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WOMEN'S POWER IN THE HOUSEHOLD

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ABSTRACT

We examine women's household power 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 influence over household choices, distinguishing it from broader empowerment concepts. We review economic models, including unitary, collective, and bargaining frameworks, and map these to empirical approaches. We then discuss measurement methods such as structural estimation of consumption allocation, survey measures, and laboratory experiments. On the determinants of women's power, we find that some approaches, such as transfers targeted to women, show mixed results, while others, such as increasing women's control over their earnings, show clearer positive impacts. On the effects of women's power, we pay special attention to children's human capital. Few studies provide strong evidence that mothers invest more in children than fathers do, but collectively the evidence suggests such an effect. We conclude by highlighting research and methodological gaps.

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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 has intrinsic value to people (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, an influential view in the literature is 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. This definition implies that power within the household is finite. Our emphasis on the intrahousehold division of power diverges from some definitions that focus on a woman's level of resources and well-being. For this reason, we use the term 'power.' 'Empowerment' is more common in the literature, but people often use it as a synonym for women's overall status in society, and we mean something narrower. Moreover, 'empowerment' suffers from ambiguity, referring both to a person's current power and to the process of gaining power (Kabeer, 1999).

Women's power is related to but distinct from women's agency. Agency is an internal and process-focused concept—the capacity to make choices; power is inherently relational. Power requires agency and that the person's choices shape outcomes involving other people.

In focusing on power-sharing between spouses, we are 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.[1] We do

[1]We 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.

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.

Our focus on low- and middle-income countries (LMICs) emerges primarily in our review of the empirical evidence, as 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 common. Researchers are able to collect direct questions about intrahousehold power, lab game measures of it, or individual-level measures of consumption in their surveys, which general-purpose household surveys typically lack. Second, the LMIC literature often uses participation in decision-making 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 further research in this domain (for example, 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, in many LMICs, women have extremely limited say, with less than half of them reporting they have any role 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 empirical research, with a focus on studies that provide strong causal evidence. Our article complements several excellent reviews on the theory and the empirics of intrahousehold decision-making, such as Browning, Chiappori and Weiss (2014), Chiappori and Mazzocco (2017), Baland and Ziparo (2018), Almås, Attanasio and Carneiro (2023), Doss (2013), Donald et al. (2020), Chang et al. (2020), and Almås, Ringdal and Sjursen (2021).

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

In this section, we summarize the main frameworks, drawing out their implications for how different policies may affect women's power inside the household. Our aim is also to offer a primer on these models that is accessible to empirically-focused researchers. To this end, we have included in footnotes several technical points that are important for precision but that many readers may want to skip.

2.1 Unitary models of the household

One way to model household decision-making is to use a unitary model, in which families act as a single unit.[2] 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.[3] The household problem can then be written as:

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

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

The objective function $U(x_1, ..., x_N, Q)$ represents the utility function of the family. The utility function could be the result of common preferences. In that case, power is not a relevant concept since family members do not have their own preferences, and thus there is no scope for one member to influence choices more than another member does.

The unitary framework can also accommodate individual preferences, albeit in a restricted way. The household objective function can be characterized as representing an aggregate of the utility function of each member, with an aggregation that does not depend on prices or individual income (Samuelson, 1956). For example, this would occur if decisions are made by an altruistic dictatorial decision-maker (Becker, 1974).[4] While some notion of power seems to be operating in the background here, who holds the power and where it comes from are not made explicit.[5]

[2]The unitary model could be classified as cooperative, but in some sense the distinction is immaterial, as there is only a single agent (the household).

[3]Here 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.

[4]See 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."

[5]See Samuelson (1956), 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.)"

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. A central implication of unitary models is that these demands do not depend on the sources of income. Moreover, because power is immutable in these models (to the extent the concept is even applicable in them), no policy can change demands by shifting say within the family.

The invariance of demands to the sources of income leads to a well-known testable implication of the unitary framework, *income pooling*. This is the notion that, controlling for Y, demands do not depend on any y_i: 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 is distributed within households and how that can change 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 Nash bargaining models, rely on the assumption that household decisions are efficient. In this subsection, we primarily discuss static versions of these models without uncertainty.

2.2.1 Collective models of the household

In collective models, like in unitary models, decision-making leads to Pareto efficient outcomes (Chiappori, 1988; Browning and Chiappori, 1998). Collective models require specifying household member-level utility $u_i(x_i, Q)$. The household maximizes the weighted sum of each member's utility function:[6]

$$U(x_1, ..., x_N, Q) = \sum_{i=1}^{N} \mu_i(p, q, Y, \mathbf{z}) \cdot u_i(x_i, Q).$$

The weight $\mu_i(p, q, Y, \mathbf{z})$ attached to an individual's preferences is known as the Pareto weight, and $\sum_{i=1}^{N} \mu_i(p, q, Y, \mathbf{z}) = 1$. In collective models, Pareto weights can depend on individual-specific income, wages, and other factors that affect the intrahousehold decision process

[6]In what follows, we assume that preferences are well-behaved (strictly increasing, strictly concave, and twice-continuously differentiable).

(known as 'distribution factors' and denoted $\mathbf{z}$, Chiappori, Fortin and Lacroix, 2002).[7] Distribution factors are defined as variables that: i) do not affect the budget constraint; ii) do not affect preferences; iii) do not affect prices; and iv) affect demand through the decision-making process. Hence, they are solely 'instruments' for the distribution of power within the household.[8]

When family members are selfish, the Pareto weight maps closely to our definition of power, as it captures the agent's influence over household choices as manifested in intra-household allocations.[9] However, when agents are altruistic toward each other, a person's Pareto weight reflects both her power and how altruistic other family members are towards her, complicating the mapping between allocations and power.[10]

A key implication of the collective framework is that a transfer of resources to a household member can have both a standard income effect and what we can call a 'balance of power' effect on household economic behavior: if a person's share of household income constitutes a distribution factor, then the resulting shift in the Pareto weight also influences demand. Similarly, a change in prices (notably, an increase in the female wage when leisure is a consumption good) can have not only the standard substitution effect and income effect but also an additional effect on the balance of power. This important result modifies the fundamental conditions of household demand behavior, like Slutsky symmetry (Browning and Chiappori, 1998).[11]

[7] Note that a household model in which the Pareto weights are fixed and do not depend on income, wages, or distribution factors, is a unitary model.

[8] An example of a distribution factor is the identity of the recipient of a government transfer 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.

[9] Importantly, the Pareto weight is not invariant to different cardinal representations of the utility function, which creates an empirical challenge since preferences are typically unknown. The empirical literature typically estimates resource shares as opposed to Pareto weights, as we describe in section 4. Other studies impose parametric restrictions on the utility functions or make further assumptions to estimate Pareto weights. See Chiappori and Ekeland (2009), Browning, Chiappori and Lewbel (2013), and chapter 5 of Browning, Chiappori and Weiss (2014) on the identification of the collective model. Note also that the correspondence between power and the Pareto weight when agents are selfish applies in static cases. We discuss dynamic cases in subsection 2.4.

[10] 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).

[11] Scholars have derived conditions under which, in a stable household decision-making process, demands can be rationalized by a collective model, yielding testable implications of the model such as the z-conditional demand test and the distribution factor proportionality test (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, often postulating that it follows a Nash bargaining process (hence Pareto efficient), in which partners have threat points V_i that represent their payoff if an agreement cannot be reached:

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

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.[12]

Manser and Brown (1980) and McElroy and Horney (1981) model bargaining as symmetric, implying that the bargaining skill $\alpha = \beta$. Symmetry in bargaining means that, if the role of the parties was swapped—that is, 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 bargaining skill, in addition to their threat point. It also recognizes the possibility that allocations may depend on personality traits that could potentially be influenced by an intervention that leaves threat points unchanged. In both of these papers, the threat point is represented by each party's opportunity if the marriage dissolves.

A particularly influential bargaining model is the separate spheres model (Lundberg and Pollak, 1993), in which the relevant threat points, V_A and V_B, 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. Importantly, this model allows policy interventions to influence allocations even when they have no effect on marriage dissolution, as the threat points are internal to the marriage. This conceptualization of threat points is particularly relevant in the many LMICs where separation and divorce rates are low.

[12] We 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).

2.3 Deviation from efficiency

Inefficiency can arise if households act non-cooperatively, particularly if there are frictions within the household. For example, non-cooperative models, such as public good voluntary contribution games, result in inefficiently low levels of public goods provision, as each partner does not internalize the benefit that the public goods have on the other.[13]

In addition, several papers have developed models that depart from the fully efficient paradigm due to frictions such as asymmetric information (Baland and Ziparo, 2018). Many of these models build on findings from the lab and the field (Udry, 1996; Ashraf, 2009; Schaner, 2015, for example), and a key theme that emerges is that inefficiency is often exacerbated by the dynamic nature of household decisions and by the presence of risk or uncertainty.

Anderson and Baland (2002) model women's participation in Rotating Savings and Credit Associations 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 threat points, leading to inefficient bargaining. 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) study the role of asymmetric information about income in intrahousehold allocations and develops a model to explain the conditions under which 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. (2025) study strategic communication between partners over maternal health risk and its effect on fertility decisions. Calvi and Keskar (2025) build a non-cooperative bargaining model to study the interaction between dowry and intimate partner violence (IPV) in India. 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

[13]These models have been extensively studied theoretically, but have received less attention in the economics of the family compared to cooperative models, as it is common to assume that emotional ties between agents can sustain a high degree of cooperation. In these non-cooperative voluntary contribution games, when each spouse contributes to the public good (provided that there is a single one), non-cooperation implies income pooling (Warr, 1983; Bergstrom, Blume and Varian, 1986; Bernheim, 1986)—a counterintuitive finding. With multiple public goods, Browning, Chiappori and Lechene (2010) show that spouses either contribute to different public goods, or there exists at most one public good to which both partners contribute, again with income pooling. See also chapter 3 of Browning, Chiappori and Weiss (2014), Del Boca and Flinn (2012), and Boone et al. (2014).

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., 2025).

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 fully 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. 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 (the ratio of the partners' marginal utility of private consumption 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, policy changes or idiosyncratic shocks to one partner have no effect on the intrahousehold allocations and power (Mazzocco, 2007).

Dynamic models with limited commitment account for the effects that policies can have on existing couples by characterizing how changes in *outside options*, which can vary over time and across states of nature, may lead to changes in power even after a couple has formed (Mazzocco, 2007; Voena, 2015). These models add *participation constraints* to the household problem, building on 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. This implies that these models depart from the full commitment framework by assuming that family members cannot commit to not exercising their outside option, but they otherwise maintain the ability to commit to future allocations as long as they cooperate.[14]

Dynamic models with limited commitment, thus, offer a way to micro-found the impact

[14]Models with no commitment (for instance, Pollak, 2019; Doepke and Kindermann, 2019), on the other hand, assume that family members can never commit to future allocations, which get re-negotiated in every period.

of policy interventions: by influencing the outside option, whether it is internal to the marriage (as in the separate spheres equilibrium in Lundberg and Pollak, 1996), or external (by changing the ability to or attractiveness of separation or divorce), policy interventions can lead to a reallocation of power. In contrast to the full commitment case, the ratio of the spouses' marginal utilities of private consumption (and, consequently, the intrahousehold allocation of resources) is not fixed over time and instead depends on whether the participation constraint of a given spouse binds at that point in time or did bind in the past. If no participation constraint ever binds, we return to a full commitment problem, but if a constraint binds at any point of time, the allocation of resources persistently shifts.

The key insight of the limited commitment model is that, unlike in the bargaining models we described above, an improvement in the outside option of one party will affect power within the household (the allocation of resources) only in some cases. Specifically, it would fail to matter if that person's participation constraint is not binding because the outside option remains undesirable (for example, if divorce is heavily stigmatized, or if the unconstrained allocation based on the Pareto weight is already very favorable to that party).[15]

What determines initial allocations? Static and dynamic collective models do not explicitly take a stance on what pins down the Pareto weight, 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 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 (Lise and Yamada, 2019).[16]

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

[15]The shift in power is persistent, meaning a binding participation constraint continues to influence the allocation of consumption in all following periods), since in a limited commitment model, partners maintain the ability to commit to future allocations within marriage when future constraints to not bind.

[16]An important caveat is highlighted by Chiappori et al. (2017): to the extent that partners can commit to future allocations, even in a limited way, expected future 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.

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; Edlund and Lagerlöf, 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., 2020*b*; Corno, Hildebrandt and Voena, 2020; Bau et al., 2023).

Discussion The limited commitment model highlights that the circumstances that allow a policy to affect household decision-making in a persistent manner are complex. First, there is only scope for policy to have bite if family members do not fully insure one another. Second, to affect the balance of power, policies need to shift a member's outside option enough to make her willing to walk away from cooperation unless her position improves. Hence, the cultural, legal, and institutional environment, by shaping the relevant outside option, plays a fundamental role in determining whether a policy is effective at shifting women's power over household outcomes.

2.5 Power versus agency

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

Sen (1999) defines an agent as "someone who acts and brings about change, and whose achievements can be judged in terms of her own values and objectives." Kabeer (1999) characterizes agency similarly, as the "ability to define one's goals and act upon them." While agency is not inherently a relational concept, it is relevant in the intrahousehold literature when it is applied to household outcomes or to individual-level choices that fellow household members might also have say over.

The economic frameworks described above largely ignore the process through which outcomes obtain and, hence, agency. The closest proxy for power in these models is the Pareto weight, or the person's allocation share. It captures the extent to which the household's choices align with the person's preferences, but regardless of whether she has agency over those choices. Someone can have a high Pareto weight yet limited agency if other household members are altruistic toward her. Having one's preferred outcomes realized but lacking agency would not be satisfying to most people because agency has intrinsic value beyond its instrumental value.

We conceptualize power as requiring agency: household outcomes align with the person's preferences *because* she agentically influenced the outcomes.[17] This implies that the Pareto weight is an imperfect (but still useful) measure of power within a household.

Can someone have a high degree of agency over household decisions but limited power? Under our definition of power, and implicitly in the economics models, the answer is no.[18] Agency means shaping decisions with intentionality. A person with high agency will effect outcomes that are aligned with her preferences and, hence, have power.[19]

Not only does agency imply power, but, in many empirical applications, it is used as a stand-in for power. What is measured is the process through which household outcomes are determined. However, agency is often operationalized as *making* decisions rather than *influencing* decisions. Making decisions is neither necessary nor sufficient for agency and power. For instance, a person who is able to bring about her preferred outcome without bearing the cognitive and emotional burden of decision-making is (especially) agentic. Think of a woman who delegates decisions about what to cook to her husband, confident that his choices will reflect her preferences. Characterizing women's agency or power based solely on whether they actively make choices can misrepresent their actual level of self-determination and how much weight their preferences receive in household outcomes. 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 focus this section 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 in Section 2. Recall that in this model, a household maximizes the weighted sum of members'

[17] Consider parents who favor their sons over their daughters, giving them more food, health care, and education. Under our definition, boys have a higher Pareto weight than girls, but do not have more power.

[18] Our definition of power differs from that of Kabeer (1999), for whom power requires agency but also financial resources and supportive norms and institutions. The main differences are that we define power as a relative measure within the household and characterize women constrained by norms and institutions as having low agency.

[19] Agency is also the determinant of intrahousehold allocation that is most amenable to policy influence. For example, policies might aim to improve someone's outside options or bargaining skill. Altruism is less often what policy aims to change.

preferences, the weights are referred to as Pareto weights, and factors that shift the weights are referred to as distribution factors. We denote woman j's Pareto weight as μ_j, the distribution factor as z_j, and her private consumption as x_j, but for simplicity suppress the subscripts except in equations.

3.1 Measuring women's power

The goal of some empirical studies is to estimate the average value of the Pareto weight μ in a population. These studies employ structural estimation to infer μ from the allocation of resources in the household (with the caveat noted in footnote 9). 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. Other studies collect a proxy measure of μ at the household level for use in answering a causal research question about the determinants or consequences of women's power.Section 4 describes both types of studies.

3.2 Causes and effects of women's power

The remainder of this section pertains to studies that assess the determinants or consequences 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. In the notation of subsection 2.2.1, if $\partial\mu_j(p, q, Y, \mathbf{z})/\partial z_j > 0$, then increasing z_j will increase x_j. 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.[20] We now use a more expansive notion of x than before: x could represent the woman's private consumption

[20] As discussed in section 2, the Pareto weight is defined relative to a particular cardinal representation of preferences and has a precise structural interpretation. In practice, most empirical studies on the causes and effects of women's power take a reduced-form approach that does not specify a utility function. These studies typically refer to what they are measuring as 'decision-making power' or 'agency' rather than the Pareto weight. We use 'Pareto weight' here to maintain a connection with the theory, but readers should interpret it as referring to an empirical proxy for intrahousehold power rather than a structurally-identified Pareto weight.

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:

$$\mu_j = \alpha + \beta z_j + \varepsilon_j.$$

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:

$$x_j = a + b\hat{\mu}_j + u_j.$$

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 there can be 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 the policy being analyzed 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 off-the-shelf 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:

$$x_j = a + \delta z_j + \varepsilon_j.$$

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 effects of women's power (Category 2), some are investigating the determinants 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 when, rather, the hypothesized distribution factor did not affect women's power. For example, a program might nominally give transfers to women, but, in practice, their husbands take control of the funds.[21]

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 an indirect alternative. 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. 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 by her husband. The interpretive challenge here is that a null result might reflect incorrect assumptions about gendered preferences rather than no change in power. (For example, men might value spending on women's clothing as much as their wives do, or women might have as much son preference as men.)

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." The reduced-form regression indeed 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.[22] 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 in response to a change in z would reject the unitary model, but studies typically use a more stringent test of whether consumption changed

[21] While 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.

[22] Browning, Chiappori and Weiss (2014) provide a deep dive into several studies 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, 2016; Armand et al., 2020).

in a way that favored the person whose Pareto weight increased. This requires the outcome to be assignable to one person, for example, that women value it more than men. Interpreting the empirical results as supporting or rejecting the unitary model then rests on the assumptions from both Categories 2 and 3: that women indeed 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 their mother's power increased.

It is not a policy flaw to operate through multiple mechanisms, but it does limit the knowledge we can gain from analyzing the policy. We can learn whether or not the policy increased women's power, confirming or ruling out power as a possible mechanism through which other outcomes changed. However, we cannot isolate and quantify the role that women's power played, which makes extrapolation to other policies more challenging. Clarity about what we can learn is helpful because it highlights the value of including direct measures of women's power in the analysis and of devising research designs that vary only women's power and have statistical power to detect its effects.

4 Measuring women's power in the household

Several studies aim to quantify the distribution of power in the household. We organize this work into two categories. Section 4.1 reviews studies that infer women's power from how resources are allocated within households. Many of these studies structurally estimate the models laid out in section 2. Section 4.2 discusses studies that elicit women's influence over household choices using surveys, lab experiments, or qualitative methods.

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. 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 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:

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

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. These studies 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, using information on consumption of an assignable good (a good whose consumption can only be attributed to a particular household member) and imposing different semi-parametric restrictions on preferences within a collective framework. Bargain, Lacroix and Tiberti (2022) use data on individual expenditures in Bangladesh to assess the validity of this method, showing that it performs well when using data on individual clothing expenditure to infer overall consumption shares. Lechene, Pendakur and Wolf (2022) extends the methodology so that it can be estimated with a simpler linear model.

Several studies use this approach or related methods to estimate consumption shares, often in LMICs. Notably, Calvi (2020) applies Dunbar, Lewbel and Pendakur (2013) to Indian families over women's lifecycle. Exploiting variation in women's inheritance rights between the 1970s and 2000s, it measures how the allocation of resources to women varies for younger vs. older women, showing 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).

Table 1 describes studies that have estimated the allocation of resources to women within households in LMICs (see also Almås, Ringdal and Sjursen, 2021, for an overview of measures of allocations to men, women, and children around the world).[23] We focus on the ratio

[23] A promising approach in settings where cash use is limited is to analyze credit and debit card expenditures (see, for example, Kim, 2021), but unfortunately most LMICs do not meet the criterion.

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 identified, 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%. Bringing in the evidence from wealthier countries, we note that studies using data from Asia tend to report substantially lower women's relative share (see Lise and Yamada, 2019, for Japan), while studies from sub-Saharan Africa, LMICs in other regions, and high-income countries report more mixed findings.[24]

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 are contributing to the gaps. Some of this work studies wealth. How spouses share control over wealth during their marriage is the result of household decisions (Fafchamps and Quisumbing, 2002). (How household wealth would be divided upon divorce plays a different role, as a distribution factor that can influence power within the marriage.)

Deere and Doss (2006), in an evidence review, document large, systematic gender wealth gaps in LMICs. The most extensive evidence exists for land, which is the largest component of wealth for most households. 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 India (specifically, Karnataka). In Ghana and India, the study reveals large gender gaps within families in home ownership, land ownership, and ownership of consumer durables such as vehicles and mobile phones (but not 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 India.[25]

[24] Because 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. Calvi (2020) and Lechene, Pendakur and Wolf (2022) consider multiple adults of the same gender within a household. Studies with complex household composition report a per-capita resource share for a specific demographic group (Brown, Calvi and Penglase, 2021). A promising avenue for future research would to collect direct information about the distribution of resources to women in non-nuclear families, especially multi-generational families and polygynous families.

[25] A 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).

4.1.3 Other intrahousehold allocations

Researchers have also analyzed other individual-level outcomes to shed light on inequality within households. For example, several studies compare men's and women's leisure time (though usually not restricting the analysis to couples). Li (2023) documents that women have 28 fewer minutes per day of leisure than men in the most recent wave of a time-use survey in India; Ferrant and Thim (2019) find that women have 51 fewer minutes per day of leisure in Ethiopia and South Africa and 36 minutes fewer in Peru, though there is a 23-minute gap favoring women in Bangladesh; and Grogan (2018) reports 49 fewer minutes per day of leisure for women in Guatemala.

Men and women in the same household might also differ in their access to health care. Dupas and Jain (2024) use data from the public insurance program in Rajasthan, India, to document that, outside of reproductive years, women are underrepresented in hospital visits, particularly when out-of-pocket costs are higher. This finding reinforces other evidence that women tend to have worse health outcomes, especially later in life (Anderson and Ray, 2010).

Another way to examine intrahousehold power is through joint decisions when individual preferences are known. Fertility is an especially important joint decision and, indeed, several papers have examined decision-making around fertility in LMICs (Rasul, 2008; Ashraf, Field and Lee, 2014; Ashraf et al., 2025, among others). The DHS collects individual-level fertility preferences for both women and men, which show 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, so the stated preferences might already be the result of intrahousehold bargaining between partners.

Finally, women's experience of 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 Elicited measures of women's power

Understanding women's power requires learning about not only the intrahousehold allocation of resources but also the process through which the allocation was determined. When researchers collect their own data, they are able to use measures of power directly elicited from respondents rather than inferred from naturalistic behavior. These elicited measures often focus on the household's decision-making process.

The most common strategy is to ask women close-ended survey questions, although lab games and qualitative data are also increasingly being used. We review the literature on these measurement approaches in this subsection, and one conclusion we draw is that there is scope to improve on status quo practice by identifying new measures that hew closer to the concept of women's power while also being quick and simple to collect. The remaining challenge would then be for the field to coordinate on the new measures to ensure comparability across studies.

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. Development economists have generally coordinated on using questions modeled after those in the DHS, but several critiques highlight the limitations of these questions as a proxy for women's power.

In the late 1990s, based on the recommendations of a group of experts convened to advise on measuring gender and power in the DHS, questions related to household decisions became part of the standard DHS questionnaire, initially for women and now also for men (Kishor and Subaiya, 2008). The specific domains the questions probe 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 proposed 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). In addition, because of the generality of the scenarios ("large household purchases"), respondents will construe the question differently, making the responses less comparable across people. Scholars have suggested that asking about more specific decisions or using vignettes might yield more informative answers (Glennerster, Walsh and Diaz-Martin, 2018; Donald et al., 2020).[26]

A particularly compelling critique is that making decisions is neither necessary nor sufficient to have agency. Decision-making is often a cognitive burden, as discussed in section 2.5, so it is critical to understand if the individual wants to make the decision (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.[27]

Thus, a main limitation of the DHS-type questions, in our view, is that they emphasize *making* decisions but 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 space permits, or replace them, if not.

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

[26]Scholars have also suggested broadening the measures beyond decision-making to incorporate the respondent's sense of autonomy (Alkire et al., 2013; Donald et al., 2020).

[27]A related point is that 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 her.

or they chose to delegate the role. A wife who lets (makes) her husband decide what to cook would be rated as having high agency. Arugay et al. (2024) assess the performance of different indicators of agency used in the Women's Empowerment in Agriculture Index (Alkire et al., 2013) in the Philippines and conclude that the "could... if they wanted to" question performs better than the DHS-style questions. Their way of evaluating different indicators is via 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. 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 (as benchmarked against open-ended interview responses) to measure women's agency in their Indian setting. The "is your opinion heard" language centers the person's influence and agency, independent of whether she actively makes the decisions.

A fruitful direction for research is to test whether an index based on a survey module that is as short as the DHS one but uses questions about *influencing decisions* or *being able to make decisions if one wants to* captures women's agency better than the status-quo approach. Then, ideally, the field would coordinate to use these alternative survey questions.

4.2.2 Lab-game measures of agency

Scholars have also developed measures of intrahousehold power using lab games. A key motivation is that behavior in a real-stakes situation might provide more reliable information than survey responses. In particular, when testing whether an intervention increased agency, choices made under real stakes might be less vulnerable to experimenter demand effects than self-reports are. However, lab games also have their own limitations. They are more logistically complex; the decisions they ask respondents to make are somewhat artificial; they are better-suited to measuring agency in certain domains, such as household finances; and with low or moderate stakes, experimenter demand effects might still be a problem.

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.[28] The measure has been adopted by studies in Zambia and Tanzania,

[28]This 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).

among other places (Barr et al., 2020; Almås et al., 2020).

Interpreting a woman's low demand for additional agency as indicating that she has high agency assumes that agency is a 'good' with diminishing returns. However, this condition may not hold in all contexts. When the Almås et al. (2018) game was replicated in India and Myanmar (and even in the original North Macedonia study), many women required a premium before they were willing to receive the money themselves (Jayachandran, Biradavolu and Cooper, 2023; Fertig et al., 2026); for these women, agency was a 'bad.' Some feared backlash from their husbands, while others had internalized the norm that women should not have financial agency. Devising lab-game measures of agency appropriate for contexts with particularly restrictive gender norms is an area for further research.

Lab games have also been used to investigate precisely whether women's demand for agency maps monotonically to their 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. They also find that women who received a cash transfer through an RCT had higher demand for agency but not higher actual agency. The lab experiment builds on Afzal et al. (2022), who document that, in their sample of Pakistani couples, 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 want to choose even when doing so will not influence the choice that is made). Lab games are particularly valuable when testing precise hypotheses and unpacking mechanisms, such as this application.

Another compelling use of lab-in-the-field methods elicits each spouse's choices (individual-level preferences) and then their joint choices (aggregated household preferences) to back out each spouse's weight in their joint decisions. This exercise delivers a measure that maps closely to our notion of power, or how each person's preferences influence joint outcomes. Carlsson et al. (2012) ask husbands and wives in China to each make several real-stakes decisions that depend on their discount factor, first separately and then jointly. By assuming that the discount factor reflected in the joint decisions is the weighted sum of the individual discount factors, the authors can estimate the wife's relative weight in joint decisions 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 elicit and analyze individual and joint decisions, using choices that depend on risk rather than time preferences. Cherchye et al. (forthcoming) conduct a similar exercise in

Kenya in which spouses individually and jointly choose between money for themselves or a nutritious meal for their child, and then they use these data to structurally estimate the parameters of a collective model.

4.2.3 Measures derived from qualitative data

An emerging technique for measuring agency is to collect open-ended text from respondents and then convert it to quantitative measures. There are not many examples to date, but artificial intelligence holds great promise for making this approach feasible at scale.

The traditional workflow is labor-intensive. Trained social scientists conduct interviews that explore the respondent's agency via open-ended questions. Then other high-skill individuals 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.

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 exciting new possibilities for using 'text as data' in quantitative studies. Researchers can use simplified interview scripts that do not require expert interviewers and then automate the coding of the open-ended responses. Human experts can code a subset of recorded responses, which are then used as training data for a supervised model. Alternatively, researchers can prompt an off-the-shelf large language model to encode the responses or use unsupervised methods to analyze the text.

4.2.4 Using richer measures to select survey questions

Lab games and expert-led qualitative interviews require more piloting and time from respondents than the short survey modules on agency that are the norm. Given their extra costs, these more involved measures 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 main use, richer measures can serve another valuable purpose: as benchmarks that inform which short survey measures researchers should use. An example of such an exercise 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 their context than the default option of the DHS questions. 'Works better' was assessed based on concordance with a measure of agency derived from qualitative interviews. Specifically, the study used 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 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 extra methodological contribution by using their data to improve the survey questions that researchers routinely use. 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 determinants of women's power

We now turn to synthesizing research on the determinants of women's power, focusing on determinants that are amenable to policy influence. We review studies that test whether a particular policy increases women's power, as indicated by changes in a direct measure of women's decision-making power (studies that fall into Category 1 in the taxonomy of section 3) or by changes in an outcome assumed to be valued more by women than men on the margin (Category 3). We restrict our attention to studies with strong research designs for isolating causal effects.

Many studies estimate the effects of a policy on downstream outcomes as a way to shed light on the determinants of women's power (Category 3) but also the effects of power (Category 2). Rather than splitting the discussion of a paper across this section and the next one, we also discuss findings about the effects of women's power here. Thus, this section is organized around different determinants of power, but discusses both determinants and effects. Section 6 revisits the evidence but organized around different types of effects and with a more stringent inclusion criterion, focusing on the evidence that most convincingly isolates the effects of women's power.

5.1 Cash transfers and other unearned financial resources

The financial resources that each individual brings into the household are a frequently explored determinant of intrahousehold power. To investigate the role of unearned income, scholars typically study the impacts of social insurance and cash transfer programs on decision-making power and household outcomes. They ask, "how does the identity of the transfer recipient — and hence the share of the household's unearned income that flows to the woman — shape how the influx of money is spent?"

Broadly speaking, early studies concluded that the identity of the recipient matters for important household outcomes, while more recent experimental studies often report null

results. It remains unresolved whether, in the newer studies, targeting the transfers to women was insufficient to give them control over the funds, or women controlling the funds did not lead to meaningful downstream changes. To speak to this question, we highlight the reported impacts on direct measures of power, if available.

In the early literature on LMICs, conditional cash transfers received substantial attention, starting with PROGRESA in Mexico. 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 that operates specifically through power do so by flexibly controlling or instrumenting for total household resources. Attanasio and Lechene (2002) show that PROGRESA reduced the number of household decisions reported to be made by men only and increased investments in children. Rubalcava, Teruel and Thomas (2009) similarly find positive effects of the program on expenditure on children, livestock, and diet quality, but do not explore proxies for power.

Many recent studies likewise estimate the effects of cash transfers to women relative to no transfers, shedding light on the combined effect of increased household income and an increase in women's share of unearned income. 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.

Another approach, which has the important advantage of holding household income fixed, is to compare transfers to women to transfers that are not targeted to a particular gender. Crosta et al. (2024) do exactly this in their meta-analysis of unconditional cash transfer RCTs in LMICs.[29] 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, relative to untargeted transfers. They do not examine direct measures of women's power.

Recent RCTs have engineered a starker comparison between transfers targeted to women and transfers targeted to men. Prior to the RCTs, an influential study in this spirit was Duflo (2003), who showed that when grandmothers receive old-age pensions in South Africa, girls' but not boys' weight-for-height increases, while transfers to grandfathers do not seem to lead to improvements for either girls or boys in the household. However, the estimates are

[29] Crosta et al. (2024) compare 33 programs targeting transfers to women to 34 untargeted transfer programs because they identified too few studies, for the purpose of meta-analysis, that randomized the gender of the recipient. Below, we describe in detail the studies that randomize the recipient, but we exclude two studies that Crosta et al. (2024) classify as doing so; those two 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.

not always precise enough to statistically distinguish the effects across recipients' genders or children's genders. The study does not estimate effects on a direct measure of power.

Through RCTs designed to isolate the effects of women's share of unearned income, researchers have been able to identify the impacts of women's household power particularly cleanly. These experiments recruit a sample of households in which both husbands and wives could be eligible for the transfer and randomly vary whether a transfer is directed to the man, a transfer is directed to the woman, or no transfer is given. We describe the specific studies below, but as an overall summary, their findings on the relative effects of transfers to women are considerably more mixed than in the early literature, and null results are common. This is possibly due to different implementations of the programs and the different characteristics and cultures of the settings (Bauchet et al., 2021), which might prevent the programs from shifting power in the household.

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, but do not explore measures of intrahousehold power. 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 large unconditional cash transfers in rural Kenya, randomizing whether the recipient was the male or the female head of the household. The study finds little difference in how choices and outcomes vary based on 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 attitudes toward IPV and general gender views, 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 the lab-in-the-field experiment described in section 4.2.2. They find that this measure, unlike the commonly-used survey 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 going to her husband. This outcome is consistent with the finding in Armand et al. (2020) that when the woman rather than the man was the recipient of the conditional cash transfer in North

Macedonia, household food expenditure was higher.

Akresh, De Walque and Kazianga (2016) study the impact of conditional and unconditional cash transfers paid to mothers or 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.

In a study in rural Chhattisgarh, India, Almås, Vandewalle and Somville (2024) find null effects for household consumption choices, irrespective of whether (through randomized variation) the respondent received assistance in opening a bank account or whether payments were made directly into their account. The authors hypothesize that strong gender norms in the region that discourage women from controlling financial resources may drive the lack of response.

Collectively, these findings suggest that how a cash transfer program is designed and how it interacts with the underlying economic and social environment may determine whether the program is able to shift women's power and ultimately influence household behavior. Yet, no study, to the best of our knowledge, has systematically compared how these programs fare across different contexts.

5.2 Earning capacity

Another 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 is that a person's relative income is a determinant of her Pareto weight in a collective model or her threat point in a bargaining framework. Threat points being a potential mechanism highlights that higher earning capacity can increase an individual's power even if she does not actually work.

In this subsection we review interventions among adult women, and we discuss education and other pre-marriage channels in section 5.7. The overall conclusion we draw from the evidence is that increases in women's earning capacity often but not always increase their power, and some of the heterogeneity stems from whether women are able to maintain control of their earnings, vis-à-vis their spouses.

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 a difference-in-differences (DiD) 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 higher earning potential

for women 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 municipality-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.

Researchers have also tested the effects of job opportunities that are randomly offered to women as part of a research study. 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 in response to their wife's employment. They find no impact of access to job opportunities on different survey measures of intrahousehold power.

Productivity as micro-entrepreneurs Self-employment is prevalent in LMICs, and many interventions aim to boost women's productivity as micro-entrepreneurs. Often, this is through access to capital. The evidence on the effects of microfinance on women's power is mixed. Banerjee et al. (2015) find that a group lending program in Hyderabad, India, had no effect on an index of women's household decision-making. 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 generally been more effective when accompanied by tools and strategies to help women maintain effective control of funds, through commitment savings programs or mobile money. 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 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 Chang et al. (2020),

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 for women's businesses.

Another common strategy for expanding women's access to capital (for their businesses and in general) is to establish self-help or savings groups. Participation in such groups has 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).

Beyond access to capital, business skills are another determinant of entrepreneurs' productivity. Trainings on business skills typically lead to modest improvements in firm outcomes, both in general and when targeted to female entrepreneurs (McKenzie et al., 2021; McKenzie and Puerto, 2021). Few studies have explored the implications of this type of training for power within the household. An exception is Bulte, Lensink and Vu (2016), who show that an entrepreneurship training in Vietnam led to household decisions that were more aligned with women's preferences.

Control over labor income A policy aim related to boosting women's earning capacity is to strengthen their control over their earnings, which can be thought of as increasing their 'effective' earning capacity from an individual perspective. Echoing the theme that emerged in microcredit studies, how earnings are delivered matters. Field et al. (2021) show that providing women in Madhya Pradesh, India, with a personal bank account and directly depositing their labor earnings from a government workfare program into that account increases their labor supply (both inside and outside the program) and improves measures of women's power for some subgroups.[30] Similarly, when Carranza et al. (2025) allow female factory workers in Côte d'Ivoire to deposit some of their earnings in a private commitment savings account, the women supply more labor. The study does not examine downstream impacts on women's power, however.

5.3 Property ownership

Someone's power can also derive from their share of household assets. Land is typically the largest component of household wealth in LMICs, and men have greater property rights over it. This is rooted in inheritance and titling practices. While much remains to be learned

[30] García (forthcoming) finds that India's workfare program crowds out women's employment overall, reducing their intrahousehold resource share even as household consumption rises.

about how to ensure that *de jure* changes in land ownership translate into *de facto* changes, several studies find that, when they do, the gender gap in household power narrows.

Most of the evidence comes from studies of reforms that granted women more equal rights, such as the amended Hindu Succession Act in India that gave equal land inheritance rights to Hindu women when a family member died without a will. Studies typically use a DiD design based on states' year of adoption and women's age as a proxy for their exposure to the law change, as existing marriages were grandfathered. Because inheritance often occurs or is expected pre-marriage, some of the effects operate through pre-marriage channels. For example, the reform increased girls' educational attainment (Deininger, Goyal and Nagarajan, 2013; Roy, 2015). Regarding effects during marriage, Heath and Tan (2020) find that it increased an index of women's household decision-making, as well as their market labor supply, while Grover and Sharma (2025) and Mookerjee (2019) find more mixed results on decision-making. Anderson and Genicot (2015) report a sobering finding that the law change led to higher suicide rates among both men and women, which could be due to male backlash and marital discord.

Harari (2019) exploits Kenya's 1981 Law of Succession, which granted women equal inheritance rights, and its 1990 amendment exempting Muslims, using a 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 more education and are less likely to undergo genital mutilation, and they also marry later.

Policy can also intervene to redistribute household property between husbands and wives. Vardani (2025) implements an RCT in Maharashtra, India that informed the treatment group about a little-known resolution in the state that granted married women 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 and decreased men's alcohol consumption, but did not reduce IPV.[31]

Ambler, Jones and O'Sullivan (2026) use an RCT to evaluate an intervention in Uganda that, via persuasion and small financial incentives, led couples to register some of their sugarcane plots with the local sugarcane processing company in the woman's name. The revenue for those plots was then deposited in her bank account. (To this end, registration was bundled with opening a bank account for her). The study finds that treated women were more involved in sugarcane production and in broader household decision-making. Most strikingly, the intervention increased both men's and women's stated support for gender equality; for

[31] In a related DiD study in China, Wang (2014) finds that when men acquire property rights over housing, household consumption shifts toward male-favored goods.

example, men became more likely to agree that men should help with household chores.

5.4 Ability to divorce

In many countries, women have less ability to leave their marriages than men do, stemming from gendered restrictions on divorce or on independent living. This has a direct cost to women of having to remain in unhappy marriages more often, and also an indirect cost of a lower bargaining position within marriage because of the lack of a divorce-related outside option. Most of the literature examines the effects of *de jure* divorce rights, but we highlight the equal importance of *de facto* rights.

On the legal right to divorce, Corradini and Buccione (2023) use a DiD to analyze a 2000 reform in Egypt that gave women the right to unilateral divorce. They use women with young children as the treated group and women with older children, for whom divorce remained costly because they would lose custody of their children, 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 becoming more aligned with women's preferences.

An increase in the *de jure* right to divorce might make little difference if women are culturally or financially unable to exit marriages. A study on the interplay of *de jure* and *de facto* constraints on divorce is Bargain, Loper and Ziparo (2024). They examine Indonesian reforms in 2008 that gave women better access to courts to pursue divorce, which they argue should especially help matrilineal women because of this group's higher standard of living outside of marriage. They find that not only does this group divorce at a higher rate after the reform, but within marriage, their and their children's well-being improves (as measured, for example, by 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 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 suggestive, 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.[32]

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

Psychological interventions Several studies have evaluated interventions that aim to increase women's power by building their self-confidence and resolve to advocate for them-

[32] Improved bargaining skill also might enable someone to improve her outside option or directly improve her outcomes. For example, a woman might use her skills to successfully advocate that she should be able to take up employment or to improve her interactions with doctors and hence her health.

[33] Lowe and McKelway (2025) find that simply enabling discussion between spouses about a job opportunity for the wife lowers job takeup.

selves. These interventions are often described as 'psychological interventions' because they change women's mindsets.

For example, 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 led to changes in other household outcomes that women may have especially valued, such as increased savings. Bossuroy et al. (2022) study the effect of a week-long life-skill training for women (which covered topics such as goal setting and effective decision-making) and a community film screening aimed at boosting aspirations that were layered on top of a multifaceted ('graduation') program in Niger. They find that the psychological intervention improved women's mental health and self-efficacy but had no persistent effect on their household decision-making power.

Psychological interventions and communication skills trainings often target adolescent girls, for example, through life skills and safe space programs (Ashraf et al., 2020*a*; J-PAL, 2023). Long-run follow-up of participants could reveal whether these interventions are an effective way to increase participants' eventual power within their marriages.

Mental health Addressing mental health disorders is distinct from the psychological interventions described above, but could affect women's power in a similar way. For example, 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 Convincing men to cede power

Another policy approach is to persuade men to cede power to their wives. The notion that someone would voluntarily reduce their power is hard to fit into the economic models described in Section 2. However, the theory of change is that men can be convinced that ceding power will improve household income, they are altruistic toward their wives and come to appreciate the intrinsic value to their wives of power, or they can be convinced that equitable power-sharing is morally right.[34]

Unsurprisingly, the approach does not always work. Quisumbing et al. (2021) evaluate a multi-faceted 'gender sensitization' workshops for couples in Bangladesh that aimed

[34] An intervention targeting men can improve women's well-being by making men's desired outcomes more aligned with their wives' preferences, without reducing men's authority in the household. This approach does not increase women's power, under our definition. An example is Ashraf et al. (2025), who find that when men become more knowledgeable about maternal mortality risk, their desire to have additional children and their wives' pregnancy rate decrease, creating better alignment with their wives' preferences.

to make men aware of the burdens and constraints facing their wives (and also improve both spouses' communication skills and raise women's confidence). The workshops 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. Dean and Jayachandran (2019) intervened with husbands (as well as parents and in-laws) of young women in India, showing them videos that featured testimonials from women and their family members that conveyed the self-realization benefits for women who were allowed to work. The intervention had no effect on family members' attitudes towards women's employment.

Nonetheless, sometimes this type of intervention works. 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, 2026) 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 both women's and men's stated support for gender inequality, as well as the household's likelihood of entering into a contract with a sugarcane buyer in the woman's name (from 68% to 74%).

Doyle et al. (2023) report on a six-year follow-up to an RCT that evaluated a 15-session IPV intervention for men in Rwanda that also entailed discussions about gendered power dynamics, decision-making, and male engagement in caregiving. 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 women.

Dhar, Jain and Jayachandran (2022) study a curriculum adopted in randomly selected schools in India that aimed to advance women's equality by increasing boys' and girls' support for equality. The emphasis was on the human rights case for equality. The intervention could increase women's power if, once married, male participants choose to share more power with their wives because they believe not doing so is morally wrong. The study showed that the program reshaped adolescent boys' views in this direction, but one would need longer-run data to assess if their behavior as husbands, in fact, changed.

In short, persuading men to cede some of their power is a potentially simple, cost-effective way to increase women's power, even if the probability of success is low, as the interventions are often light touch. Building up knowledge about the circumstances under which the

approach works and the messages that are effective seems valuable.

5.7 Pre-marriage interventions

Some interventions relevant for 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 through two broad channels. The first channel is that, within marriage, women have stronger outside options and bargaining skills. These are pathways to greater power we have discussed above; the change is simply instigated earlier. The second channel is unique to pre-marriage interventions: these interventions can influence when and whom a woman marries, which, in turn, influence her power. Here we elaborate on this second channel and then discuss a major type of pre-marriage intervention, namely girls' education.

Marriage timing could affect women's power because young brides typically have low bargaining skill relative to their husbands. Adolescents are not mature enough to advocate for themselves, and the husband-wife age gap tends to be larger in early marriages, creating a power differential. Tauseef and Sufian (2024) report evidence in support of this. They find that early marriage, instrumented with age of menarche, reduces women's household decision-making in a representative sample in Bangladesh. 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.

Schooling can prevent early marriage through an incapacitation effect. If the societal norm is for women to marry once they stop going to school, then increases in female education can delay their marriages. In addition, education might increase a young woman's voice vis-à-vis her parents, enabling her to successfully advocate for a delayed marriage.

Researchers have exploited the many educational expansions across LMICs to study the effects of education on women's power later in life, though they are unable to disentangle effects that derive from delayed marriage, spousal choice, outside options, or bargaining skill. For example, Kazibwe and Li (2025), using a DiD design in Uganda, find that expanded access to secondary school in Uganda increased women's educational attainment, decision-making power, and support for gender equality, while Samarakoon and Parinduri (2015), through a regression discontinuity design, report on a reform that increased women's education in Indonesia but had no effect on their 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 both women's and men's schooling attainment. The survey

she analyzes included DHS-style decision-making questions and another novel question asked for several domains: "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. It also made both women's and their husbands' gender attitudes more egalitarian. The effect on husbands' attitudes could be due to marital sorting, women influencing their husbands' views, or increases in men's own education.

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.

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. Her study applies a spatial regression discontinuity design to DHS surveys for several countries. Walker et al. (2025) find that, within the Solomon Islands, women in matrilineal communities have more leisure time, and men participate more in child care.

Sex ratios in the marriage market are relevant because when women are scarce, they have more leverage at the time of marriage formation, which could translate into more power within marriage. However, women might instead use their leverage to match with a wealthier husband or pay a lower dowry. Importantly, some of these gains might accrue to the woman's parents rather than to her, and if the market equilibrates by women "marrying up" or marrying older men, women's power in marriage could end up lower. 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 an increase in their decision-making power in China. Porter (2016), also studying China, finds consistent results.[35]

Researchers have also examined how polygyny (the practice of men having multiple wives) affects women's power. If the man's wealth and income comprise most of the household's financial resources, then polygyny will reduce each woman's allocation almost mechanically; the resources need to be split among more people. 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

[35] Another hypothesis tested in the literature, with mixed findings, is that in societies with son preference, having a son confers power to the mother relative to the father (Li and Wu, 2011; Zimmermann, 2018).

considerable variation in power across co-wives, often based on their seniority and fertility (Reynoso, 2025; Rossi, 2019).

5.9 Discussion

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, surprisingly, persuading men to share power sometimes works. 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 cases in which interventions show mixed results, such as cash transfer programs, may reflect the role that institutions, culture, and economic circumstances are playing. As seen in the models reviewed in Section 2, a central way that policy can increase women's power is by meaningfully improving their outside options. 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—rarely holds. 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.

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).[36] We thus restrict our synthesis to these types of studies.

We then close the section by discussing how women's limited power can interact with other frictions in the household and how it can moderate the efficacy of policies aimed at improving their well-being.

6.1 Children's outcomes

The potential effect 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 also primarily analyzes income as the shifter of household power, but with less clear-cut findings. The newer studies often have cleaner research designs but less statistical power. We conclude that women's power likely boosts children's human capital, but the welfare implications depend on whether men's power helps children in other ways, such as through non-human-capital investments that grow the household's income, and we lack evidence on this.

Probably the most influential paper in this literature, including for practice in LMICs,

[36] We 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.

studies a policy change in the UK. Lundberg, Pollak and Wales (1997) 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 used 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 have leveraged experimental or quasi-experimental variation in cash transfers, albeit with limitations in their research designs. Several papers 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. They 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 is that household composition changes in response to pension receipt (Hamoudi and Thomas, 2014).

While many of 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 immediate child outcomes more than mothers' income does.

Some studies exploit 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 have separate sources of exogenous variation in men's and women's earning capacity, which ideally they could use as 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. The male and female shocks are unlikely to be equal in size, however. Majlesi (2016) compares men's and women's relative *employment*, but if the wage rate differs by gender, this, likewise, is not an apples-to-apples comparison of contributions

to household income.

The apples-to-oranges concern is circumvented if men's and women's employment opportunities have effects in opposite directions. For example, if a positive shifter of men's employment decreases an outcome while a positive 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 has increased in both cases. Children's well-being seems unlikely to fit this description.[37] 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 how women's power affects children, randomizing the gender of the recipient of cash transfers. This creates near-ideal variation to test the effects of women's power, convincingly exogenous and satisfying 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 (2016) 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.[38]. Bauchet et al. (2021) find 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 health and education outcomes in Kenya.

A key reason for the null results in the cash grant RCTs may be limited statistical power. The low statistical power, in turn, stems from households spending a fairly small share of household income on children's health and education. In the Haushofer and Shapiro (2016) study, with large cash transfers and a sample size of 762 households (for the comparison across recipient gender), the analysis is powered to detect differences by recipient gender in the health and education outcomes only if they are 0.25 standard deviations or larger.[39] To provide intuition for this effect size, suppose there was a binary investment in children with a 20% purchase rate in the status quo, and a cash grant to men increases the purchase rate to

[37] As 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.

[38] Akresh, De Walque and Kazianga (2016) 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.

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

32%. If the minimum detectable effect size is 0.25 standard deviations, then a mother-father gap is only detectable if a grant to women increases the purchase rate to at least 44%. In other words, the effect size would need to be twice as large for women as for men to be detectable.

Statistical power might also help explain why some of the strongest evidence that women's relative income improves children's human capital comes from the natural experiments that use gender-specific shocks to earning potential (Qian, 2008; Majlesi, 2016). While the causal identification in these studies is not as strong as in the RCTs, 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.

Importantly, 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 (1997) 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.[40] 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

[40] One 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.

higher than fathers do (or equivalently, fathers might perceive other investment opportunities as higher return than mothers do). Second, mothers might be more knowledgeable and so more confident about how to improve children's human capital, particularly their health, 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.[41]

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 is less theoretically ambiguous how women's power will improve their own outcomes (although male backlash effects introduce theoretical uncertainty). In this subsection, we briefly review what is known, but our main message is that more work is needed.

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, but women's power might also increase IPV via a backlash effect from their husbands.[42] 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.[43]

Psychological well-being There is limited evidence on how women's power improves women's psychological well-being. Haushofer and Shapiro (2016) pool men's and women's outcomes when they report the effects of cash transfers in Kenya on psychological well-being; they do not report results by gender. The couple's average stress level improves, but not

[41] Doepke and Tertilt (2019) extend the separate spheres of men and women (Lundberg and Pollak, 1993) by assuming the same parent needs to provide the goods and time inputs for the production of child human capital. Women have the comparative advantage because of their lower market wage.

[42] IPV 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.

[43] 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.

their depression or happiness, if the woman rather than the man receives a transfer. Ashraf, Field and Lee (2014) find that giving women more control over contraception decisions led them to be 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 driven by women having fewer sex-selective abortions.

Health We know of no evidence that meets our inclusion criterion that studies how women's power affects their health care take-up, morbidity, or mortality, despite the importance of these outcomes. The closest fit is Calvi (2020), who analyzes India's Hindu Succession Act reforms, which increased women's power and their households' wealth by expanding women's inheritance rights, and finds that the reforms increased women's body mass index and reduced their likelihood of anemia and their mortality rate.

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 that when women gain more control over the household's income, they will decrease their labor supply, as leisure is a normal good. However, women might find employment more rewarding than leisure on the margin. Moreover, in places 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. Although granting women more inheritance rights is not a policy that satisfies the exclusion restriction, we note that Heath and Tan (2020) find that it increases women's employment in India.

6.3 Household efficiency

We view the literature testing for Pareto inefficiency in households as mostly outside the scope of this review. What makes women's power such an important topic is that it is often much lower than men's power: this review is fundamentally about *asymmetry* in power. Many household inefficiencies are present even without introducing asymmetry. For example, household members have an incentive to hide income from each other and distort their consumption to enable income-hiding, as in Ziparo (2020), Zhang (2024), and Castilla and

Walker (2013). Likewise, asymmetry in power does not imply Pareto inefficiency. However, in some cases, women's limited household power interacts with frictions to exacerbate, or potentially reduce, inefficiency. We describe a few papers that explore this idea.

Udry (1996), in a pathbreaking paper on Pareto inefficient production, 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 the inefficiency is the power imbalance between husbands and wives. Women, anticipating the imbalance at the time of marriage, require a commitment that they will receive sufficient resources during the marriage. The commitment comes in the form of being granted exclusive rights over certain plots, but the cost is inefficient agricultural production.

In the consumption domain, Jack et al. (2024) model a free-riding problem in households that arises when individuals incur private, unobservable effort costs to be frugal with the household's money, while the benefits (money saved) are shared with family members. They show that with convex effort costs, this inefficiency is exacerbated when power is shared unequally within households. Concretely, even though a lower water bill saves the household money, if the woman has little say over how those savings are spent, she has little incentive to use water frugally.

There is also growing evidence of inefficient information-sharing within households that appears to be related to power differentials, or perhaps just gender norms. Several studies find that knowledge provided to husbands increases their wives' knowledge, but knowledge gains for women do not spill over to their husbands (Björkman Nyqvist and Jayachandran, 2017; Conlon et al., 2021; Ashraf et al., 2025). This inefficiency seems particularly consequential for domains where women have more access to information, such as women's and newborns' health.

Intrahousehold power could also affect whether households avail themselves of high-return investment opportunities. Women's limited power could be inefficient if it leads to underinvestment in children's human capital, for example. However, Doepke and Tertilt (2019) note that, in some contexts, greater investment in children's human capital might not be growth-promoting if it crowds out potentially higher-return investments such as physical capital or financial assets. There is very little evidence on the effects of women's power on these other types of investments. 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 (though not consistently across their two endline survey rounds) and in cash crop yields when men rather than women receive transfers. Further evidence on investment effects would be valuable. Still, to assess efficiency, one would need to know the

returns to the different forms of investments. Thus, a useful omnibus test would be to assess how women's power affects medium- and long-term household income and wealth.

Standard economic models do not classify consumption choices as inefficient, even if they are on "sinful" goods like alcohol and tobacco, at least absent behavioral biases such as self-control problems. That said, policymakers often have preferences over how households spend transfers, so from their perspective, women's power might lead to welfare-increasing consumption choices. Specifically, a common view is that men will spend transfers on alcohol and tobacco. Overall, there is limited evidence to support this view (Evans and Popova, 2017). Exceptions are Armand et al. (2020), who find a marginally significant decrease in alcohol and tobacco consumption if women receive transfers instead of men in North Macedonia, and Vardani (2025), who finds that women's power decreases men's alcohol consumption in India.

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 highlight 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 less, not more, account usage for women with low baseline power; this pattern is not seen for those with high baseline power. When women have limited power to resist demands on their money from other household members, frictions in access to money can, in fact, be 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 business capital to women is partly to improve their household power, but the effectiveness of this approach 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, especially in some regions, 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, strengthen their legal rights (for instance, around divorce and property), and improve their spousal communication skills have all shown promise. However, the design and context of these interventions matter enormously. For example, financial resources earned by or given to women appear to be most effective at enhancing their influence in the household when policy add-ons or the institutional context enable them to maintain tight control over the funds.

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, on the effects of women's power, there is surprisingly limited causal evidence on how women's power affects their own outcomes, such as their health and psychological well-being. We also know too 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 such as children's education versus assets? The answer matters for understanding how women's power affects families' prosperity over the longer run. More evidence on the effects of women's power on household income and wealth would also speak to this question.

Second, on the determinants of women's power, we encourage work on how gender norms shape women's bargaining 'skill' or style, as well as more work on how norms and laws affect spouses' outside options. In addition, non-nuclear family structures and relationships beyond husband-wife ones deserve more attention. Power dynamics in intergenerational family structures are particularly understudied.[44]

Third, measurement of women's power remains contested. While the DHS decision-making questions have enabled valuable cross-country comparisons, they have important limitations. The field would benefit from developing alternative short survey modules that capture influence over decisions rather than just decision-making roles. Multi-study coordination to validate new survey questions or other measurement tools would enhance our ability to identify appropriate measures. Beyond close-ended survey questions, the prospect of combining open-ended responses with AI-assisted coding seems promising as a way to construct measures that are highly textured but also feasible to collect at scale.

Fourth, studies that cleanly isolate the effects of women's power from other mechanisms are rare but essential for understanding women's power as a causal mechanism for improving families' welfare. Such studies will almost always need to rely on researcher-generated policy variation because most naturally-occurring policy variation will not satisfy the exclusion restriction—where the policy affects outcomes only through shifts in intrahousehold power. More generally, studies on the causes or effects of women's power should be explicit about the assumptions linking the estimates to the conclusions drawn. For example, some studies aim to identify the effect of increased power on children's education; others treat that outcome as a proxy for women's power. These approaches rest on different, often implicit, assumptions: in the former, we must be sure that the intervention increased (or decreased) women's power; in the latter, we must know what women prefer relative to men. We also want to highlight the value of measuring impacts on women's power directly in studies that examine downstream

[44] An exception is Anukriti et al. (2020) who 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.

outcomes, as this helps distinguish between the intervention failing to shift power versus power not affecting the downstream outcome.

Finally, the empirical literature, particularly through lab-in-the-field experiments, has shown that household behavior is often non-cooperative and inefficient. Bespoke theoretical models that posit a specific friction have been developed to rationalize many of the observed behaviors, but apart from the limited commitment model, we lack overarching frameworks that are applicable to a broad range of choices and settings. Expanding the theoretical toolbox could help empirical researchers design studies to answer important open questions, such as whether strengthening women's power exacerbates or mitigates household inefficiencies. Whether shifts in power in the household are zero-sum or can enlarge the pie remains largely unanswered, with far-reaching implications.

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 devote more attention to understanding and addressing women's ability to leave marriages. As theoretical models with limited commitment highlight, credible outside options confer power within marriage. Beyond the legal right to divorce, women's social status and legal rights 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, through sophisticated analyses using experimental and quasi-experimental variation, structural methods, and theoretical modeling that increasingly engages with the complexity of how family members interact. 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. "Intrahousehold 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.

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, 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.

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.

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.

Ambler, Kate, Kelly M Jones, and Michael O'Sullivan. 2026. "Increasing women's empowerment: Evaluating two interventions in Uganda." *Journal of Development Economics*, 178(C).

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." *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, and Jean Lee. 2014. "Household bargaining and excess fertility: An experimental study in Zambia." *American Economic Review*, 104(7): 2210–2237.

Ashraf, Nava, Maxim Bakhtin, Erica Field, Alessandra Voena, and Roberta Ziparo. 2025. "Gendered spheres of learning and household decision making over fertility."

Ashraf, Nava, Natalie Bau, Corinne Low, and Kathleen McGinn. 2020*a*. "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. 2020*b*. "Bride price and female education." *Journal of Political Economy*, 128(2): 591–641.

Attanasio, Orazio, and Valérie 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, 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*, 81(4): 813–846.

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.

Bergstrom, Theodore, Lawrence Blume, and Hal Varian. 1986. "On the private provision of public goods." *Journal of Public Economics*, 29(1): 25–49.

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.

Bernheim, B Douglas. 1986. "On the voluntary and involuntary provision of public goods." *The American Economic Review*, 789–793.

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, Valérie 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-André 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 Valérie Lechene. 2010. "Distributional effects in household models: Separate spheres and income pooling." *Economic Journal*, 120(545): 786–799.

Browning, Martin, Pierre-André Chiappori, and Yoram Weiss. 2014. *Economics of the family.* Cambridge University Press.

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.

Bulte, Erwin, Robert Lensink, and Nhung Vu. 2016. "Gender training and female empowerment: Experimental evidence from Vietnam." *Economics Letters*, 145: 117–119.

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, and Ajinkya Keskar. 2025. "'Til Dowry Do Us Part: Bargaining and Violence in Indian Families." *Review of Economics and Statistics*, 1–16.

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.

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.

Carranza, Eliana, Aletheia Donald, Florian Grosset-Touba, and Supreet Kaur. 2025. "The social tax: Redistributive pressure and labor supply." *Econometrica*, 93(6): 2273–2308.

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, Pierre-André Chiappori, Bram De Rock, Charlotte Ringdal, and Frederic Vermeulen. forthcoming. "Feed the children." *Economic Journal*.

Chiappori, P-A, and Ivar Ekeland. 2009. "The microeconomics of efficient group behavior: Identification." *Econometrica*, 77(3): 763–799.

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-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.

Chiappori, Pierre-André, and Maurizio Mazzocco. 2017. "Static and intertemporal household decisions." *Journal of Economic Literature*, 55(3): 985–1045.

Chiappori, Pierre-André, Bernard Fortin, and Guy Lacroix. 2002. "Marriage market, divorce legislation, and household labor supply." *Journal of Political Economy*, 110(1): 37–72.

Chiappori, Pierre-André, 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.

Conlon, John J, Malavika Mani, Gautam Rao, Matthew W Ridley, and Frank Schilbach. 2021. "Learning in the household." National Bureau of Economic Research working paper.

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 Rüschenpöhler, 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 working paper.

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.

Del Boca, Daniela, and Christopher Flinn. 2012. "Endogenous household interaction." *Journal of Econometrics*, 166(1): 49–65.

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 Fabian Kindermann. 2019. "Bargaining over babies: Theory, evidence, and policy implications." *American Economic Review*, 109(9): 3264–3306.

Doepke, Matthias, and Michèle Tertilt. 2018. "Women's empowerment, the gender gap in desired fertility, and fertility outcomes in developing countries." *AEA Papers and Proceedings*, 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 Levtov, Emmanuel Karamage, Deboleena Rakshit, Shamsi Kazimbaya, Felix Sayinzoga, Hassan Sibomana, Silas Ngayaboshya, Fidèle Rutayisire, and Gary Barker. 2023. "Long-term impacts of the Bandebereho 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, and Nils-Petter Lagerlöf. 2006. "Individual versus parental consent in marriage: Implications for intra-household resource allocation and growth." *American Economic Review*, 96(2): 304–307.

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, Rasmané 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, Alexandra Hartman, Lakshmi Iyer, and Edmund Malesky. 2026. "A field of her own: Property rights and women's agency in Myanmar." *Journal of Politics*, 88(1): 000–000.

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.

García, Jorge Luis. forthcoming. "Guaranteed Employment in Rural India: Intra-Household Labor and Resource Allocation Consequences." *American Economic Journal: Economic Policy*. forthcoming.

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 No. 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 No. 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.

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?" *Journal of Development Studies*, 57(6): 882–905.

Lewbel, Arthur, and Krishna Pendakur. 2022. "Inefficient collective households: Cooperation 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.

Lowe, Matt, and Madeline McKelway. 2025. "Coupling labor supply decisions: An experiment in India." Working paper, Dartmouth College.

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. 1997. "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.

McKenzie, David, and Susana Puerto. 2021. "Growing markets through business training for female entrepreneurs: A market-level randomized experiment in Kenya." *American Economic Journal: Applied Economics*, 13(2): 297–332.

McKenzie, David, Christopher Woodruff, Kjetil Bjorvatn, Miriam Bruhn, Jing Cai, Juanita Gonzalez-Uribe, Simon Quinn, Tetsushi Sonobe, and Martin Valdivia. 2021. "Training entrepreneurs." *VoxDevLit*, 1(2): 3.

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.

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, Ikhlaque Ahmed, Barbara Tomenson, 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." *Review of Economic Studies*, 86(3): 1332–1370.

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. 139.

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.

Wang, Shing-Yi. 2014. "Property rights and intra-household bargaining." *Journal of Development Economics*, 107: 192–201.

Warr, Peter G. 1983. "The private provision of a public good is independent of the distribution of income." *Economics letters*, 13(2-3): 207–211.

Westoff, Charles F. 2010. "Desired number of children: 2000-2008." Demographic and Health Surveys Comparative Report No. 25.

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.

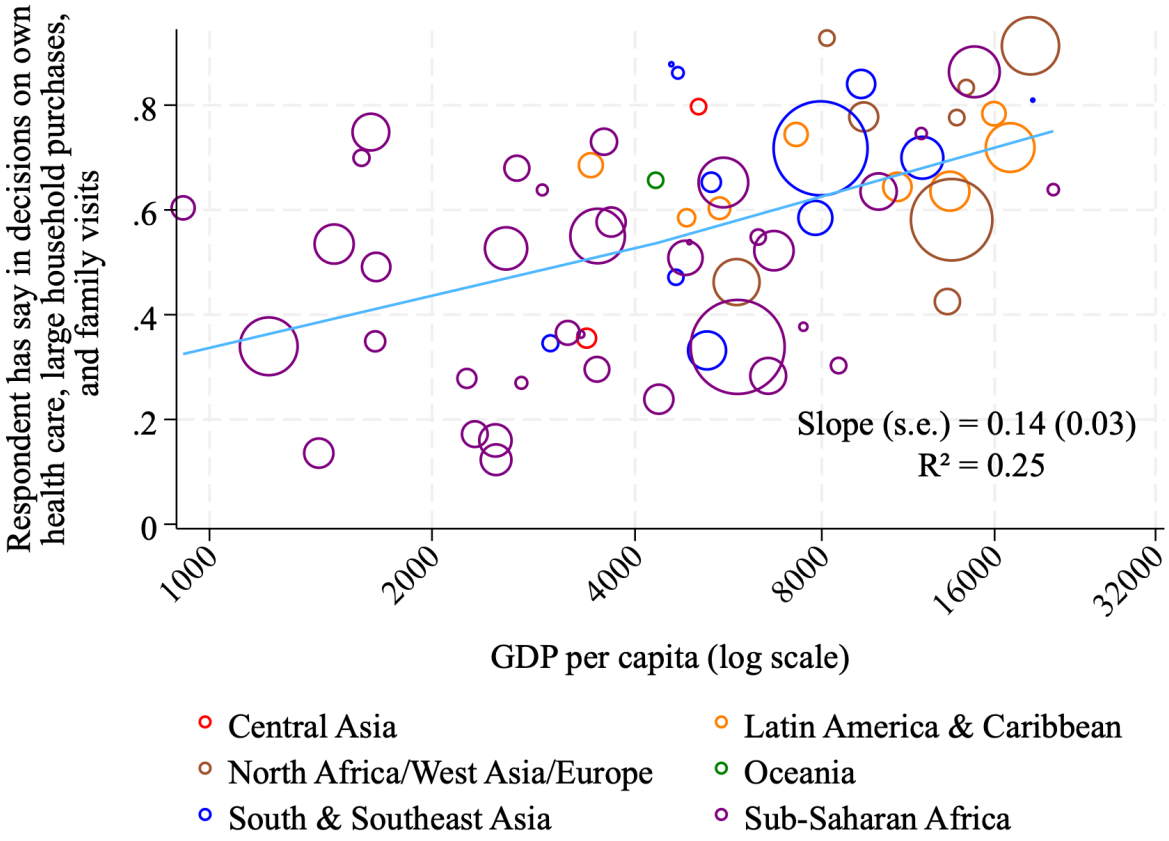
Zhang, Sally. 2024. "Hidden in plain sight: Asymmetric information and hidden income within the household." *Available at SSRN 4883384*.

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.

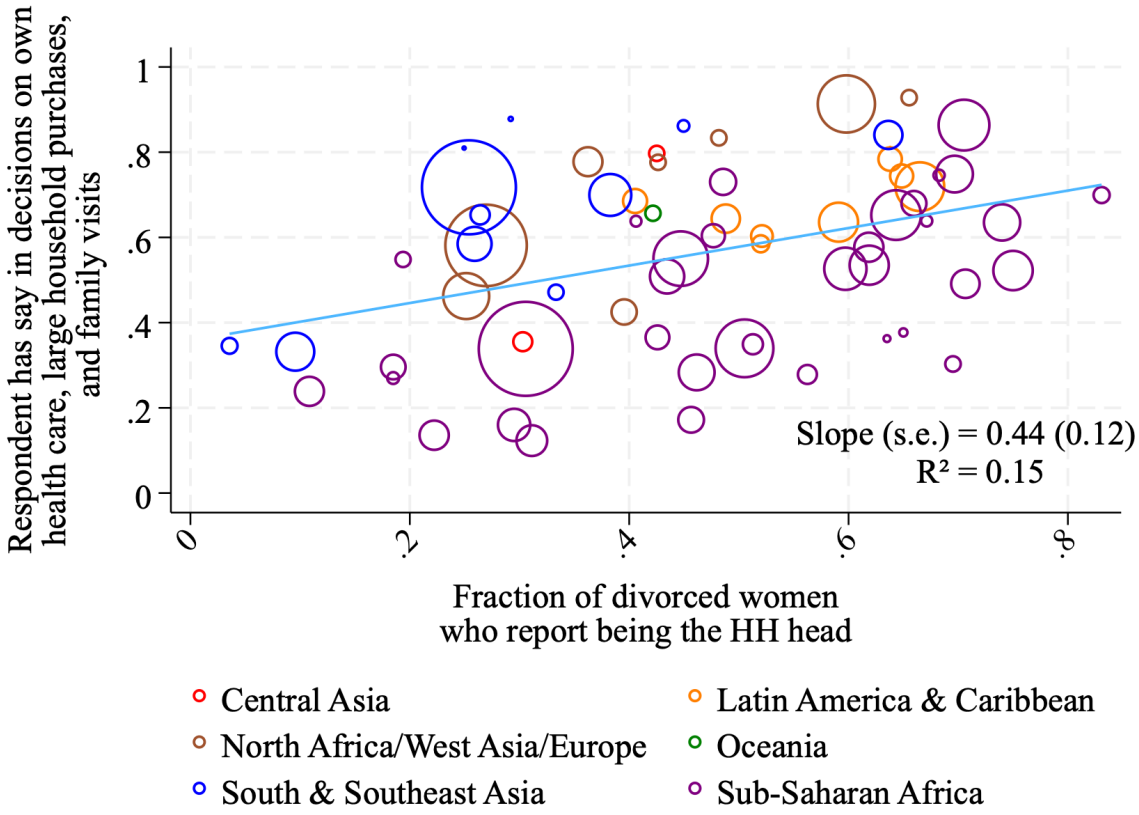
Ziparo, Roberta. 2020. "Why do spouses communicate: love or interest? A model and some evidence from Cameroon." *Unpublished mimeo.*

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. 's.e.' refers to the (robust) standard error for the estimated slope. 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. 's.e.' refers to the (robust) standard error for the estimated slope. 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.

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, Lacroix and Tiberti (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. (forthcoming)	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 (2011)	Households with at least one child under 5 years of age and farming less than 15 hectares.	46%