Lewbel and Pendakur (2013) develop a now widely-used methodology to estimate how households allocate expenditure to their members that uses information on consumption of an assignable good (i.e., a good whose private consumption can be attributed to a particular household member), applying it to households in Malawi. Bargain, Lacroix and Tiberti (2022) use data on individual expenditures in Bangladesh to validate this method, showing that it performs well when using data on individual clothing expenditure to infer overall consumption shares.¹⁵ Lechene, Pendakur and Wolf (2022) extend the methodology so that it can be estimated with a simpler linear model. They estimate women’s share of total household expenditure for households in Albania, Bangladesh, Bulgaria, Iraq, and Malawi, examining households with different compositions.

Using a related approach, Bargain, Donni and Kwenda (2014) measure the allocation of resources to women in Côte d’Ivoire, finding that women’s share is somewhat larger than men’s (e.g., 52.2% vs. 47.8% for couples without children), but the share converges as the number of children increases.

Calvi (2020) applies the method in Dunbar, Lewbel and Pendakur (2013) to Indian families, exploiting variation in women’s inheritance rights between the 1970s and 2000s and measuring how the allocation of resources to women varies over the lifecycle. It documents that resources for women sharply decline as they age. Such a drop may contribute to the excess mortality of older women documented in India by Anderson and Ray (2012).

Brown, Calvi and Penglase (2021) estimate resource shares of family members in Bangladesh, showing that women, especially older ones, and children are often poor even within households whose per-capita expenditure is not below the poverty line.

Calvi et al. (2023) measure members’ resource shares across households with a different number of children in Bangladesh and Mexico. In Bangladesh, they document that women have fewer resources than men, while the opposite is true in Mexico. Tommasi (2019) estimates consumption shares in Mexico to show that the well-known conditional cash transfer

¹⁵The 95% confidence interval of resource shares estimated using the method of Dunbar, Lewbel and Pendakur (2013) contains the directly-observed resource shares, with the estimated men’s share being somewhat smaller than the directly-observed ones in households with one or two children.

program PROGRESA, assigned to mothers, led to a convergence between women’s resource shares (which increased from 29% to 31%) and men’s resource shares (which decreased from 40% to 36%). [Sokullu and Valente \(2022\)](#) also examine the impact of PROGRESA on intrahousehold allocation. Like [Calvi et al. \(2023\)](#), they find that women consume relatively more resources than men in Mexico, and their findings suggest that the program primarily benefited children’s consumption.

[Zhao and Qu \(2024\)](#) measure resource shares in China to examine the impact of economic zones on intrahousehold allocations. The paper finds minor differences in resource shares between men and women, that further narrow in economic zones.

Appendix Table 1 describes studies that have estimated the allocation of resources to women within households in LMICs (see also [Almås, Ringdal and Sjørusen \(2021\)](#) for an overview of measures of allocations to men, women, and children around the world).¹⁶ We focus on the ratio between women’s consumption and total adult consumption in nuclear households, a *relative resource share* ([Blundell et al., 2025](#)). In over two thirds of the country-study combinations we consider, women’s relative resource share is less than a half, although often with wide confidence intervals. Overall, the relative resource share ranges from 38% to 55%. Considering studies from wealthier countries, we note that studies using data from Asia tend to report substantially lower women’s relative share ([Lise and Yamada, 2019](#); [Lechene, Pendakur and Wolf, 2022](#); [Dubois and Ligon, 2011](#); [Brown, Calvi and Penglase, 2021](#); [Calvi, 2020](#); [Calvi et al., 2023](#); [Zhao and Qu, 2024](#)), while studies from Sub-Saharan Africa ([Dunbar, Lewbel and Pendakur, 2013](#); [Bargain, Donni and Kwenda, 2014](#); [Cherchye et al., forthcoming](#)), Europe ([Lechene, Pendakur and Wolf, 2022](#); [Lise and Seitz, 2011](#); [Cherchye, Rock and Vermeulen, 2012](#); [Blundell et al., 2025](#)), and North America ([Browning, Chiappori and Lewbel, 2013](#); [Voena, 2015](#); [Cherchye et al., 2020](#); [Tommasi, 2019](#); [Sokullu and Valente, 2022](#)) report more mixed findings.¹⁷

4.1.2 Wealth distribution

The literature has also studied gender gaps in other allocations within families besides private consumption, typically without aiming to disentangle how much preference differences

¹⁶A promising approach in settings where cash use is limited, and hence unlikely to provide much insight in most LMICs, is to use information on credit and debit card expenditures (see, for example, [Kim, 2021](#)).

¹⁷Because household composition is often complex in LMICs, with multiple generations living in the same household, the majority of the studies focus on nuclear, monogamous households when estimating resource shares (e.g., [Dunbar, Lewbel and Pendakur, 2013](#); [Bargain, Donni and Kwenda, 2014](#); [Cherchye et al., forthcoming](#)). [Lechene, Pendakur and Wolf \(2022\)](#) develop a method to deal with multiple adults of the same gender within a household. Studies with complex household composition report a per-capita resource share with a specific demographic group (e.g., [Brown, Calvi and Penglase, 2021](#)). A promising avenue for future research would be to collect direct information about the distribution of resources to women in non-nuclear families, especially multi-generational families and polygynous families.

are contributing to the gaps. Some of this work studies wealth. As wealth accumulates over the course of the marriage, how it is distributed across individuals is the result of household decisions (Fafchamps and Quisumbing, 2002; Voena, 2015). (How household wealth would be divided upon divorce plays a different role, as a distribution factor that influences each spouse’s power within marriage.)

Deere and Doss (2006) review the evidence on gender differences in wealth in LMICs. They document large and systematic gender asset gaps. In Latin America, the vast majority of landowners are men, and women’s acquisition of land occurs primarily via inheritance. In many countries in sub-Saharan Africa, women only own a small minority of land, both customarily and statutorily.

Doss et al. (2014) examine data on individual holdings of assets in Ecuador, Ghana, and Karnataka (India). In Ghana and Karnataka, the study reveals large gender gaps within families in home ownership, land ownership, and ownership of consumer durables (e.g. vehicles, mobile phones, with the exception of jewelry). Men are twice as likely to be homeowners as women, and two to three times more likely to own land. The distribution of wealth is much more balanced in Ecuador, where joint ownership of assets is more widespread. The female share of household wealth is 52% in Ecuador, 30% in Ghana, and 19% in Karnataka.¹⁸

4.1.3 Other intrahousehold allocations

Studies have also used other individual-level outcomes or household-level outcomes to shed light on inequality within households. For example, research has compared men’s and women’s leisure time (though usually not restricting to married or cohabitating couples). Li (2023) documents that women have less leisure time than men across two waves of a time-use survey conducted in six states in India, with the gender gap narrowing between 1998 and 2019 from 51 to 28 minutes per day. Ferrant and Thim (2019) analyze time-use surveys conducted in the early 2010s in four countries and report a leisure gap favoring men of 51 minutes per day in Ethiopia and South Africa and 36 minutes in Peru, and a 23-minute gap favoring women in Bangladesh. Grogan (2018) reports 49 more minutes per day of leisure for men than women in Guatemala, based on a survey conducted in 2000.

Men and women in the same household might also differ in their access to health care. Dupas and Jain (2024) use data from the Indian public insurance program in Rajasthan to document that, outside of reproductive years, women are underrepresented in hospital visits, particularly when out-of-pocket costs are higher. This finding reinforces existing

¹⁸A growing body of theoretical and empirical work on India argues that dowry-related wealth is mainly controlled by husbands and their parents, and not by women themselves (Anderson and Bidner, 2015; Bau et al., 2023).

evidence that women tend to have worse health outcomes, especially later in life (Calvi, 2020; Anderson and Ray, 2010).

Another way to examine the intrahousehold allocation of power is through joint decisions when individual preferences are known. For many families, fertility is their most consequential choice, economically and otherwise, and, indeed, several papers have examined decision-making around fertility in LMICs (Rasul, 2008; Ashraf, Field and Lee, 2014; Ashraf et al., 2023, among others). The DHS collects individual-level fertility preferences for both women and men, and demographers have used these data to document that men tend to desire larger family sizes than women do (Westoff, 2010).

Doepke and Tertilt (2018) use DHS data from Burkina Faso and Ethiopia to compare the woman’s and man’s stated fertility preferences to the couple’s realized fertility. They find that realized fertility is positively correlated with both spouses’ desired fertility, with women’s preferences playing a greater role when they are more educated. A limitation of this approach is that fertility preferences are typically measured after the fertility outcomes are at least partially realized, and the stated preferences might already be the result of intrahousehold bargaining between partners.

Finally, women’s experience of or tolerance for intimate partner violence (IPV) is sometimes used as a proxy for their (lack of) power. Yet, the literature also indicates that IPV may have a *non-monotonic* relationship with a woman’s power since violence can be the result of male backlash against power gains by women. This makes IPV a less clear proxy for power than sometimes implied. We refer the reader to Shah and Barski (forthcoming) for a comprehensive discussion of this issue from a theoretical and empirical perspective.

4.2 Household-specific measures of women’s power

For many purposes, a population-level measure of women’s power would not suffice. To statistically estimate the effect of a policy on women’s power, or how women’s power moderates or mediates the policy’s effects on downstream outcomes, one needs variation in women’s power across observations. Thus, many studies construct a household-specific measure of women’s power. We discuss the most common strategy, which is to ask survey questions to women about their agency, as well as recent innovations using lab games and qualitative interviews.

4.2.1 Survey measures of agency

Many studies use survey questions about women’s decision-making roles as a proxy for their agency or power in the household. This practice is strongly influenced by the survey

design of the DHS. While the early DHS surveys in the 1980s and 1990s did not routinely ask about women’s agency, in 1998 a group of experts was convened to advise on adding questions related to gender and power (Kishor and Subaiya, 2008). Based on their recommendations, questions related to household decisions became part of the standard DHS questionnaire, initially for women and now also for men.

The specific domains asked about have varied over time, but the three asked of all respondents and mostly commonly analyzed are:

- “Who usually makes decisions about your own health care?”
- “... about making large household purchases?”
- “... about visits to your family or relatives?”

The main possible responses are:

- Respondent
- Husband/partner
- Respondent and husband/partner jointly

While there is debate in the literature over whether solo decisions by the woman represent more agency than joint decisions (Peterman et al., 2021), there is consensus that the woman having no role (“husband/partner” as the response) should be coded as her having limited agency. Many studies combine the domain-specific responses into an index, for example averaging indicator variables for the woman having no say in the domain (or using the intersection as we did in Figure 1).

The DHS questions have shaped how women’s agency is measured not only because of the many studies analyzing DHS data but also because researchers designing their own survey instruments often adopt the DHS questions. This practice has the advantage that one can benchmark one’s sample to a representative sample for the country or to other countries.

However, a spate of recent papers points out limitations of DHS-style questions. For example, when the same decision-making questions are asked to men, their responses often diverge from their wife’s responses. Researchers have sought to make progress on how best to aggregate women’s and men’s responses, but have also pointed out that spouses’ discordant perceptions raise concerns about how well these questions are measuring agency (Anderson, Reynolds and Gugerty, 2017; Ambler et al., 2021; Annan et al., 2021).

Another critique is about the generality of the DHS scenarios (“large household purchases”). Scholars have suggested that asking about more specific decisions or using vignettes might make the answers more informative (Glennerster, Walsh and Diaz-Martin, 2018; Donald et al., 2020).

An additional limitation of the DHS-type questions is that their focus on decision-making is too narrow. First, agency also encompasses the ability to set goals, and scholars have suggested using broader measures that also measure the respondent’s sense of autonomy (Alkire et al., 2013; Donald et al., 2020). Second, an influential framework for women’s empowerment offered by Kabeer (1999) encompasses both the means (agency) and ends (achievements, or outcomes) of power, and some measures of women’s power combine both types of variables. For example, the influential Women’s Empowerment in Agriculture Index (WEAI) is constructed using questions about both women’s decision-making power and their outcomes such as their level of asset ownership (Alkire et al., 2013).

Of course, a key advantage of the DHS measure is that the module is short. Collecting a broader measure of agency or power will typically entail a lengthier module. Studies in which women’s agency is the focus will often find this extra cost worthwhile, while studies in which agency plays an auxiliary role will not.

A different critique of the focus on decision-making is that making decisions is neither necessary nor sufficient to have agency. Decision-making is often a cognitive burden, so it is important to understand whether the individual wants to make the decisions (Maiorano et al., 2021; Bernard et al., 2020). Someone who is able to delegate decision-making to others is exhibiting their agency, and, conversely, someone who makes decisions knowing they must adhere to another person’s preferences has limited agency. Likewise, someone who makes decisions in domains that they care little about is not as empowered as someone who makes the decisions that are important to them.

We view this critique that agency is not always increasing in decision-making as especially compelling. The main limitation of the DHS-type questions is that they emphasize *making* decisions but they should be asking about *influencing* decisions. Those with agency can effectuate the outcomes they want, even if they delegate the actual day-to-day decisions to someone else. Questions about influencing decisions could be used in addition to the current questions, if spaces permits, or replace them, if not.

It seems feasible to update the standard survey questions to address this critique. One alternative question is to ask if the respondent “could make their own personal decisions if they wanted to,” which captures either whether they are the decision-maker or they chose to delegate the role. The husband who lets (makes) his wife decide what to cook would be rated as having high agency. In a study in the Philippines, Arugay et al. (2024) assess the performance of different indicators of agency used in WEAI, including this question, and conclude that it performs better than the DHS-style questions on whether the respondent views herself as a sole or joint decision-maker. Their way of measuring the performance of different indicators is to test the correlation with the Relative Autonomy Index (Ryan and

Deci, 2000), which they use as the ‘true’ measure of agency.

Another option is to tweak the language to emphasize whether the respondent’s preferences influenced the outcome. For example, Jayachandran, Biradavolu and Cooper (2023) find that responses to, “Is your opinion heard when the household purchases an expensive item like a bicycle or cow,” is the best-performing survey question to measure women’s agency in their Haryana, India setting. The “is your opinion heard” language centers the person’s influence and agency, but in a way that is detached from who makes the decisions.

A fruitful direction for research would be to systematically test whether and when an index based on an equally short module as in the DHS, but using questions about *influencing decisions* or *being able to make decisions if one wants to* captures women’s agency better than the status-quo approach.

4.2.2 Lab-game measures of agency

While the survey questions described above are an example of stated preferences, economists typically view revealed preferences — behavior in a real-stakes situation — as providing more reliable information about a person’s preferences. Thus, one direction in the literature has been to develop innovative measures of intrahousehold power using lab games. The usual limitation of lab games applies, which is that the decisions are somewhat artificial; they are not typical decisions that people make in their lives.

Almås et al. (2018) develop a willingness-to-pay (WTP) index of women’s agency in North Macedonia that elicits how much money the respondent will forgo so that she receives a small transfer from the researchers rather than it going to her husband. Women with a high WTP are classified as less empowered; the premise is that demand for agency is decreasing in one’s level of agency.¹⁹ The researchers use the measure as an outcome in an RCT of (large) conditional cash transfers, finding that recipients of the cash transfers have a lower WTP to receive the lab-game transfer themselves. The measure has been adopted in other studies, including in Zambia and Tanzania (Barr et al., 2020; Almås et al., 2020).

Demand for agency will be decreasing in agency if agency is a ‘good’ with diminishing returns. These conditions might not hold in all contexts. When the Almås et al. (2018) game was replicated in India and Myanmar, many women had a negative WTP for agency, a pattern also seen in the original North Macedonia study (Jayachandran, Biradavolu and Cooper, 2023; Fertig et al., 2022). A negative WTP means that women required a premium before they were willing to receive the money themselves; they viewed agency as a ‘bad.’ In

¹⁹This interpretation is derived using the collective model. Similar games have been used in LMICs to test intrahousehold efficiency and whether spouses are able to achieve gains from cooperation (Iversen et al., 2011; Mani, 2020).

contexts where women have very low agency, some women may have internalized the norm that they should not have (financial) agency. Thus, developing lab games measures of agency appropriate for this context is an area for future research.

Some studies are explicitly interested in the demand for agency and how it relates to one’s level of agency. [Bakhtiar et al. \(2024\)](#) measure demand for agency among couples in Nigeria by eliciting how much a respondent is willing to pay to make a choice herself rather than having her spouse make it for her. The choice concerns whether the household will receive female items (items valued by women), male items, or household items. They find low demand for agency among women: two thirds of women, compared to a quarter of men, choose to defer decisions to their husband. In their RCT, women who received a cash transfer had higher demand for agency but not higher actual agency.

The lab experiment in [Bakhtiar et al. \(2024\)](#) builds on the work of [Afzal et al. \(2022\)](#), who elicit demand for agency among couples in Pakistan. The study documents that people demand agency partly because of its instrumental value (demand is higher when they believe their spouse would not make the choice they want) but also for non-instrumental reasons (they prefer to choose even when doing so will not influence the choice that is made). They find mixed evidence on whether women have higher demand for agency than their husbands.

Another lab-in-the-field strategy is to elicit each spouse’s choices (individual-level preferences) and then their joint choices (aggregated household preferences) to back out the Pareto weights. [Carlsson et al. \(2012\)](#) use this promising technique in China. Husbands and wives each make several real-stakes decisions that depend on their discount rate, first separately and then jointly. By assuming that the discount rate reflected in the joint decisions is the weighted sum of the individual discount rates, the authors can estimate the husband and wife’s relative Pareto weights for each household. They find that men have more influence than women in 99% of households, and that, on average, women have 67% as much weight as their husbands. [Carlsson et al. \(2013\)](#) similarly collect and analyze data on individual and joint decisions, using choices that depend on risk rather than time preferences.

[Cherchye et al. \(forthcoming\)](#) conduct a similar lab-in-the-field experiment in Kenya in which spouses individually and jointly choose between money for themselves or a nutritious meal for their child. They then use these revealed-preference data to structurally estimate the Pareto weights.

4.2.3 Measures derived from qualitative data

An emerging technique to measuring agency is to collect open-ended text from respondents and then convert it to quantitative measures. Traditionally, this process has been labor-intensive. The conventional workflow would involve trained social scientists conducting

interviews that explore the respondent’s agency via open-ended questions. The interviewers or other trained individuals would later read the transcripts and assign each respondent’s agency a numerical score based on a coding scheme that the research team developed. For instance, [Jayachandran, Biradavolu and Cooper \(2023\)](#) implement this procedure to construct a quantitative measure of women’s agency for a sample of 200 women in north India.

While effective, this traditional approach faces significant scalability challenges. For large-N studies, a data collection protocol that relies so heavily on skilled labor is infeasible. However, recent advances in natural language processing are opening new possibilities for using ‘text as data’ in large-N quantitative studies. For example, researchers can use simpler interview scripts that do not require expert interviewers and combine human expertise with automated processing to encode the data; concretely, human experts can code a subset of the observations, which are then used as training data for a large language model.²⁰

4.2.4 Using richer measures to validate survey questions

Lab games and qualitative interviews often require more piloting and more time from respondents than the short modules on agency that are the norm. Given their extra costs, they are most valuable when having an accurate and precise measure of agency is central to the study goals, but may not be worthwhile in other cases.

Beyond their direct application, however, these more involved methods can serve another important purpose: they can validate shorter survey-based measures. By serving as benchmarks, they can help us make progress on developing brief instruments that capture the complexity of agency without sacrificing accuracy.

An example of this validation strategy comes from [Jayachandran, Biradavolu and Cooper \(2023\)](#), whose aim was to develop a five-question index for women’s agency that would work better for the context than simply using the DHS questions. The innovation lay in the validation method. Determining what ‘worked well’ was based on concordance with a richer measure of agency derived from qualitative interviews. Specifically, the study employed machine learning algorithms to select five survey questions from among 64 contenders that, when combined into an index, best predicted the qualitative interview score.

This type of validation exercise has potential for broader application. Studies that collect richer measures of agency — whether through lab-game outcomes, naturalistic revealed-preference outcomes, or qualitative interviews — have an opportunity to make an additional

²⁰[Ashwin et al. \(2022\)](#) develop a natural language processing model to quantify recorded responses to two open-ended questions about aspirations for their children given by 2,200 parents in Bangladesh. While they find that their supervised model performed better than off-the-shelf large language models (LLMs) such as ChatGPT, they did not compare it to a fine-tuned LLM trained on the same human-coded data ([Ashwin, Chhabra and Rao, 2023](#)).

methodological contribution by using their data to improve the survey questions that researchers use across the field. Even the straightforward step of reporting the correlation between the richer measure and various survey questions would offer valuable insights for survey design.

5 Evidence on the causes of women’s power

We now turn to synthesizing research on the determinants of women’s power. We review studies that test whether a particular policy or other factor increases women’s power, as determined by changes in a direct measure of women’s decision-making power or an outcome assumed to be valued more by women than men on the margin. We review the causes of women’s power that are most commonly studied, focusing on those that are amenable to policy influence. We restrict our attention to studies with strong research designs to isolate causal effects.

Many of the studies also examine outcomes that are downstream of women’s power. Rather than trying to segregate the findings, we also discuss the results on effects of women’s power here. Thus, this section is organized around different types of causes, but discusses both causes and effects. Section 6 revisits the evidence but organized around different types of effects and with a more critical eye, focusing on the evidence that most convincingly speaks to the effects of women’s power.

5.1 Cash transfers (unearned financial resources)

The financial resources that each individual brings into the household, through earned or unearned income, are likely a significant determinant of intrahousehold power (Browning, Chiappori and Weiss, 2014). For unearned income, an influential literature has examined the impact of social insurance and cash transfer programs on decision-making power and household outcomes, studying whether and how the identity of the recipient in the household shapes how the new influx of money is spent.

Duflo (2003) studies the effects on young children in the household when women or men receive old-age pensions in South Africa. Transfers to women improve girls’ but not boys’ weight-for-height, while transfers to men lead to improvements for neither gender. The evidence is suggestive, as the estimates do not seem precise enough to statistically distinguish the effects across the genders of recipients or children.

Conditional and unconditional cash transfers have received substantial attention, starting with PROGRESA in Mexico. Importantly, the experimental design component of this

program did not randomize who the recipient of the cash was but simply targeted mothers. Hence, PROGRESA studies that attempt to isolate the effect of the program on power do so by controlling or instrumenting for total household resources or compare the effect of PROGRESA with that of other programs not targeted at women (Attanasio and Lechene, 2002; Rubalcava, Teruel and Thomas, 2009).

More advanced experimental designs evaluating cash transfers allow researchers to compare the effects of directing the transfers to women versus men, offering a cleaner test. The findings of these studies have been quite mixed, possibly due to different implementations of the programs and the different characteristics and cultures of the settings (Bauchet et al., 2021).

Benhassine et al. (2015) evaluate a conditional cash transfer in Morocco, randomizing whether mothers or fathers receive the transfer. They find very little difference in the effect of the program on educational outcomes based on the identity of the recipient. As the authors highlight, only one third of female recipients (compared to 70% of male recipients) picked up the transfer alone; the others were typically accompanied by their husband or another family member, raising the possibility that the women did not subsequently have control over the transferred money.

Haushofer and Shapiro (2016) evaluate the effects of a large unconditional cash transfer experiment in rural Kenya, which randomized whether the recipient was the male or the female head of the household. The study finds little difference in how choices and outcomes respond to treatment by the gender of the recipient. Yet, as the authors highlight, the study is only powered to detect relatively large differential effects. The study does find positive effects of targeting women on women’s power, defined as attitudes toward IPV and general gender attitudes, but it does not measure decision-making power or resource allocations within the household. Haushofer et al. (2019) examine the impact of the same program on IPV and find that transfers reduce violence, but not differentially depending on the gender of the recipient.

Almås et al. (2018) examine the effects of a conditional cash transfer program in North Macedonia on women’s willingness to pay to control resources in the household, measured through a lab-in-the-field experiment. They find that such a measure, unlike the more commonly-used measures of agency, is sensitive to the identity of the cash recipient: when a woman is the designated program beneficiary, she has lower willingness to pay to control a (separate) sum of money in the lab instead of that sum being assigned to her husband. This outcome is consistent with the finding in Armand et al. (2020) that when the woman was the recipient of the conditional cash transfer in North Macedonia, household food expenditure was higher than when the man was the recipient.

Akresh, de Walque and Kazianga (2025) study the impact of conditional and unconditional cash transfers paid to mothers and fathers in rural Burkina Faso using an RCT. They find limited differences in the effect of giving cash to mothers compared to fathers, but do not measure power or agency directly. Payments were made in public, but further information on how they were disbursed is not provided. Almås, Vandewalle and Somville (2024) find similar null effects in a study in rural Chhattisgarh (India) on household consumption choices.

In their meta-analysis of RCTs of unconditional cash transfers programs in low- and middle-income countries, Crosta et al. (2024) compare effect sizes between 33 programs that gave transfers to women and 34 programs in which the transfers were not targeted to a particular gender. They find that transfers to women lead to a larger increase in food consumption but no larger or smaller impact on children’s health and educational outcomes. They compare transfers to women and untargeted transfers because they identified only four studies that randomized the gender of the recipient.²¹

Many additional studies examine the impact of cash transfers to women relative to no transfers. If the research goal is to understand impacts on decision-making power and not to draw conclusions about downstream effects of women’s power, a simple treat-control design suffices. For example, Bonilla et al. (2017), using an RCT, and Ambler and de Brauw (2024), using a regression discontinuity design, find modest effects of cash grants to women on their decision-making power in Zambia and Pakistan, respectively, while El-Enbaby et al. (2025), using a regression discontinuity design, find no average effect in Egypt.

5.2 Earning capacity

One strategy to empower women is to increase their labor market earnings, for example, through education, access to finance for entrepreneurship, or skills that boost labor productivity. The theory of change closely maps to relative income being a determinant of an individual’s Pareto weight in a collective model or changing their threat point in a bargaining framework. Note that higher earning capacity can shift the threat point and increase a person’s power even if they do not actually work.

Labor demand One way to study how relative earning capacity influences household power is to exploit variation in the demand for female and male labor. Qian (2008) uses

²¹We exclude from this count two studies that Crosta et al. (2024) classify as randomizing the identity of the recipient; those studies examine heterogeneous effects by gender, but their sample inclusion criteria and hence sample composition differ by the gender of the recipient. A pure test of whether reallocating resources within the household affects outcomes requires a design that first identifies couples in which *both* parties are eligible, and then randomizes the identity of the recipient.

a difference-in-differences design in China based on men and women having a comparative advantage working in fruit orchards and tea plantations, respectively, and on economic reforms that increased agricultural labor demand. She finds that women’s income made the child sex ratio less male-skewed and increased both girls’ and boys’ education, which she interprets as aligned with women’s preferences.

Majlesi (2016) studies Mexico, employing a shift-share design that combines temporal variation in aggregate employment by industry with municipal-level variation in the shares of women’s employment and men’s employment by industry, as well as an alternative design that exploits changes induced by China’s entry into the WTO. He finds that a higher labor demand for women, conditional on labor demand for men, increases women’s household power, spending on children’s health, and children’s health outcomes.

Microfinance The evidence on the effects of microfinance on women’s power is mixed. Banerjee et al. (2015) find that a group micro-lending program in Hyderabad (India) had no effect on an index of women’s decision-making in the household. Angelucci, Karlan and Zinman (2015) find that expansion of a group-lending program in Mexico had limited effects on women’s income and well-being, but led to a small increase in the number of decisions that a woman reports having a say in and in her likelihood of having a say in financial decisions.

Microfinance interventions that distribute resources to women have been more effective when accompanied by tools and strategies to help women maintain effective control of funds, through commitment savings programs or mobile money. In particular, Ashraf, Karlan and Yin (2010) find that savings commitment devices increase an index of women’s say in household decision-making in the Philippines, especially for women who are less empowered at baseline. Riley (2024) shows that loans paid via mobile money in Uganda are less likely to be captured by family members. One of the lessons drawn out in an unpublished working paper that reviews ways to increase women’s agency is indeed that *how* the money is delivered is important for increasing women’s agency (Chang et al., 2020). Consistent with this idea, Bernhardt et al. (2019) reevaluate data from RCTs in Ghana, India, and Sri Lanka and show that capital infusions targeted to female microentrepreneurs appear to also be spent on their husband’s business, reducing the measured returns on women’s businesses.

Women’s savings or self-help groups have been found to increase women’s influence in household decisions in Ghana, Malawi, and Uganda (Karlan et al., 2017), but not in Mali, where take-up was highest among women with greater freedom to make decisions at baseline (Beaman, Karlan and Thuysbaert, 2014), or in Bihar, India (Hoffmann et al., 2017).

Access to employment and control over labor income Field et al. (2021) show that providing women in Madhya Pradesh (India) with more direct control over their earnings, by providing them with an account and directly depositing labor earnings from a government workfare program in that account encourages their labor supply (both inside and outside the program) and improves measures of women’s power. Ho, Jalota and Karandikar (2024) find that opportunities to work within the home have no effect on an array of measures of women’s intrahousehold agency in West Bengal, India, possibly because of the short-term nature of the offer. Hsu et al. (2025) show that providing job opportunities to male or female refugees in Bangladesh has strong positive effects on the well-being of the job offer recipient, but asymmetric spillovers within the household. In particular, while women’s well-being benefits from their husband’s employment, the same is not true for men’s well-being depending on their wife’s employment. They find no impact of access to job opportunities on different survey measures of intrahousehold power.

5.3 Land ownership

Someone’s power can also derive from her share of the household’s assets. In most cases in LMICs, land is the largest component of household wealth. Men’s greater property rights over land is, thus, one source of their greater household power.

One source of the gender gap in land ownership are inheritance practices. Land ownership could increase power during the marriage, and some of the effects on women’s power could be operating through the pre-marriage effects, if acquisition occurs or is expected pre-marriage. Several papers have examined effects of the amended Hindu Succession Act in India that gave equal land inheritance rights to Hindu women when a family member died without a will. Most studies use a difference-in-differences (DiD) design based on states’ year of adoption and women’s age, as a proxy for their likely exposure to the law change, as existing marriages were grandfathered. Early studies showed that it increased girls’ education (Deininger, Goyal and Nagarajan, 2013; Roy, 2015). Heath and Tan (2020) find that the reform increased an index of women’s household decision-making, as well as their market labor supply. Grover and Sharma (2025) and Mookerjee (2019) find more mixed results when they examine impacts on women’s decision-making. Anderson and Genicot (2015) report a more sobering finding that the law change led to higher suicide rates among both men and women, which could be due to male backlash and more marital discord.

Harari (2019) exploits Kenya’s 1981 Law of Succession, which granted women equal inheritance rights, and its 1990 amendment exempting Muslims, using DiD strategy across cohorts and across non-Muslim and Muslim women. She finds that women exposed to equal

inheritance rights participate more in household decisions. Prior to marriage, they obtain education and are less likely to undergo genital mutilation, and they also marry later.

Vardani (2025) implements an RCT in Maharashtra, India that informed the treatment group about a little-known resolution in the state that declared that married women have the right to an equal share in their husbands' property. As a post-marriage change in the perceived allocation of property rights between spouses, this intervention offers one of the cleaner tests of women's power in the literature. The intervention increased spending on women's private consumption (e.g., food and clothing) and decreased men's alcohol consumption, but did not reduce IPV.

5.4 Ability to divorce

In many countries, women have less *de jure* or *de facto* ability than men to leave a marriage, because of restrictions on divorce or independent living. Divorce rates are persistently low in many LMICs (Bau and Fernández, 2023). This has a direct cost of making it more likely that they remain in unhappy marriages and also an indirect cost of a lower bargaining position within marriage because of their weaker outside option.

Most of the literature is on legal reforms related to divorce. Corradini and Buccione (2023) use a DiD that analyzes a 2000 reform in Egypt that gave women the right to unilateral divorce, using women with young children as a treated group and those with older children who would lose custody of their children through divorce as a comparison group. They find some evidence that women's say in household decisions increases, and stronger evidence that IPV decreases and children's school enrollment increases.

Sun and Zhao (2016) use the sudden announcement of unilateral divorce in China and show, using a DiD design, that it reduced sex-selection of female fetuses, which they argue is consistent with fertility decisions being more aligned with women's fertility preferences.

A study that looks at the interplay of *de jure* or *de facto* constraints on divorce is Bargain, Loper and Ziparo (2024). It examines changes after Indonesian reforms around 2008 that gave women better access to courts to pursue divorce. The authors argue the reforms should especially help matrilineal women because of their higher standard of living outside of marriage. They find that not only did this group divorce at a higher rate, but within marriage, their well-being improves (e.g., greater food consumption, lower morbidity), as does their children's (e.g., greater food consumption). Women also report more say in decisions about contraception and give birth to fewer children; the effect on fertility could be due to the increase in women's power or the increased chance of marriage dissolution.

We provide some additional descriptive evidence on *de facto* constraints in Figure 2.

We use DHS data to construct a measure of whether women can live independently if they divorce, namely the share of divorced women who report being the household head. This is the variable along the horizontal axis. The vertical-axis variable is, instead, constructed using married women; it is the share who have say in household decisions. In countries where women have more *de facto* ability to divorce, based on our measure, married women have more say in their households. This correlational analysis is just a suggestion, but we hope it prompts more rigorous research on women’s *de facto* ability to leave marriages.

5.5 Communication skills and psychological interventions

In bargaining models, power depends on the person’s outside options and their bargaining skill. Most of the policies we have discussed aim to improve women’s outside options. In this subsection, we discuss interventions that try to change how the marital surplus is shared by enhancing women’s bargaining skill. These are either communication trainings or so-called psychological interventions that aim to increase self-efficacy, aspirations, or belief in gender equality. We use bargaining ‘skill’ as an umbrella term, recognizing that sometimes what is changing is closer to bargaining will, or how much the person believes she deserves.²²

Communication skills Women who are better at communicating their preferences to their spouses and other family members and advocating for their needs should be able to claim a larger slice of the pie or find win-win ways to enlarge the pie, for example by persuading their spouses to share their preferences.

Kala and McKelway (2025) use an RCT to evaluate an ‘assertive communication’ training for women in India that taught them how to express their views while being respectful.²³ Among women who, at baseline, wanted to work more than their husbands wanted them to, the six-session training increased take-up of a paid training program offered to them and overall employment. While there was no effect on women’s say in household decisions, husbands’ preferences changed to be more supportive of their wives’ employment, suggesting the mechanism was that women persuaded their husbands to share their preferences.

Björkman Nyqvist, Jayachandran and Zipfel (2024) study a similar training for women in Uganda, aimed at improving communication between spouses about maternal and child health. Using an RCT, they find that the 19-session program increased spousal communication about health and decreased arguments. Treated women reported having more say in

²²Improved bargaining skill might also enable someone to improve her outside option (e.g., a woman successfully advocates that she should be able to take up employment) and directly improve women’s outcomes (e.g., communication skills improve her interactions with doctors and hence her health).

²³Lowe and McKelway (2021) find that simply enabling discussion between spouses about a job opportunity for the wife lowers job take-up.

household decisions about health and nutrition, with modest downstream effects, such as increased meat consumption for women.

Some of the interventions of this type focus on adolescent girls, such as [Ashraf et al. \(2020a\)](#), which reports benefits of negotiation skills training for adolescent girls in Zambia. Long-run follow-ups of these studies could reveal whether these interventions later change the participants’ power within their marriages.

Psychological interventions Several studies have evaluated interventions that aim to increase women’s power by building their self-confidence and resolve to advocate for themselves, or what is sometimes referred to as ‘power within’ ([Rowlands, 1997](#)). These interventions are often described as ‘psychological interventions’ because they change women’s mindsets.

[McKelway \(2025\)](#) uses an RCT to evaluate a training designed to boost women’s general self-efficacy in India. While the intervention did not increase take-up of a job offer, it affected other household outcomes (e.g., increased savings) that presumably women valued.

[Bossuroy et al. \(2022\)](#) study the effect of a psychological intervention that was layered on top of a multifaceted (‘graduation’) program among women in Niger. By comparing treatment arms in their RCT, they find that the psychological intervention, which consisted of a week-long life-skill training (e.g., goal setting, effective decision-making) for women and a community film screening aimed at boosting aspirations, improved women’s mental health and self-efficacy, but had no persistent effect on their household decision-making power.

There are also many psychological interventions for adolescent girls, often described as life-skills programs or safe spaces, which could have long-term effects on participants’ power ([J-PAL, 2023](#)).

Mental health Addressing mental health disorders is distinct from the psychological interventions described above but could affect women’s power in a similar way. Postpartum depression is a contributor to the mental illness disease burden among women in LMICs. [Rahman et al. \(2012\)](#) and [Baranov et al. \(2020\)](#) analyze an RCT that offered psychotherapy to treat postpartum depression in Pakistan and find that treated women have more control over household spending, both in the short-run and when assessed seven years post-intervention.

5.6 Shifting men’s preferences or beliefs

As hinted at in Section 2, a person’s power can increase without their agency increasing if other decision-makers’ preferences become more aligned with the person’s preferences. For example, a powerful husband’s altruism toward his wife might increase. More often, he might

already be altruistic and gain a better understanding of his wife’s preferences, or his personal preferences might change in a way that aligns with hers.

Sometimes, the mechanism through which an intervention changes outcomes is that the female participants nudge their husbands’ preferences in their direction, as in [Kala and McKelway \(2025\)](#). But interventions can also directly target husbands to activate this mechanism. This approach is arguably simplest when men have incorrect factual beliefs and correcting them changes their choices. In their RCT in Zambia, [Ashraf et al. \(2023\)](#) find that when men become more knowledgeable about maternal mortality risk, their desire for more children falls, and their wives are less likely to become pregnant in the following year. Another prominent example of correcting men’s beliefs, albeit not in an LMIC, is [Bursztyn, González and Yanagizawa-Drott \(2020\)](#). Men are less likely to allow their wives to work in Saudi Arabia if they think other men disapprove of female employment, but they overestimate this disapproval. This study also highlights how women’s employment, and hence their share of household power, is shaped by external factors, namely societal norms.

Other interventions include a mix of information intended to correct beliefs and to change preferences (or beliefs about what should be valued). For example, [Dean and Jayachandran \(2019\)](#) intervened with husbands (as well as parents and in-laws) of working women in India, showing them videos that depicted the women’s work environment to dispel misperceptions about safety and featured testimonials from women and their family members that conveyed and promoted the self-esteem benefits of working for women. The intervention had no effect on participants’ attitudes towards women’s work, however.

Sometimes men can be persuaded that ceding power to their wives has instrumental value for them. [Seshan and Yang \(2014\)](#) use an RCT to evaluate a three-hour financial workshop for male temporary migrants from India to Qatar that advocated for involving wives in decision-making as part of good household financial management. The intervention increased women’s role in financial decision-making, as reported by both the men and their wives. [Ambler, Jones and O’Sullivan \(2021\)](#) randomize sugarcane-growing couples’ participation in a workshop in Uganda that aimed to open men’s minds to the possibility that they and their households might benefit if their wives have greater participation in decisions around selling sugarcane and spending the profits. The workshop increased the household’s likelihood of entering into a contract with a sugarcane buyer in the woman’s name from 68% to 74%.

Husbands and wives participate together in some programs, and often one intended goal is to change husbands’ beliefs and preferences. [Quisumbing et al. \(2021\)](#) evaluate a multi-faceted ‘gender sensitization’ workshops for couples in Bangladesh that aimed to make men aware of the burdens and constraints facing their wives (and also improve both spouses’ communications skills and raise women’s confidence). The workshops, which were layered

on top of an agricultural production and nutrition training program in a randomized way, did not have a detectable effect on measures of women’s power, or men’s or women’s gender attitudes. [Lecoutere and Wuyts \(2021\)](#) find no significant effects on women’s decision-making or economic outcomes of a couples’ coaching program that encouraged and guided them on adopting a more gender-equitable process for making household decisions.

[Dhar, Jain and Jayachandran \(2022\)](#) study a curriculum added in randomly selected schools in India that aimed to advance women’s equality by increasing boys’ and girls’ support for gender equality. The instrumental value of equality was discussed, but the emphasis was on the human-rights value. One way that women’s power could increase is that, once married, male participants choose to share more power with their wives because they believe not doing so is wrong.

A common type of intervention that engages men to dislodge harmful gender norms focuses on IPV. Some of these have a broader focus. For example, [Doyle et al. \(2023\)](#) reports on a 6-year follow-up to an RCT that evaluated a 15-session intervention for men in Rwanda. Participants discussed gendered power dynamics, decision-making, and male engagement in caregiving, among other topics. In addition to decreasing IPV, the intervention increased women’s say in household decisions and led to a more equitable sharing of childcare and household chores, as reported by both men and their spouses.

While we have focused this review on husband-wife dynamics, other household members (and people outside the household) can influence women’s power. For example, [Anukriti et al. \(2020\)](#) show descriptively that women in India who reside with their mother-in-law have more restricted mobility outside the home and fewer close social connections. Changing these other family members’ beliefs and preferences could also affect women’s power.

5.7 Pre-marriage interventions

The timing of some interventions relevant to women’s power occur pre-marriage, such as the communications skills and psychological interventions discussed above that target adolescents. Policies that increase girls’ education or give them job opportunities in young adulthood are other examples. Such interventions can affect women’s power in two broad ways. The first channel is that, within marriage, they increase women’s outside options and ‘power within’, strengthening their power. These are channels we have discussed above; the change is simply instigated earlier. The second channel is unique to pre-marriage interventions: they can influence when and who a woman marries, which, in turn, influences her power. Here we elaborate on this second channel and then summarize a major type of pre-marriage intervention, namely girls’ education.

The theory of change for why delayed marriage might increase women’s power is because teenagers might not be mature enough to advocate for themselves. In early marriages, the husband-wife age gap is, on average, larger, creating a power differential. Conditional on outside options, young brides have low bargaining skill. [Tauseef and Sufian \(2024\)](#) reports evidence in support of this. They find that early marriage reduces women’s household decision-making in a representative sample in Bangladesh. Their empirical strategy follows [Field and Ambrus \(2008\)](#) in instrumenting for age of marriage with age of menarche. In contrast, [McGavock \(2021\)](#), using a DiD design, finds limited evidence that a reform in Ethiopia that reduced early marriage led to subsequent increases in women’s decision-making power in their marriages.

Policies can delay the timing of marriage through a so-called incapacitation effect. For example, if it is not the norm to continue education after marriage, then increases in girls’ and young women’s education will delay marriage. Education might also increase a young woman’s voice vis-a-vis her parents, enabling her to delay her marriage. (A woman might similarly advocate for whom she wants to marry, which could affect power, but there is less evidence on this mechanism.)

Education is not the only way to delay marriage. For example, several countries have laws or campaigns to discourage early marriage. In their RCT in Bangladesh, [Buchmann et al. \(2018\)](#) show that offering financial incentives to families to delay their daughter’s marriage succeeded in its goal. The either-or nature of marriage and schooling means that delaying marriage can increase schooling and [Buchmann et al. \(2018\)](#) indeed find such an effect.

Researchers have exploited the many educational expansions across LMICs to study the effects of education on women’s power later in life. For example, [Kazibwe and Li \(2025\)](#) use a DiD design to study the effects of expanded access to secondary school in Uganda and find that it increased women’s educational attainment, decision-making power and support for gender equality. Meanwhile, [Samarakoon and Parinduri \(2015\)](#) analyze an education reform that increased women’s education in Indonesia, using a regression discontinuity design, and find that it had no effect on women’s household decision-making power.

[Ma \(2025\)](#) uses a DiD design to study the effects of a compulsory education law introduced in China in 1986 that increased schooling attainment. The study uses the 2010 National Survey on Women’s Social Status, which included DHS-style decision-making questions and another novel question for each domain: “Who do you think has more real power within your family between the husband and wife?” The policy increased women’s power, as measured by both types of questions.

The policy in China also made both women’s and men’s gender attitudes more egalitarian. The effect of women’s education on their gender attitudes is consistent with [Friedman et al.](#)

(2016) and Cannonier and Mocan (2018), who similarly find that education makes women’s gender attitudes more progressive, in Kenya and Sierra Leone, respectively. The effect on men’s attitudes in China could also be a causal effect of their education, or due to marital sorting or the influence of their wives on their views.

5.8 Non-policy determinants

Scholars have also examined determinants of women’s power that are less amenable to policy intervention, such as matrilineality and marriage-market scarcity.

Applying a spatial regression discontinuity design to DHS surveys for several countries, Lowes (2022) shows that in matrilineal societies, women have more decision-making power, experience less IPV, and close the gender gap in child education that favors boys, though income levels and average levels of education are lower. Walker et al. (2025) finds that, within the Solomon Islands, women in matrilineal communities have more leisure time, and men participate more in child care.

Another determinant studied in the literature is sex ratios in the marriage market. The theory of change is that when women are scarce in the marriage market, they have more power at the time of marriage formation, which could translate into more power within marriage. (They could also use their strong position in the marriage market to marry better (e.g., wealthier) men or to lower dowry amounts or increase brideprice amounts.) Edlund et al. (2013), using a DiD design, finds that male-skewed sex ratios led to a relative decrease in women’s time doing household chores and increase in their decision-making power in China. Porter (2016) also examines the effect of marriage-market sex ratios in China and finds consistent results.

Another factor that might affect women’s power is the sex composition of their children. Li and Wu (2011) hypothesize that in societies with son preference, having a son brings status to the mother (relative to the father). Using the China Health and Nutrition Survey, they find that women whose first-born is a son have more say in household decisions. In contrast, Zimmermann (2018) finds no support for such an effect in India.

Researchers have also examined how polygyny (the practice of men having multiple wives) affects women’s power. If the man’s wealth and income is the primary source of the household’s resources, then polygyny will reduce each woman’s allocation almost mechanically; the resources need to be split among more adults and children. However, the effects are more nuanced, as several studies find that women in polygynous marriages have a lower work burden because they are able to share responsibilities, such as child care and cooking, with co-wives, and are able to maintain more control over their earnings, even if they

typically participate less in other household decisions (Eissler et al., 2025). Beneath these average patterns is considerable variation across co-wives in their power, often based on their seniority and fertility (Reynoso, 2025; Rossi, 2019).

To summarize, the literature has found that a wide array of interventions have successfully increased women’s power, assessed using a direct measure of power or an outcome assumed to change in a particular way with women’s power (such as sex-selection in China). Like most literatures, this one probably suffers from bias in which results are reported in published studies and which studies are published, so one should be cautious in drawing definitive conclusions about ‘what works.’

With that caveat, we note a few of our takeaways from reading and summarizing the evidence. First, giving women financial resources is especially beneficial if done in a way that ensures they can control them (as highlighted by Chang et al. (2020)). Second, strengthening women’s ability to divorce (and presumably also to never marry) seems to increase their power within their marriages. Third, interventions that increase women’s ability to communicate assertively, yet cooperatively, while hard to get right, seem promising. Fourth, intervening with husbands seems most successful when it is to correct factual beliefs, while the evidence on persuading men to share power is, perhaps unsurprisingly, less conclusive. Finally, there is promising short-run evidence from several interventions involving adolescent girls, but we do not (yet) have evidence on whether such programs increase participants’ power in adulthood.

It is worth highlighting that the instances in which the results from similarly-designed studies are mixed (e.g., cash transfer programs) may reflect the role that institutions, culture, and economic circumstances are playing. Many of the models we reviewed in Section 2 predict that a policy change only affects power if it has a credible impact on women’s outside options. For example, laws that make divorce feasible, social norms that permit women to manage financial resources, and the presence of financial institutions where women can open bank accounts could be crucial in determining whether a cash transfer targeted at women confers decision-making power to them. Future research that can measure the complementarity between specific policies and the broader social and economic environment would make a valuable contribution, helping us to better understand the external validity of existing studies.

6 Evidence on the effects of women’s power

Here we complement the evidence review in Section 5 with a synthesis focused on the effects of women’s power on children’s and women’s outcomes. In doing so, we discuss a subset of the studies previously summarized. Even when a research design is able to leverage exogenous variation to show that a policy increases women’s power, the design typically does not allow for a convincing test of the effects of women’s power. This is because the additional condition that must be met — the exclusion restriction — is rarely met. While exogeneity derives from the identifying variation in the policy, the exclusion restriction is related to the nature of the policy, specifically whether it is only changing husbands’ and wives’ *relative* financial resources or otherwise shifting only their relative power.²⁴

Our assessment is that the studies in which the exclusion restriction is most convincing (even if not perfectly) do one of the following: (a) they compare same-sized increases in unearned or earned income for women versus men (such as the RCTs with separate treatment arms that target transfers by gender), (b) they redistribute asset ownership within the family (as in the Vardani (2025) information experiment that shifts perceived property rights from the husband to the wife), (c) they allow women (or men) to make decisions unilaterally (as in Ashraf, Field and Lee (2014), which compared contraception vouchers to women versus couples), or (d) they strengthen women’s control over their income (as in Field et al. (2021), which compared depositing women’s earnings in their private bank account or the household’s).²⁵ We thus restrict our synthesis to these types of studies.

We then pivot and close the section by discussing implications of women’s limited power for household efficiency and for the efficacy of policies aimed at improving their well-being.

6.1 Children’s outcomes

The potential consequence of women’s power that has received the most attention in the literature is improvements in children’s health and education. Here we summarize the trajectory of this literature over the past three decades and the state of knowledge. The literature was jump-started by influential studies that found that mothers’ income leads to better outcomes for children than fathers’ income does. The follow-on literature has similarly focused mostly on income, earned or unearned, as the shifter of household power.

²⁴An exception where the research design is what delivers the validity of the exclusion restriction are studies with separate sources of exogenous variation in men’s and women’s income, such as RCTs that randomize which gender receives a transfer or gender-specific shift-share designs.

²⁵We exclude policies that increase women’s relative ability to divorce because their effects are partly due to both spouses expecting divorce to be more common. Expecting their marriage might end should deter them from taking on specialized roles within the household, for example. That said, studies find that such policies have notable benefits for women and children, as discussed in Section 5.

Probably the most influential paper in this literature, including for practice in LMICs, studies a policy change in the UK. [Lundberg, Pollak and Wales \(1996\)](#) conduct a before-after comparison of household spending when child benefits payments switched to being a cash transfer to women and find that spending on children’s and women’s clothing increased. Another early influential early study was [Thomas \(1990\)](#), which uses observational variation in men’s and women’s unearned income in Brazil to show that women’s income reduces fertility and increases the child survival rate more than fathers’ income does, and also leads to larger improvements in some child nutrition and health measures.

Subsequent studies leveraged experimental or quasi-experimental variation in cash transfers, albeit with limitations. Several studies have analyzed randomized PROGRESA transfers in Mexico, which were targeted to women, and control for other sources of income to try to isolate the effect of specifically women’s income. The PROGRESA studies typically find positive effects on spending on children ([Yoong, Rabinovich and Diepeveen, 2012](#)). [Duflo \(2003\)](#) uses a DiD design to show that women’s pension income seems to improve girls’ health in South Africa more than men’s pension income does, but a potential threat to the validity of the design is that household composition changes in response to pension receipt ([Hamoudi and Thomas, 2014](#)).

While these early studies used research designs that might not be deemed credible under current standards, it is noteworthy that they either report better outcomes for children when mothers receive income or null effects. None of the studies find that children’s outcomes improve more with fathers’ income. Thus, even with omitted variable bias as a concern in these studies and the possibility of publication bias, the evidence seems strong enough to update on the direction of the pattern, if there is one: it seems unlikely that fathers’ income systematically improves contemporaneous child outcomes more than mothers’ income does.

Some studies use quasi-experimental variation in men’s and women’s earning capacity. [Qian \(2008\)](#), using a DiD design in China, and [Majlesi \(2016\)](#), using a shift-share design in Mexico, both find patterns consistent with women’s power improving children’s health or education outcomes. Some care is needed in interpreting the findings. Both designs use separate sources of exogenous variation in men’s and women’s earning capacity, which ideally they could use as two instruments for men’s and women’s income. Then they could test if women’s income has a significantly larger effect than men’s income on children’s outcomes. However, neither paper does this. [Qian \(2008\)](#) does not use employment or earnings data and instead presents ‘reduced form’ results, estimating how market reforms in tea-growing areas (which favor female income) relative to fruit-growing areas (which favor male income) affect children’s education. [Majlesi \(2016\)](#) compares men’s and women’s relative *employment*, but if the wage rate differs by gender, this is not an apples-to-apples comparison of contributions

to household income.

The apples-to-oranges concern could be circumvented if men’s and women’s employment opportunities both have effects, but in opposite directions. For example, if the shifter of men’s employment decreases an outcome while the shifter of women’s employment increases it, this would be convincing evidence that women’s power increases the outcome. However, such a pattern should only materialize if the outcome is a ‘good’ for women and a ‘bad’ for men, as household income is increasing in both cases. Children’s well-being seems unlikely to fit this description.²⁶ Yet, remarkably, both Qian (2008) and Majlesi (2016) find such results. Qian (2008) finds the positive-for-women, negative-for-men pattern for girls’ education, and Majlesi (2016) finds it for child health outcomes. Majlesi (2016) has the advantage of also showing opposite-signed effects on direct measures of women’s power in the household.

More recent studies have used RCTs to study the question, randomizing the gender of the recipient of cash transfers. This creates near-ideal variation to test the effects of women’s power that is convincingly causal and satisfies the exclusion restriction. These studies almost uniformly fail to reject equal effects on children’s outcomes when men versus women receive the transfers. Benhassine et al. (2015) and Akresh, de Walque and Kazianga (2025) do not find that conditional cash transfers have different effects on children’s educational outcomes in Morocco and Burkina Faso, respectively, based on the recipient’s gender.²⁷ Bauchet et al. (2021) finds no differences by gender in the effects of in-kind transfers of cooked rice and rice seeds on children’s anthropometric outcomes in Bolivia. Haushofer and Shapiro (2016) find no evidence of different effects by gender for their health and education outcomes in Kenya.

One key reason for the null results in the RCT studies is limited statistical power. For example, in the Haushofer and Shapiro (2016) study, with cash transfers of \$300 and a sample sizes of 762 households (for this comparison), the analysis is powered to detect woman-man differences in the health and education measures only if they are 0.24 and 0.25 standard deviations or larger.²⁸ To provide intuition for this effect size, suppose there was a binary investment in children with a 25% purchase rate in the status quo, and a cash grant to men increases the purchase rate to 50%. If the minimum detectable effect size is 0.25 standard deviations, then a mother-father gap is only detectable if a cash grant to women increases the purchase rate to 75% or higher. In other words, the effect size would need to be twice as large for women as men to be detectable. An underlying reason for the limited power

²⁶As we discuss later, the interpretation need not be that children are a ‘bad’ for fathers. They might use their power to shift spending from children’s human capital to other investments more valuable to children.

²⁷Akresh, de Walque and Kazianga (2025) find weak evidence that transfers to fathers improve child health more than transfers to mothers; the difference is present in one follow-up round but not the other.

²⁸This calculation is from Dizon-Ross and Jayachandran (2023), who argue that a higher-powered way to understand mothers’ and fathers’ spending on children is to elicit their willingness to pay for items for their children.

is that households spend a fairly small share of household income on children’s health and education.

Some of the strongest evidence that women’s income improves children’s human capital more than men’s income comes from the natural experiments that use gender-specific shocks to earning potential (Qian, 2008; Majlesi, 2016). The causal identification in neither study is experimental. However, a key advantage they have is statistical power. They use existing general-purpose data sets with larger sample sizes than in the single-purpose data sets collected for most RCTs. Also, the income shocks they analyze might be larger than the cash transfers that have been studied, if they were perceived to be permanent shocks; it is hard to make a direct comparison about the size of the income shocks without data on perceptions.

Publication bias and bias in which outcomes researchers report are also possible factors in the differing results by research design. Many recent RCTs pre-specify which outcomes they will examine, constraining them to report a null result later.

The discrepant findings across research designs might also be because not all income sources are equal in terms of their effect on household power. It seems quite possible that someone’s earned income, or perhaps any income they were instrumental in obtaining, confers more power to them than income that is ‘theirs’ by the choice of a policymaker making a household transfer. The Lundberg, Pollak and Wales (1996) study that launched this literature finds that shifting the identity of transfer recipients does shift power, but the follow-on studies either have not directly measured power or do not find an effect on power (with Armand et al. (2020) and Somville, Almås and Vandewalle (2020) as exceptions). A valuable direction for future research would be to investigate the ‘first stage’ effect on power. For example, researchers designing RCTs could collect data that directly probes each person’s influence over the spending of transferred resources and ideally how this varies based on the (framing of) the transfer’s provenance.

Another area worthy of further research is why mothers and fathers spend differently on children. One possibility, which often seems to be the implicit assumption, is based on preferences: mothers are more altruistic toward their children. However, there are several other possibilities. First, mothers might perceive the return to investing in children to be higher than fathers do (or equivalently, fathers might perceive other investment opportunities as higher return than mothers do).²⁹ Second, mothers might be more knowledgeable and so more confident about how to improve children’s human capital, particularly their health,

²⁹One study that tests why parents spend differently is Dizon-Ross and Jayachandran (2023), who compare mothers’ and fathers’ willingness to pay for both human capital items and non-human-capital (‘enjoyment’) goods for their children. They find that fathers but not mothers spend more on sons than daughters and that this is true for both human capital and non-human capital goods, which is more consistent with a preferences than investment explanation.

which raises their risk-adjusted return to investing. Third, mothers might expect to benefit more from higher-earning adult children, for example because they expect to be more reliant on financial support from their children when they are elderly. Fourth, there might be a ‘separate spheres’ arrangement in which each spouse spends in different domains, with women specializing in spending on children.³⁰

6.2 Women’s outcomes

Causal evidence on how women’s power affects their own outcomes is much scarcer. This seems mostly due to researcher interest, perhaps because it seems less theoretically ambiguous how women’s power will improve their own outcomes (although male backlash effects refute the theoretical certainty). The dearth of evidence might also be due to variables available in data sets.

Intimate partner violence Women’s power has a theoretically ambiguous effect on IPV. Women can use their power to deter their husbands from being violent toward them. However, women’s power can also increase IPV via a backlash effect from their husbands.³¹ [Haushofer et al. \(2019\)](#) find that unconditional cash transfers to women, relative to men, have no effect on IPV. [Vardani \(2025\)](#) finds that women’s relative property ownership does not affect IPV, on average.³²

Psychological well-being There is limited evidence on how women’s power improves women’s psychological well-being. [Haushofer and Shapiro \(2016\)](#) only report the effects of cash transfers in Kenya on psychological well-being, pooling men’s and women’s outcomes; they do not report results separately by individual. They find that average stress levels for the couple, as measured by cortisol levels, decrease, with no effect on average depression or happiness. [Ashraf, Field and Lee \(2014\)](#) finds that giving women more control over

³⁰[Doepke and Tertilt \(2019\)](#) extend the separate spheres ([Lundberg and Pollak, 1993](#)) of men and women based on the same parent needing to provide the goods and time inputs for the production of child human capital, and women thus having a comparative advantage because they face a lower market wage.

³¹IPV can also affect women’s power. When IPV is more accepted, due to either norms or law, the threat hanging over women during spousal disagreements is more serious, which weakens their power. For a review of studies in this causal direction, see [Shah and Barski \(forthcoming\)](#). Many studies use exogenous variation to test for the effect of IPV laws or norms on the prevalence of IPV, but few of them assess the downstream impact on women’s influence in the household.

³²[Erten and Keskin \(2024\)](#) use a shift-share design to show that in regions of Cambodia that experienced larger tariff reductions after WTO accession, men experienced larger shifts from paid to self-employment, women entered the labor force (mostly in unpaid employment), and IPV increased. The effect on IPV could be due to an increase in women’s power or a drop in total household income.

contraception decisions led to them being less happy, when measured two years later. This result could be due to the intervention increasing marital tension.

Contraceptive use and fertility outcomes Ashraf, Field and Lee (2014) find that increasing women’s ability to make contraception decisions unilaterally increases contraceptive use and decreases fertility. Qian (2008) finds that women’s power increases the number of surviving girls which is likely mostly due to a decrease in the rate of sex-selective abortions that women have.

Health While many studies report a positive association between women’s decision-making and their maternal health care take-up (e.g., prenatal care, skilled attendance at birth) and anthropometric measures such as BMI (Pratley, 2016), there is no evidence that meets our inclusion criterion for this synthesis. We similarly know of no causal evidence that women’s power improves other health outcomes such as routine health care, morbidity, or mortality.

Labor supply In settings where restrictive gender norms limit women’s employment, policymakers often look for ways to increase women’s employment as a way to increase their power. A different question is whether more power will increase or decrease women’s labor supply. A textbook economic model would predict a decrease in labor supply, as leisure is a normal good. However, women might find employment more rewarding than leisure on the margin. Moreover, in places, such as India, where gender norms restrict female employment, the counterfactual to employment is often home production rather than leisure, so we might expect that power increases women’s market work. Granting women more inheritance rights is not a policy that satisfies the exclusion restriction, but we note that Heath and Tan (2020) find that it increases women’s employment in India. Field et al. (2021) answer an adjacent question: They find that when women have more financial control over their earnings, which increases their effective wage, they work more.

6.3 Household efficiency

We view the literature testing for Pareto inefficiency in households as mostly outside the scope of the review. Our focus is women’s power because it is usually lower than men’s power; this review is fundamentally about asymmetry in power. Many household inefficiencies are present even without asymmetry, e.g., individuals hide income from each other and distort their consumption to be able to do so, as in Zhang (2024) and Castilla and Walker (2013).

However, in some cases, women’s limited power in the household interacts with frictions to exacerbate, or potentially reduce, inefficiency. We view this topic as a fruitful area for

further research and mention a few papers on the topic.

Udry (1996), a pathbreaking paper on Pareto inefficiency, shows that households in Burkina Faso do not allocate inputs efficiently (by equating marginal returns) between agricultural plots controlled by men and women. The root of this inefficiency is individual-level property rights over plots within the household, which stems from the imbalance of power across genders. Granting women individual control over plots is a way to commit some resources to them in marriage. However, the cost is that it generates the inefficient agricultural production that Udry (1996) documents.

In the consumption domain, Jack et al. (2024) models a free-riding problem in households that arises because individuals incur private effort costs to be frugal when they spend the household's money (specifically, when using piped water in their application), while the benefits (money saved) is shared with family members. They show that with convex effort costs, this inefficiency is exacerbated when power is shared unequally within households.

There is also growing evidence of inefficient information-sharing within households that seems related to power differentials, or perhaps just gender norms. Several studies find that knowledge provided to husbands increases their wives' knowledge, but that knowledge gains for women do not spill over to their husbands' domain (Björkman Nyqvist and Jayachandran, 2017; Conlon et al., 2021; Ashraf et al., 2023). This inefficiency seems particularly consequential for domains where women have much more access to information, such as women's and newborns' health.

Targeting cash transfers to women increases household spending on food consumption (Crosta et al., 2024), but this pattern is difficult to interpret in welfare terms without knowing which spending is crowded out. The implications are quite different if high-return investments or wasteful spending decreases. While a common view is that men will spend transfers on alcohol and tobacco, there is limited evidence that transfers are spent on 'temptation goods' (Evans and Popova, 2017). However, Armand et al. (2020) find a marginally significant decrease in alcohol and tobacco consumption if women receive transfers instead of men in North Macedonia, and Vardani (2025) finds that women's power decreases men's alcohol consumption in India.

Shifts in intrahousehold power could affect other decisions that have dynamic, long-term implications, such as decisions over savings and investment. Doepke and Tertilt (2019) note that, in some contexts, greater investments in children's human capital might not be growth-promoting or even beneficial if the alternative is to choose other forms of investment with higher return (e.g., physical capital, financial assets). However, we lack evidence on whether targeting resources to men or women has larger effects in the medium- or long-term on household income and wealth. In Kenya, Haushofer and Shapiro (2016) find mostly

insignificant differences by gender in the effects of cash transfers on household assets and business activities. In Burkina Faso, [Akresh, De Walque and Kazianga \(2016\)](#) document a larger increase in livestock ownership, although not consistently across their two rounds of follow-up data, and in cash crop yields when men rather than women receive transfers. More such evidence on how women’s household power affects investment behavior, income, and wealth is needed.

6.4 Women’s power as a moderator of policy impacts

Women’s intrahousehold power can also be a determinant of how effective specific economic and social policies are at improving women’s well-being. Thus, even when uneven household power cannot be changed, it is relevant for thinking about what type of policy might improve women’s outcomes.

A study would need exogenous variation in both household power and the policy to definitively test for such an interaction effect, which is rare. However, studies often present suggestive evidence by combining exogenous policy variation with observational variation in women’s power. We do not comprehensively review these studies but mention a few of them to convey the relevance of existing power dynamics for policy design.

[Schaner \(2017\)](#) finds that reducing withdrawal fees on individually-held bank accounts in Kenya leads to more account usage for men but not for women. This gender difference in policy effectiveness appears to stem from women’s lower power to resist demands on their money from other household members; for women with limited power, frictions in access to money were, in fact, beneficial. This finding echos the result in [Ashraf, Karlan and Yin \(2010\)](#) from the Philippines that access to hidden savings is most beneficial to the spouse with less financial power in the household (typically the man in that context).

The goal of giving financial resources to women to help their businesses is partly to improve their household power, but the effectiveness of standard tools to do so can, in turn, depend on their power. [Bernhardt et al. \(2019\)](#) re-analyze data from studies that found minimal effects of providing loans or capital grants to women in India, Ghana, and Sri Lanka. They find that women’s businesses did benefit when they were the sole business owner in the household, but if their husband or another household member also had a business, the capital seemed to often be redirected toward that other business, presumably because of women’s low power to retain control over the money.

7 Conclusions and directions for future research

This review has synthesized the literature on women’s power within households in low- and middle-income countries, covering theoretical frameworks, measurement approaches, and empirical evidence. One goal was to integrate theoretical models of household decision-making with the vast empirical literature that uses causal research designs to study the determinants and consequences of women’s power. Several key findings emerge from this analysis that have implications for both research and policy.

What we know

The evidence is clear that women systematically have less power than men in households across LMICs. Studies using diverse measurement approaches — from structural estimation of consumption allocation to survey-based measures of decision-making — usually find that women receive smaller shares of household resources and have limited influence over key family decisions.

Research has identified multiple pathways through which women’s power can be increased. Interventions that enhance women’s earning capacity, provide them with direct control over financial resources, strengthen their legal rights (for instance, around divorce and property), and build their communication skills have all shown promise. However, the design and context of these interventions matter enormously. Cash transfers are most effective when women can maintain control over the funds, and skills-based interventions work best when they address specific constraints women face in their particular settings.

Do women prioritize spending on children’s human capital more than men? While the evidence is mixed, several studies suggest this is the case. Some of the notable evidence for this conclusion is based on comparing changes in men’s and women’s earning capacity, instead of their receipt of cash transfers. We do not know if this pattern reflects differences in how earned versus unearned income affects household power or differences in the study designs; but the distinction is important for both policy and future research.

Directions for future research

Several research priorities emerge from this review. First, we have surprisingly little causal evidence on how women’s power affects their own outcomes, such as their health and psychological well-being. We also know relatively little about what men prioritize when allocating their share of household resources. Is the relevant distinction between private consumption and investment in children, or between the types of investments (e.g., children’s education versus assets)? The answer matters for understanding how women’s power affects

household prosperity over the longer run. Of course, estimating effects of women’s power on household income and wealth directly would also speak to this question.

Another topic that would benefit from more research is how gendered laws and norms affect women’s power by shaping their outside options and (especially understudied) their bargaining ‘skill’ or style. A related key question is how these laws and norms moderate the effects of policies aimed at strengthening women’s power. There is also a research gap in our understanding of how unequal power exacerbates or mitigates household inefficiencies. A final direction we highlight for further causal research is how other features of LMICs, such as multi-generational households, informal labor markets, and missing markets, shape intrahousehold power dynamics.

Second, measurement of women’s power itself remains contested. While the DHS decision-making questions have enabled valuable cross-country comparisons, they have important limitations, particularly their emphasis on who makes decisions rather than who influences them. The field would benefit from developing short survey modules that capture influence over decisions rather than just decision-making roles. More innovative approaches using lab games, qualitative interviews, and revealed preference methods also show promise but require further validation and progress on making them scalable. Multi-study coordination to validate new survey questions or other measurement tools would enhance our ability to identify appropriate measures and understand how context shapes power dynamics.

Third, we need more studies that are able to isolate the effects of women’s power from other channels through which policies might operate. This requires research designs that satisfy the exclusion restriction — where the policy affects outcomes only through shifts in intrahousehold power. Such studies are rare but essential for understanding women’s power as a causal mechanism for improving family welfare.

When that is not possible, we call for studies on the causes or effects of women’s power to be more explicit about the assumptions linking their estimates to the conclusions drawn. Some studies aim to identify the effect of increased power on outcomes like children’s education; others treat such outcomes as a proxy for women’s power. These approaches rest on different assumptions: in the former, we must know how the intervention affected women’s power; in the latter, we must know what women prefer relative to men. Making these assumptions transparent is crucial for interpretation. We also highlight the value of measuring impacts on women’s power directly in such studies. As the literature matures, studies that establish clear first-stage effects on power will provide a foundation for understanding whether and how women’s power translates into improved welfare for women and their families.

Policy implications

We hope this review has also provided practical insights for policymakers. One lesson that emerges is that simply transferring resources to women may not increase their power if they cannot maintain control over those resources. Program design details — such as how transfers are delivered, whether women receive them privately, and what support systems exist to help them maintain control — are crucial for effectiveness.

The evidence also suggests that policymakers (and researchers) should invest more heavily in understanding and addressing women’s *de jure* and *de facto* ability to leave marriages. Theoretical models with limited commitment help clarify that most policies shift spouses’ power only when they change credible outside options. Some studies suggest that divorce rights may be an effective lever for increasing women’s power within marriage, yet this area has received less attention than it deserves. Beyond the right to divorce, women’s legal rights and social status outside of marriage may be underutilized pathways to improve their well-being within marriage.

The literature on women’s power in households has made remarkable progress over the past three decades, moving from descriptive studies to sophisticated analyses using experimental and quasi-experimental variation and structural methods. Continued advances in measurement, theory, and empirical methods will deepen our understanding of these fundamental dynamics that shape the lives of billions of women worldwide.

References

- Afzal, Uzma, Giovanna d’Adda, Marcel Fafchamps, and Farah Said. 2022. “Intra-household consumption allocation and demand for agency: A triple experimental investigation.” *American Economic Journal: Applied Economics*, 14(3): 400–444.
- Akresh, Richard, Damien De Walque, and Harounan Kazianga. 2016. “Evidence from a randomized evaluation of the household welfare impacts of conditional and unconditional cash transfers given to mothers or fathers.” World Bank Policy Research Working Paper, n.7730.
- Akresh, Richard, Damien de Walque, and Harounan Kazianga. 2025. “Cash transfers and child welfare: Evidence from a randomized evaluation of the role of conditionality and transfer recipient.” working paper, University of Illinois Urbana-Champaign.
- Alkire, Sabina, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour, and Ana Vaz. 2013. “The Women’s Empowerment in Agriculture Index.” *World Development*, 52: 71–91.
- Almås, Ingvild, Alex Armand, Orazio Attanasio, and Pedro Carneiro. 2018. “Measuring and changing control: Women’s empowerment and targeted transfers.” *Economic Journal*, 128(612): F609–F639.
- Almås, Ingvild, Charlotte Ringdal, and Ingrid Hoem Sjursen. 2021. “Understanding inequality within households.” In *Handbook of Labor, Human Resources and Population Economics*. 1–27. Springer.
- Almås, Ingvild, Lore Vandewalle, and Vincent Somville. 2024. “The effect of gender-targeted transfers: experimental evidence from India.” Working paper, KU Leuven.
- Almås, Ingvild, Orazio Attanasio, and Pedro Carneiro. 2023. “Household decisions and intra-household distributions.” In *Handbook of the Economics of the Family*. Vol. 1, 111–149. Elsevier.
- Almås, Ingvild, Lars Ivar Berge, Kjetil Bjorvatn, Vincent Somville, and Bertil Tungodden. 2020. “Adverse selection into competition: Evidence from a large-scale field experiment in Tanzania.” Norwegian School of Economics, Department of Economics Discussion Paper Series in Economics 19/2020.
- Ambler, Kate, and Alan de Brauw. 2024. “Cash transfers and women’s agency: Evidence from Pakistan’s BISP program.” *Economic Development and Cultural Change*, 72(3): 1117–1150.
- Ambler, Kate, Cheryl Doss, Caitlin Kieran, and Simone Passarelli. 2021. “He says, she says: Spousal disagreement in survey measures of bargaining power.” *Economic Development and Cultural Change*, 69(2): 765–788.

- Ambler, Kate, Kelly Jones, and Michael O’Sullivan.** 2021. “Facilitating women’s access to an economic empowerment initiative: Evidence from Uganda.” *World Development*, 138: 105224.
- Anderson, C Leigh, Travis W Reynolds, and Mary Kay Gugerty.** 2017. “Husband and wife perspectives on farm household decision-making authority and evidence on intra-household accord in rural Tanzania.” *World Development*, 90: 169–183.
- Anderson, Siwan, and Chris Bidner.** 2015. “Property rights over marital transfers.” *Quarterly Journal of Economics*, 130(3): 1421–1484.
- Anderson, Siwan, and Debraj Ray.** 2010. “Missing women: Age and disease.” *Review of Economic Studies*, 77(4): 1262–1300.
- Anderson, Siwan, and Debraj Ray.** 2012. “The age distribution of missing women in India.” *Economic and Political Weekly*, 87–95.
- Anderson, Siwan, and Garance Genicot.** 2015. “Suicide and property rights in India.” *Journal of Development Economics*, 114: 64–78.
- Anderson, Siwan, and Jean-Marie Baland.** 2002. “The economics of ROSCAs and intrahousehold resource allocation.” *The quarterly journal of economics*, 117(3): 963–995.
- Angelucci, Manuela, Dean Karlan, and Jonathan Zinman.** 2015. “Microcredit impacts: Evidence from a randomized microcredit program placement experiment by Compartamos Banco.” *American Economic Journal: Applied Economics*, 7(1): 151–182.
- Annan, Jeannie, Aletheia Donald, Markus Goldstein, Paula Gonzalez Martinez, and Gayatri Koolwal.** 2021. “Taking power: Women’s empowerment and household well-being in Sub-Saharan Africa.” *World Development*, 140: 105292.
- Anukriti, S, Catalina Herrera-Almanza, Praveen K Pathak, and Mahesh Karra.** 2020. “Curse of the Mummy-ji: the influence of mothers-in-law on women in India.” *American Journal of Agricultural Economics*, 102(5): 1328–1351.
- Armand, Alex, Orazio Attanasio, Pedro Carneiro, and Valérie Lechene.** 2020. “The effect of gender-targeted conditional cash transfers on household expenditures: Evidence from a randomized experiment.” *Economic Journal*, 130(631): 1875–1897.
- Arugay, Aries, Aletheia Donald, Forest Jarvis, Hillary C. Johnson, and Aletheia Valenciano.** 2024. “When does decision-making reflect agency? Evidence from the rural Philippines.” World Bank Discussion Paper 10851.
- Ashraf, Nava.** 2009. “Spousal control and intra-household decision making: An experimental study in the Philippines.” *American Economic Review*, 99(4): 1245–1277.
- Ashraf, Nava, Dean Karlan, and Wesley Yin.** 2010. “Female empowerment: Impact of a commitment savings product in the Philippines.” *World Development*, 38(3): 333–344.

- Ashraf, Nava, Erica Field, Alessandra Voena, and Roberta Ziparo.** 2023. “Gendered spheres of learning and household decision making over fertility.” *King Center on Global Development Working Paper*, Stanford University.
- Ashraf, Nava, Erica Field, and Jean Lee.** 2014. “Household bargaining and excess fertility: An experimental study in Zambia.” *American Economic Review*, 104(7): 2210–2237.
- Ashraf, Nava, Natalie Bau, Corinne Low, and Kathleen McGinn.** 2020a. “Negotiating a better future: How interpersonal skills facilitate intergenerational investment.” *Quarterly Journal of Economics*, 135(2): 1095–1151.
- Ashraf, Nava, Natalie Bau, Nathan Nunn, and Alessandra Voena.** 2020b. “Bride price and female education.” *Journal of Political Economy*, 128(2): 591–641.
- Ashwin, Julian, Aditya Chhabra, and Vijayendra Rao.** 2023. “Using large language models for qualitative analysis can introduce serious bias.” *Sociological Methods and Research*, 00491241251338246.
- Ashwin, Julian, Vijayendra Rao, Monica Biradavolu, Aditya Chhabra, Arshia Haque, Afsana Khan, and Nandini Krishnan.** 2022. “A method to scale-up interpretative qualitative analysis, with an application to aspirations in Cox’s Bazaar, Bangladesh.” World Bank Policy Research Working Paper.
- Attanasio, Orazio, and Valerie Lechene.** 2002. “Tests of income pooling in household decisions.” *Review of Economic Dynamics*, 5(4): 720–748.
- Attanasio, Orazio P, and Valérie Lechene.** 2014. “Efficient responses to targeted cash transfers.” *Journal of Political Economy*, 122(1): 178–222.
- Bakhtiar, M Mehrab, Marcel Fafchamps, Markus Goldstein, Kenneth L Leonard, and Sreelakshmi Papineni.** 2024. “To defer or to differ: Experimental evidence on the role of cash transfers in Nigerian couples’ decision-making.” *Economic Journal*, ueae117.
- Baland, Jean-Marie, and Roberta Ziparo.** 2018. “Intra-household bargaining in poor countries.” In *Towards Gender Equity in Development*. Oxford University Press.
- Banerjee, Abhijit V., Esther Duflo, Rachel Glennerster, and Cynthia Kinnan.** 2015. “The miracle of microfinance? Evidence from a randomized evaluation.” *American Economic Journal: Applied Economics*, 7(1): 22–53.
- Baranov, Victoria, Sonia Bhalotra, Pietro Biroli, and Joanna Maselko.** 2020. “Maternal depression, women’s empowerment, and parental investment: Evidence from a randomized controlled trial.” *American Economic Review*, 110(3): 824–859.
- Bargain, Olivier, Guy Lacroix, and Luca Tiberti.** 2022. “Intrahousehold resource allocation and individual poverty: Assessing collective model predictions using direct evidence on sharing.” *Economic Journal*, 132(643): 865–905.

- Bargain, Olivier, Jordan Loper, and Roberta Ziparo.** 2024. “Traditional norms, access to divorce and women’s empowerment.” Working paper, Aix-Marseille University.
- Bargain, Olivier, Olivier Donni, and Prudence Kwenda.** 2014. “Intrahousehold distribution and poverty: Evidence from Cote d’Ivoire.” *Journal of Development Economics*, 107: 262–276.
- Barr, Abigail, Marleen Dekker, Floyd Mwansa, and Tia Linda Zuze.** 2020. “Financial decision-making, gender and social norms in Zambia: Preliminary report on the quantitative data generation, analysis and results.” *CeDEx Discussion Paper Series*.
- Basu, Kaushik.** 2006. “Gender and say: A model of household behaviour with endogenously determined balance of power.” *Economic Journal*, 116(511): 558–580.
- Bauchet, Jonathan, Eduardo Undurraga, Ariela Zycherman, Jere Behrman, William Leonard, and Ricardo Godoy.** 2021. “The effect of gender targeting of food transfers on child nutritional status: experimental evidence from the Bolivian amazon.” *Journal of development effectiveness*, 13(3): 276–291.
- Bau, Natalie, and Raquel Fernández.** 2023. “Culture and the Family.” In *Handbook of the Economics of the Family*. Vol. 1, 1–48. Elsevier.
- Bau, Natalie, Gaurav Khanna, Corinne Low, and Alessandra Voena.** 2023. “Traditional institutions in modern times: Dowries as pensions when sons migrate.” National Bureau of Economic Research.
- Beaman, Lori, Dean Karlan, and Bram Thuysbaert.** 2014. “Saving for a (not so) rainy day: A randomized evaluation of savings groups in Mali.” National Bureau of Economic Research.
- Becker, Gary S.** 1973. “A theory of marriage: Part I.” *Journal of Political Economy*.
- Becker, Gary S.** 1974. “A theory of social interactions.” *Journal of Political Economy*, 82(6): 1063–1093.
- Becker, Gary S.** 1993. *A Treatise on the family: Enlarged edition*. Harvard University Press.
- Benhassine, Najy, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen.** 2015. “Turning a shove into a nudge? A “labeled cash transfer” for education.” *American Economic Journal: Economic Policy*, 7(3): 86–125.
- Bernard, Tanguy, Cheryl Doss, Melissa Hidrobo, Jessica Hoel, and Caitlin Kieran.** 2020. “Ask me why: Patterns of intrahousehold decision-making.” *World Development*, 125: 104671.
- Bernhardt, Arielle, Erica Field, Rohini Pande, and Natalia Rigol.** 2019. “Household matters: Revisiting the returns to capital among female microentrepreneurs.” *American Economic Review: Insights*, 1(2): 141–60.

- Björkman Nyqvist, Martina, and Seema Jayachandran.** 2017. “Mothers care more, but fathers decide: Educating parents about child health in Uganda.” *American Economic Review*, 107(5): 496–500.
- Björkman Nyqvist, Martina, Seema Jayachandran, and Céline Zipfel.** 2024. “A mother’s voice: Impacts of spousal communication training on child health investments.” *Journal of Development Economics*, 168: 103263.
- Blundell, Richard, Heidi Karjalainen, Valerie Lechene, and Krishna Pendakur.** 2025. “Gender inequality in expenditure: Great Britain 1978 to 2019.” working paper, Institute for Fiscal Studies.
- Bobonis, Gustavo J.** 2009. “Is the allocation of resources within the household efficient? New evidence from a randomized experiment.” *Journal of Political Economy*, 117(3): 453–503.
- Bonilla, Juan, Rosa Castro Zarzur, Sudhanshu Handa, Claire Nowlin, Amber Peterman, Hannah Ring, David Seidenfeld, Zambia Child Grant Program Evaluation Team, et al.** 2017. “Cash for women’s empowerment? A mixed-methods evaluation of the government of Zambia’s child grant program.” *World Development*, 95: 55–72.
- Boone, Jan, Karen van der Wiel, Arthur van Soest, and Frederic Vermeulen.** 2014. “Kinky choices, dictators and split might: a non-cooperative model for household consumption and labor supply.” *IZA Journal of Labor Economics*, 3: 1–19.
- Bossuroy, Thomas, Markus Goldstein, Bassirou Karimou, Dean Karlan, Harounan Kazianga, William Parienté, Patrick Premand, Catherine C. Thomas, Christopher Udry, Julia Vaillant, and et al.** 2022. “Tackling psychosocial and capital constraints to alleviate poverty.” *Nature*, 605(7909): 291–297.
- Brown, Caitlin, Martin Ravallion, and Dominique van de Walle.** 2019. “Most of Africa’s nutritionally deprived women and children are not found in poor households.” *Review of Economics and Statistics*, 101(4): 631–644.
- Brown, Caitlin, Rossella Calvi, and Jacob Penglase.** 2021. “Sharing the pie: An analysis of undernutrition and individual consumption in Bangladesh.” *Journal of Public Economics*, 200: 104460.
- Browning, Martin, and Pierre-André Chiappori.** 1998. “Efficient intra-household allocations: A general characterization and empirical tests.” *Econometrica*, 1241–1278.
- Browning, Martin, Pierre-Andre Chiappori, and Arthur Lewbel.** 2013. “Estimating consumption economies of scale, adult equivalence scales, and household bargaining power.” *Review of Economic Studies*, 80(4): 1267–1303.
- Browning, Martin, Pierre-André Chiappori, and Yoram Weiss.** 2014. *Economics of the family*. Cambridge University Press.

- Buchmann, Nina, Erica Field, Rachel Glennerster, Shahana Nazneen, Svetlana Pimkina, and Iman Sen.** 2018. “Power vs money: Alternative approaches to reducing child marriage in Bangladesh, a randomized control trial.” *Abdul Latif Jameel Poverty Action Lab (J-PAL) working paper*.
- Buchmann, Nina, Pascaline Dupas, and Roberta Ziparo.** 2025. “The good wife? reputation dynamics and financial decision-making inside the household.” *American Economic Review*, 115(2): 525–570.
- Bursztyn, Leonardo, Alessandra L González, and David Yanagizawa-Drott.** 2020. “Misperceived social norms: Women working outside the home in Saudi Arabia.” *American economic review*, 110(10): 2997–3029.
- Calvi, Rossella.** 2020. “Why are older women missing in India? The age profile of bargaining power and poverty.” *Journal of Political Economy*, 128(7): 2453–2501.
- Calvi, Rossella, Jacob Penglase, Denni Tommasi, and Alexander Wolf.** 2023. “The more the poorer? Resource sharing and scale economies in large families.” *Journal of Development Economics*, 160: 102986.
- Cannonier, Colin, and Naci Mocan.** 2018. “The impact of education on women’s preferences for gender equality: Evidence from Sierra Leone.” *Journal of Demographic Economics*, 84(1): 3–40.
- Carlsson, Fredrik, Haoran He, Peter Martinsson, Ping Qin, and Matthias Sutter.** 2012. “Household decision making in rural China: Using experiments to estimate the influences of spouses.” *Journal of Economic Behavior and Organization*, 84(2): 525–536.
- Carlsson, Fredrik, Peter Martinsson, Ping Qin, and Matthias Sutter.** 2013. “The influence of spouses on household decision making under risk: An experiment in rural China.” *Experimental Economics*, 16: 383–401.
- Castilla, Carolina, and Thomas Walker.** 2013. “Is ignorance bliss? The effect of asymmetric information between spouses on intra-household allocations.” *American Economic Review*, 103(3): 263–268.
- Chang, Wei, Lucia Diaz-Martin, Akshara Gopalan, Eleonora Guarnieri, Seema Jayachandran, and Claire Walsh.** 2020. “What works to enhance women’s agency: Cross-cutting lessons from experimental and quasi-experimental studies.” J-PAL Working Paper.
- Cherchye, Laurens, Bram De Rock, and Frederic Vermeulen.** 2012. “Married with children: A collective labor supply model with detailed time use and intrahousehold expenditure information.” *American Economic Review*, 102(7): 3377–3405.
- Cherchye, Laurens, Bram De Rock, Khushboo Surana, and Frederic Vermeulen.** 2020. “Marital matching, economies of scale, and intrahousehold allocations.” *Review of Economics and Statistics*, 102(4): 823–837.

- Cherchye, Laurens, Pierre-Andre Chiappori, Bram De Rock, Charlotte Ringdal, and Frederic Vermeulen. forthcoming. “Feed the children.” *Economic Journal*.
- Chiappori, Pierre-André. 1988. “Rational household labor supply.” *Econometrica*, 56(1): 63–90.
- Chiappori, Pierre-André. 2017. *Matching with Transfers: The Economics of Love and Marriage*. Princeton University Press.
- Chiappori, Pierre-Andre, and Maurizio Mazzocco. 2017. “Static and intertemporal household decisions.” *Journal of Economic Literature*, 55(3): 985–1045.
- Chiappori, Pierre-Andre, Bernard Fortin, and Guy Lacroix. 2002. “Marriage market, divorce legislation, and household labor supply.” *Journal of Political Economy*, 110(1): 37–72.
- Chiappori, Pierre-Andre, Murat Iyigun, Jeanne Lafortune, and Yoram Weiss. 2017. “Changing the rules midway: The impact of granting alimony rights on existing and newly formed partnerships.” *Economic Journal*, 127(604): 1874–1905.
- Chiappori, Pierre-André, and Bernard Salanié. 2023. “Mating markets.” In *Handbook of the Economics of the Family, Volume 1*. Vol. 1 of *Handbook of the Economics of the Family*, , ed. Shelly Lundberg and Alessandra Voena, 49–109. North-Holland.
- Conlon, John J, Malavika Mani, Gautam Rao, Matthew W Ridley, and Frank Schilbach. 2021. “Learning in the household.” National Bureau of Economic Research.
- Corno, Lucia, Nicole Hildebrandt, and Alessandra Voena. 2020. “Age of marriage, weather shocks, and the direction of marriage payments.” *Econometrica*, 88(3): 879–915.
- Corradini, Viola, and Giulia Buccione. 2023. “Unilateral divorce rights, domestic violence and women’s agency: Evidence from the Egyptian Khul reform.” *Journal of Development Economics*, 160.
- Crosta, Tommaso, Dean Karlan, Finley Ong, Julius Rüschepöhler, and Christopher R Udry. 2024. “Unconditional cash transfers: A Bayesian meta-analysis of randomized evaluations in low and middle income countries.” National Bureau of Economic Research.
- Dean, Joshua T, and Seema Jayachandran. 2019. “Changing family attitudes to promote female employment.” *AEA Papers and Proceedings*, 109: 138–142.
- Deere, Carmen Diana, and Cheryl R Doss. 2006. “Gender and the distribution of wealth in developing countries.” WIDER Research Paper.
- Deininger, Klaus, Aparajita Goyal, and Hari Nagarajan. 2013. “Women’s inheritance rights and intergenerational transmission of resources in India.” *Journal of Human Resources*, 48(1): 114–141.

- Desai, Sonalde, Feinian Chen, Shilpa Reddy, and Amy McLaughlin.** 2022. “Measuring women’s empowerment in the Global South.” *Annual Review of Sociology*, 48(1): 507–527.
- De Vreyer, Philippe, and Sylvie Lambert.** 2021. “Inequality, poverty, and the intra-household allocation of consumption in Senegal.” *World Bank Economic Review*, 35(2): 414–435.
- Dhar, Diva, Tarun Jain, and Seema Jayachandran.** 2022. “Reshaping adolescents’ gender attitudes: Evidence from a school-based experiment in India.” *American Economic Review*, 112(3): 899–927.
- Dizon-Ross, Rebecca, and Seema Jayachandran.** 2023. “Detecting mother-father differences in spending on children: A new approach using willingness-to-pay elicitation.” *American Economic Review: Insights*, 5(4): 445–459.
- Doepke, Matthias, and Michèle Tertilt.** 2018. “Women’s empowerment, the gender gap in desired fertility, and fertility outcomes in developing countries.” Vol. 108, 358–362.
- Doepke, Matthias, and Michele Tertilt.** 2019. “Does female empowerment promote economic development?” *Journal of Economic Growth*, 24(4): 309–343.
- Donald, Aletheia, Gayatri Koolwal, Jeannie Annan, Kathryn Falb, and Markus Goldstein.** 2020. “Measuring women’s agency.” *Feminist Economics*, 26(3): 200–226.
- Doss, Cheryl.** 2013. “Intrahousehold bargaining and resource allocation in developing countries.” *World Bank Research Observer*, 28(1): 52–78.
- Doss, Cheryl R, Carmen Diana Deere, Abena D Oduro, and Hema Swaminathan.** 2014. “The gender asset and wealth gaps.” *Development*, 57(3): 400–409.
- Doyle, Kate, Ruti G Levto, Emmanuel Karamage, Deboleena Rakshit, Shamsi Kazimbaya, Felix Sayinzoga, Hassan Sibomana, Silas Ngayaboshya, Fidèle Rutayisire, and Gary Barker.** 2023. “Long-term impacts of the Bandedereho programme on violence against women and children, maternal health-seeking, and couple relations in Rwanda: a six-year follow-up of a randomised controlled trial.” *EClinicalMedicine*, 64.
- Dubois, Pierre, and Ethan A Ligon.** 2011. “Nutrition and risk sharing within the household.” Working paper, UC Berkeley.
- Duflo, Esther.** 2003. “Grandmothers and granddaughters: Old age pension and intra-household allocation in South Africa.” *World Bank Economic Review*, 17(1).
- Dunbar, Geoffrey R, Arthur Lewbel, and Krishna Pendakur.** 2013. “Children’s resources in collective households: Identification, estimation, and an application to child poverty in Malawi.” *American Economic Review*, 103(1): 438–471.
- Dupas, Pascaline, and Radhika Jain.** 2024. “Women left behind: Gender disparities in utilization of government health insurance in India.” *American Economic Review*, 114(10): 3345–3383.

- Edlund, Lena, Hongbin Li, Junjian Yi, and Junsen Zhang.** 2013. "Sex ratios and crime: Evidence from China." *Review of Economics and Statistics*, 95(5): 1520–1534.
- Eissler, Sarah, Jessica Heckert, Abdoulaye Pedehombga, Armande Sanou, Rasmáné Ganaba, and Aulo Gelli.** 2025. "Unpacking power dynamics and women's economic empowerment in polygynous households in Burkina Faso." *Journal of Marriage and Family*, 87(3): 1249–1268.
- El-Enbaby, Hoda, Daniel O Gilligan, Naureen Karachiwalla, Yumna Kassim, and Sikandra Kurdi.** 2025. "Cash transfers, gender norms, and women's control over decision-making in Egypt." *Economic Development and Cultural Change*, 73(4): 000–000.
- Erten, Bilge, and Pinar Keskin.** 2024. "Trade-offs? The impact of WTO accession on intimate partner violence in Cambodia." *Review of Economics and Statistics*, 106(2): 322–333.
- Evans, David K, and Anna Popova.** 2017. "Cash transfers and temptation goods." *Economic Development and Cultural Change*, 65(2): 189–221.
- Exley, Christine L, Muriel Niederle, and Lise Vesterlund.** 2020. "Knowing when to ask: The cost of leaning in." *Journal of Political Economy*, 128(3): 816–854.
- Fafchamps, Marcel, and Agnes R Quisumbing.** 2002. "Control and ownership of assets within rural Ethiopian households." *Journal of development Studies*, 38(6): 47–82.
- Ferrant, Gaëlle, and Annelise Thim.** 2019. "Measuring women's economic empowerment: Time use data and gender inequality." OECD Development Policy Paper.
- Fertig, Alexander, Lakshmi Iyer, Alexandra Hartman, and Edmund Malesky.** 2022. "A Field of Her Own: Property Rights and Women's Agency in Myanmar."
- Field, Erica, and Attila Ambrus.** 2008. "Early marriage, age of menarche, and female schooling attainment in Bangladesh." *Journal of Political Economy*, 116(5): 881–930.
- Field, Erica, Rohini Pande, Natalia Rigol, Simone Schaner, and Charity Troyer Moore.** 2021. "On her own account: How strengthening women's financial control impacts labor supply and gender norms." *American Economic Review*, 111(7): 2342–2375.
- Friedman, Willa, Michael Kremer, Edward Miguel, and Rebecca Thornton.** 2016. "Education as liberation?" *Economica*, 83(329): 1–30.
- Glennerster, Rachel, Claire Walsh, and Lucia Diaz-Martin.** 2018. "A practical guide to measuring women's and girls' empowerment in impact evaluations." Abdul Latif Jameel Poverty Action Lab report.
- Gobbi, Paula E.** 2018. "Childcare and commitment within households." *Journal of Economic Theory*, 176: 503–551.
- Grogan, Louise.** 2018. "Time use impacts of rural electrification: Longitudinal evidence from Guatemala." *Journal of Development Economics*, 135: 304–317.

- Grossbard, Shoshana.** 2015. “Sex ratios, polygyny, and the value of women in marriage — A Beckerian approach.” *Journal of Demographic Economics*, 81(1): 13–25.
- Grover, Minali, and Ajay Sharma.** 2025. “Women’s inheritance rights reforms and impact on women’s empowerment: Evidence from India.” *Review of Economics of the Household*, 1–26.
- Hamoudi, Amar, and Duncan Thomas.** 2014. “Endogenous coresidence and program incidence: South Africa’s old age pension.” *Journal of development economics*, 109: 30–37.
- Harari, Mariaflavia.** 2019. “Women’s inheritance rights and bargaining power: evidence from Kenya.” *Economic Development and Cultural Change*, 68(1): 189–238.
- Haushofer, Johannes, and Jeremy Shapiro.** 2016. “The short-term impact of unconditional cash transfers to the poor: Experimental evidence from Kenya.” *Quarterly Journal of Economics*, 131(4): 1973–2042.
- Haushofer, Johannes, Charlotte Ringdal, Jeremy P Shapiro, and Xiao Yu Wang.** 2019. “Income changes and intimate partner violence: Evidence from unconditional cash transfers in Kenya.” National Bureau of Economic Research working paper.
- Heath, Rachel, and Xu Tan.** 2020. “Intrahousehold bargaining, female autonomy, and labor supply: Theory and evidence from India.” *Journal of the European Economic Association*, 18(4): 1928–1968.
- Hoffmann, Vivian, Vijayendra Rao, Vaishnavi Surendra, and Upamanyu Datta.** 2017. “Relief from usury: Impact of a community-based microcredit program in rural india.” *World Bank Policy Research Working Paper*, , (8021).
- Ho, Lisa, Suhani Jalota, and Anahita Karandikar.** 2024. “Bringing work home: Flexible arrangements as gateway jobs for women in west bengal.” STEG Working Paper.
- Hsu, Yueh-ya, Reshmaan Hussam, Gregory Lane, and Erin Kelley.** 2025. “The Impact of Employment on Partnerships: Evidence from a Refugee Settlement.” *University of Chicago, Becker Friedman Institute for Economics Working Paper*, , (2025-43).
- Hyland, Marie, Simeon Djankov, and Pinelopi Koujianou Goldberg.** 2020. “Gendered laws and women in the workforce.” *American Economic Review: Insights*, 2(4): 475–490.
- Iversen, Vegard, Cecile Jackson, Bereket Kebede, Alistair Munro, and Arjan Verschoor.** 2011. “Do spouses realise cooperative gains? Experimental evidence from rural Uganda.” *World Development*, 39(4): 569–578.
- Jack, B Kelsey, Seema Jayachandran, Flavio Malagutti, and Sarojini Rao.** 2024. “Environmental externalities and free-riding in the household.” *Journal of Development Economics*, 170: 103294.

- Jayachandran, Seema.** 2015. “The roots of gender inequality in developing countries.” *Annual Review of Economics*, 7(1): 63–88.
- Jayachandran, Seema, Monica Biradavolu, and Jan Cooper.** 2023. “Using machine learning and qualitative interviews to design a five-question survey module for women’s agency.” *World Development*, 161: 106076.
- J-PAL.** 2023. “Improving youth life skills for better outcomes.” Abdul Latif Jameel Poverty Action Lab Policy Briefcase.
- Kabeer, Naila.** 1999. “Resources, agency, achievements: Reflections on the measurement of women’s empowerment.” *Development and change*, 30(3): 435–464.
- Kabeer, Naila.** 2005. “Gender equality and women’s empowerment: A critical analysis of the third millennium development goal 1.” *Gender and development*, 13(1): 13–24.
- Kala, Namrata, and Madeline McKelway.** 2025. “The power of persuasion: Causal effects of household communication on women’s employment.” National Bureau of Economic Research working paper.
- Karlan, Dean, Beniamino Savonitto, Bram Thuysbaert, and Christopher Udry.** 2017. “Impact of savings groups on the lives of the poor.” *Proceedings of the National Academy of Sciences*, 114(12): 3079–3084.
- Kazibwe, Douglas, and Jinhu Li.** 2025. “Universal secondary education, schooling and women’s empowerment: Evidence from Uganda.” *Journal of Development Economics*, 103464.
- Kim, Olivia.** 2021. “Credit and the family: The economic consequences of closing the credit gap of us couples.” SSRN Working Paper 3962414.
- Kishor, Sunita, and Lekha Subaiya.** 2008. “Understanding women’s empowerment: a comparative analysis of Demographic and Health Surveys (DHS) data.” DHS Comparative Reports, Macro International.
- Lechene, Valérie, Krishna Pendakur, and Alex Wolf.** 2022. “Ordinary least squares estimation of the intrahousehold distribution of expenditure.” *Journal of Political Economy*, 130(3): 681–731.
- Lecoutere, Els, and Eva Wuyts.** 2021. “Confronting the wall of patriarchy: Does participatory intrahousehold decision making empower women in agricultural households?” *The Journal of Development Studies*, 57(6): 882–905.
- Lewbel, Arthur, and Krishna Pendakur.** 2022. “Inefficient collective households: Co-operation and consumption.” *Economic Journal*, 132(645): 1882–1893.
- Ligon, Ethan, Jonathan P Thomas, and Tim Worrall.** 2002. “Informal insurance arrangements with limited commitment: Theory and evidence from village economies.” *Review of Economic Studies*, 69(1): 209–244.

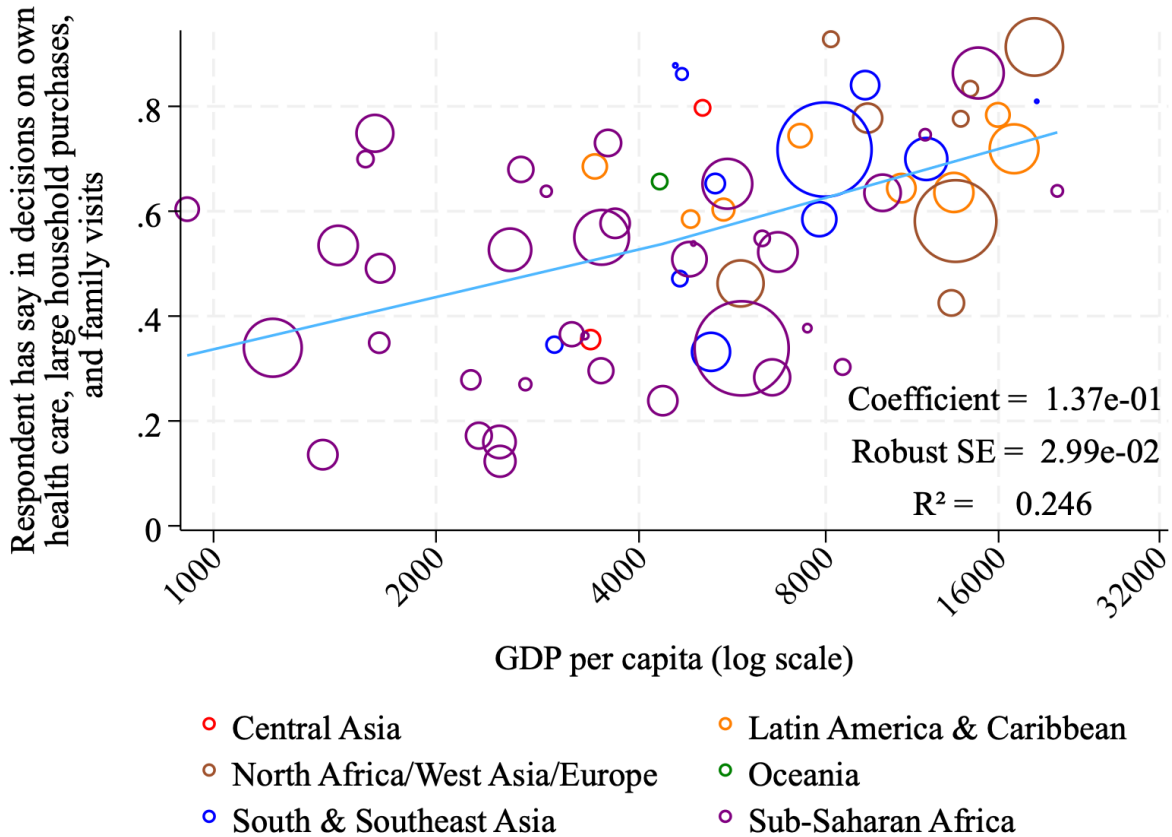
- Li, Lixing, and Xiaoyu Wu.** 2011. "Gender of children, bargaining power, and intrahousehold resource allocation in China." *Journal of Human Resources*, 46(2): 295–316.
- Li, Nicholas.** 2023. "Women's work in India: Evidence from changes in time use between 1998 and 2019." *World Development*, 161: 106107.
- Lise, Jeremy, and Ken Yamada.** 2019. "Household sharing and commitment: Evidence from panel data on individual expenditures and time use." *Review of Economic Studies*, 86(5): 2184–2219.
- Lise, Jeremy, and Shannon Seitz.** 2011. "Consumption inequality and intra-household allocations." *Review of Economic Studies*, 78(1): 328–355.
- Lowe, Matt, and Madeline McKelway.** 2021. "Coupling labor supply decisions: An experiment in india." CESifo Working Paper.
- Lowes, Sara.** 2022. "Kinship structure and the family: Evidence from the matrilineal belt." Working paper, UCSD.
- Lundberg, Shelly, and Robert A Pollak.** 1993. "Separate spheres bargaining and the marriage market." *Journal of Political Economy*, 101(6): 988–1010.
- Lundberg, Shelly, and Robert A Pollak.** 1996. "Bargaining and distribution in marriage." *Journal of Economic Perspectives*, 10(4): 139–158.
- Lundberg, Shelly J., Robert A. Pollak, and Terence J. Wales.** 1996. "Do husbands and wives pool their resources? Evidence from the United Kingdom child benefit." *Journal of Human Resources*, 32(4): 463–480.
- Maiorano, Diego, Dishil Shrimankar, Suruchi Thapar-Björkert, and Hans Blomkvist.** 2021. "Measuring empowerment: Choices, values and norms." *World Development*, 138: 105220.
- Majlesi, Kaveh.** 2016. "Labor market opportunities and women's decision making power within households." *Journal of Development Economics*, 119: 34–47.
- Mani, Anandi.** 2020. "Mine, yours or ours? The efficiency of household investment decisions: An experimental approach." *World Bank Economic Review*, 34(3): 575–596.
- Manser, Marilyn, and Murray Brown.** 1980. "Marriage and household decision-making: A bargaining analysis." *International economic review*, 31–44.
- Ma, Shengnan.** 2025. "Compulsory education and gender gaps in intrahousehold empowerment." *Review of Economics of the Household*, 23(1): 195–224.
- Mazzocco, Maurizio.** 2007. "Household intertemporal behaviour: A collective characterization and a test of commitment." *Review of Economic Studies*, 74(3): 857–895.

- McElroy, Marjorie B, and Mary Jean Horney.** 1981. “Nash-bargained household decisions: Toward a generalization of the theory of demand.” *International economic review*, 333–349.
- McGavock, Tamara.** 2021. “Here waits the bride? The effect of Ethiopia’s child marriage law.” *Journal of Development Economics*, 149: 102580.
- McKelway, Madeline.** 2025. “Women’s self-efficacy and economic outcomes: Experimental evidence from India.” Working paper, Dartmouth College.
- Mookerjee, Sulagna.** 2019. “Gender-neutral inheritance laws, family structure, and women’s status in India.” *World Bank Economic Review*, 33(2): 498–515.
- Nash, John F.** 1950. “The bargaining problem.” *Econometrica*, 18(2): 155–162.
- Peterman, Amber, Benjamin Schwab, Shalini Roy, Melissa Hidrobo, and Daniel O Gilligan.** 2021. “Measuring women’s decisionmaking: Indicator choice and survey design experiments from cash and food transfer evaluations in Ecuador, Uganda and Yemen.” *World Development*, 141: 105387.
- Pollak, Robert A.** 2019. “How bargaining in marriage drives marriage market equilibrium.” *Journal of Labor Economics*, 37(1): 297–321.
- Porter, Maria.** 2016. “How do sex ratios in China influence marriage decisions and intra-household resource allocation?” *Review of Economics of the Household*, 14: 337–371.
- Pratley, Pierre.** 2016. “Associations between quantitative measures of women’s empowerment and access to care and health status for mothers and their children: a systematic review of evidence from the developing world.” *Social Science and Medicine*, 169: 119–131.
- Qian, Nancy.** 2008. “Missing women and the price of tea in China: The effect of sex-specific earnings on sex imbalance.” *Quarterly Journal of Economics*, 123(3): 1251–1285.
- Quisumbing, Agnes, Akhter Ahmed, John Hoddinott, Audrey Pereira, and Shalini Roy.** 2021. “Designing for empowerment impact in agricultural development projects: Experimental evidence from the Agriculture, Nutrition, and Gender Linkages (ANGeL) project in Bangladesh.” *World Development*, 146: 105622.
- Rahman, Atif, Siham Sikander, Abid Malik, Ikhtlaque Ahmed, Barbara Tomen-son, and Francis Creed.** 2012. “Effective treatment of perinatal depression for women in debt and lacking financial empowerment in a low-income country.” *The British Journal of Psychiatry*, 201(6): 451–457.
- Rasul, Imran.** 2008. “Household bargaining over fertility: Theory and evidence from Malaysia.” *Journal of Development Economics*, 86(2): 215–241.
- Reynoso, A.** 2025. “Polygamy, co-wives’ complementarities, and intra-household inequality.” Working paper, University of Michigan.

- Riley, Emma.** 2024. “Resisting social pressure in the household using mobile money: Experimental evidence on microenterprise investment in Uganda.” *American Economic Review*, 114(5): 1415–1447.
- Rossi, Pauline.** 2019. “Strategic choices in polygamous households: Theory and evidence from Senegal.” *The Review of Economic Studies*, 86(3): 1332–1370.
- Rowlands, Jo.** 1997. *Questioning Empowerment: Working with Women in Honduras*. Oxfordam.
- Roy, Sanchari.** 2015. “Empowering women? Inheritance rights, female education and dowry payments in India.” *Journal of Development Economics*, 114: 233–251.
- Rubalcava, Luis, Graciela Teruel, and Duncan Thomas.** 2009. “Investments, time preferences, and public transfers paid to women.” *Economic Development and Cultural Change*, 57(3): 507–538.
- Ryan, Richard M, and Edward L Deci.** 2000. “Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being.” *American Psychologist*, 55(1): 68–78.
- Samarakoon, Shanika, and Rasyad A Parinduri.** 2015. “Does education empower women? Evidence from Indonesia.” *World Development*, 66: 428–442.
- Samuelson, Paul A.** 1956. “Social indifference curves.” *Quarterly Journal of Economics*, 70(1): 1–22.
- Schaner, Simone.** 2015. “Do opposites detract? Intrahousehold preference heterogeneity and inefficient strategic savings.” *American Economic Journal: Applied Economics*, 7(2): 135–174.
- Schaner, Simone.** 2017. “The cost of convenience? Transaction costs, bargaining power, and savings account use in Kenya.” *Journal of Human Resources*, 52(4): 919–945.
- Sen, Amartya.** 1999. *Development as freedom*. New York: Alfred A. Knopf.
- Seshan, Ganesh, and Dean Yang.** 2014. “Motivating migrants: A field experiment on financial decision-making in transnational households.” *Journal of Development Economics*, 108: 119–127.
- Shah, Manisha, and Lydia Barski.** forthcoming. “Intimate partner violence in low- and middle-income countries: Insights from economic research.” *Journal of Economic Literature*.
- Skoufias, Emmanuel.** 2005. “PROGRESA and its impacts on the welfare of rural households in Mexico.” IFPRI Research Report No.39.
- Sokullu, Senay, and Christine Valente.** 2022. “Individual consumption in collective households: Identification using repeated observations with an application to PROGRESA.” *Journal of Applied Econometrics*, 37(2): 286–304.

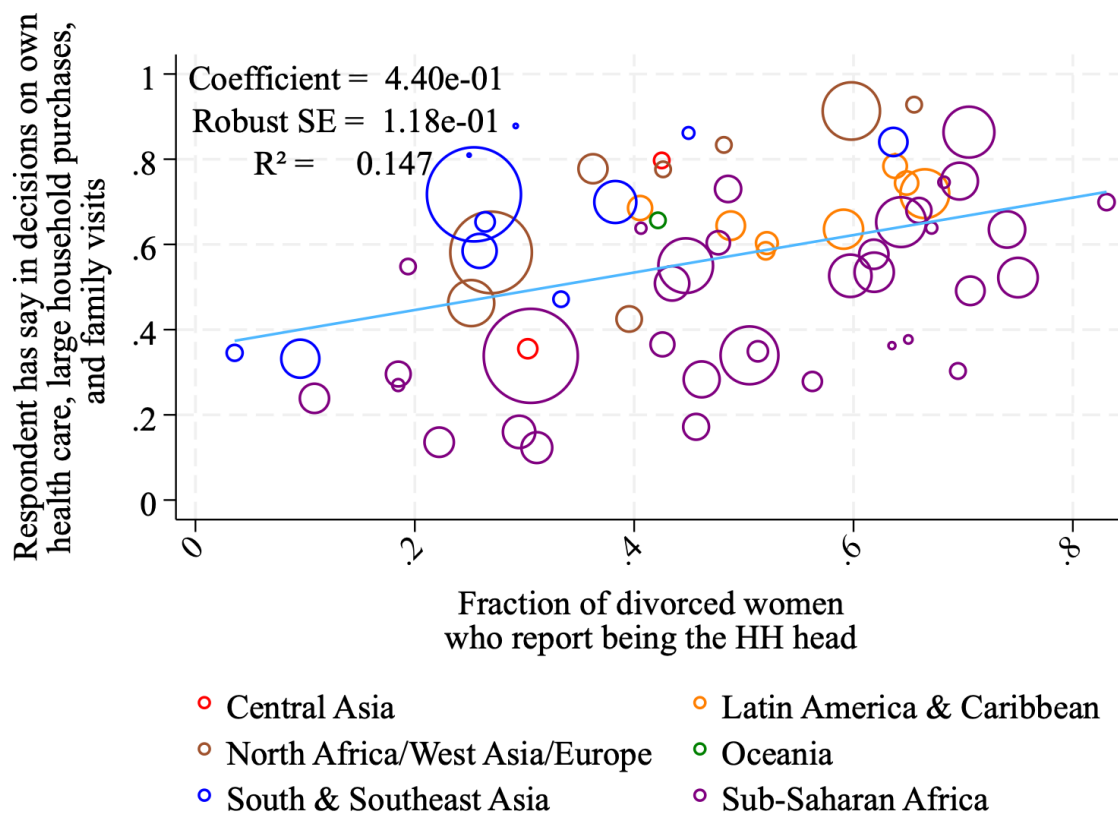
- Somville, Vincent, Ingvild Almås, and Lore Vandewalle.** 2020. “The effect of gender-targeted transfers: experimental evidence from India.” NHH Dept. of Economics Discussion Paper.
- Sun, Ang, and Yaohui Zhao.** 2016. “Divorce, abortion, and the child sex ratio: The impact of divorce reform in China.” *Journal of Development Economics*, 120: 53–69.
- Tauseef, Salauddin, and Farha Deba Sufian.** 2024. “The causal effect of early marriage on women’s bargaining power: Evidence from Bangladesh.” *World Bank Economic Review*, 38(3): 598–624.
- Tertilt, Michele.** 2006. “Polygyny, women’s rights, and development.” *Journal of the European Economic Association*, 4(2-3): 523–530.
- Thomas, Duncan.** 1990. “Intra-household resource allocation: An inferential approach.” *Journal of human resources*, 635–664.
- Tommasi, Denni.** 2019. “Control of resources, bargaining power and the demand of food: Evidence from PROGRESA.” *Journal of Economic Behavior and Organization*, 161: 265–286.
- Udry, Christopher.** 1996. “Gender, agricultural production, and the theory of the household.” *Journal of Political Economy*, 104(5): 1010–1046.
- Vardani, Akanksha.** 2025. “A House for Two: Empowering Women with Property Rights.” Working paper, Columbia University.
- Voena, Alessandra.** 2015. “Yours, mine, and ours: Do divorce laws affect the intertemporal behavior of married couples?” *American Economic Review*, 105(8): 2295–2332.
- Walker, Sarah, Pauline Grosjean, Alejandrina Cristia, and Adeline Delavande.** 2025. “HeforShe: Bargaining power, parental beliefs, and parental investments.” Working paper, University of New South Wales.
- Westoff, Charles F.** 2010. “Desired number of children: 2000-2008.”
- World Bank.** 2024. *Women, Business and the Law 2024*. World Bank.
- Yoong, Joanne, Lila Rabinovich, and Stephanie Diepeveen.** 2012. “The impact of economic resource transfers to women versus men: a systematic review.” Technical report, Institute of Education technical report, University of London.
- Zhang, Sally.** 2024. “Hidden in plain sight: Asymmetric information and hidden income within the household.” *Available at SSRN 4883384*.
- Zhao, Chuanmin, and Xi Qu.** 2024. “Place-based policies, rural employment, and intra-household resources allocation: Evidence from China’s economic zones.” *Journal of Development Economics*, 167: 103210.
- Zimmermann, Laura.** 2018. “It’s a boy! Women and decision-making benefits from a son in India.” *World Development*, 104: 326–335.

Figure 1: Women's say in household decisions across countries



Notes: Outcome data are from the most recent Demographic and Health Survey wave for each country, spanning 2001-2023, and are available for 66 countries. Data on GDP and population are from the World Bank's World Development Indicators and are for the DHS survey year. GDP per capita is PPP-adjusted and expressed in constant 2021 \$. The circle size for each country is proportional to its population in the survey year. The DHS sample is restricted to women who are currently married or living with their partner. The variable on the y-axis is the unweighted sample average of an indicator that equals 1 if a woman reports having say in all three types of decisions in response to the following DHS survey question(s): (1) *Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?* (2) *Who usually makes decisions about making major household purchases?* (3) *Who usually makes decisions about visits to your family or relatives?*

Figure 2: Relationship between women's *de facto* ability to divorce and decision-making power within marriage



Notes: Outcome data are from the most recent Demographic and Health Survey wave for each country, spanning 2001-2023, and are available for 66 countries. Data on country population are from the World Bank's World Development Indicators and are for the DHS survey year. The circle size for each country is proportional to its population in the survey year. The sample to measure decision-making is restricted to women who are currently married or living with their partner. The variable on the y-axis is the unweighted sample average of an indicator that equals 1 if a woman reports having say in all three types of decisions in response to the following DHS survey question(s): (1) *Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?* (2) *Who usually makes decisions about making major household purchases?* (3) *Who usually makes decisions about visits to your family or relatives?* The variable on the x-axis is the unweighted sample average of an indicator that equals 1 if a woman is the household head, based on women who report being divorced.

Appendix

Table 1: Women’s relative resource share from studies in LMICs

Country	Years	Source	Sample	Relative resource share to women
Bangladesh	2011-2012, 2015	Brown, Calvi and Penglase (2021)	Households with at least one woman, man, and child, excluding households with guests.	45%
Bangladesh	2015	Lechene, Pendakur and Wolf (2022)	Households consisting of men and women with children, women with children, men with children, and men and women without children.	46%
Bangladesh	2004	Bargain et al. (2022)	Monogamous couples with or without children	48%
Bangladesh	2011-2012, 2015	Calvi et al. (2023)	Households with at least one woman, man, and child.	44%
China	1997-2011	Zhao and Qu (2024)	Rural households with at least one man, woman, and child.	48%
Côte d’Ivoire	2002	Bargain, Donni and Kwenda (2014)	Childless singles and married couples without children or with children aged 16 or younger.	55%
India	2011-2012	Calvi (2020)	Nuclear households (for this estimate)	42%
Iraq	2007	Lechene, Pendakur and Wolf (2022)	Households consisting of men and women with children, women with children, men with children, and men and women without children.	46%
Kenya	2017-2018	Cherchye et al. (2024)	Married couples with at least one child between the ages of 6 and 14 years old.	54%
Malawi	2004-2005	Dunbar, Lewbel and Pendakur (2013)	Married couples with one to four children under 15 years old.	38%
Malawi	2011	Lechene, Pendakur and Wolf (2022)	Households consisting of men and women with children, women with children, men with children, and men and women without children.	45%

Country	Years	Source	Sample	Relative resource share to women
Mexico	1998-2000	Tommasi (2019)	Households eligible for PROGRESA's benefits, comprised of a married couple and their children, all of whom must be under 12 years old.	45%
Mexico	1998-1999	Sokullu and Valente (2022)	Households eligible for PROGRESA's cash transfers and in-kind benefits, comprised of an adult woman, adult man, and children, with a male household head.	51%
Mexico	2018	Calvi et al. (2023)	Households with at least one woman, man, and child.	54%
Philippines	1984-1985	Dubois and Ligon (2009)	Households with at least one child under 5 years of age and farming less than 15 hectares.	46%