A Field of Her Own: Property Rights and Women's Agency in Myanmar

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Can financial incentives lead households to register land in women's names, thereby providing them with formal property rights? Can formal property ownership improve women's economic outcomes and change decision-making dynamics within the household? To investigate these questions, we take advantage of a bank lending policy in Myanmar that motivated households with land holdings above 10 acres to title the surplus land in their wives' names. We surveyed 5,068 men and women in Myanmar about land ownership, economic activity, and gendered decision-making. We find that the financial incentives provided by the bank lending policy led to increases in women's formal property ownership, but these exogenously assigned rights did not manifest broadly into greater economic empowerment or decision-making power for recipients. We provide suggestive evidence that local cultural norms are a significant constraint for women to achieve empowerment through formal land rights.

critical driver of gender inequality is women's limited access to land, especially in low-income countries: 61% of working women are employed in agriculture in the least developed nations, but women hold only 18% of global agricultural land (FAO 2022; ILO 2019). Assessing the relationship between women's property rights and economic and political power is fundamental to understanding gender inequality (Moghadam 1990). In this article, we explore whether expanding women's *de jure* (written, legal) ownership of land, a critical economic, political, and social asset, shapes women's power within the household. We study a "natural experiment," created by a bank policy in Myanmar, that provided financial incentives to subdivide land and obtain additional formal land

certificates in a woman's name. Our analysis asks two questions. First, can such incentives increase formal property ownership among women? Second, will formal ownership improve economic outcomes as well as shift power dynamics within and beyond the household?

We find strong evidence that these incentives led households to transfer formal *de jure* property rights to women: households affected by the policy were 15 percentage points more likely to have at least one land title (known as a Form 7) with the wife's name on it. These households also reported a higher number of land-collateralized loans. Despite this change in women's debt levels, we find no evidence, on average, that *de jure* property rights for women were linked to differences in

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1. We focus our analysis on the household members with primary decision-making power. This is most often a married couple, who for brevity we refer to as husband and wife.

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economic or social decision-making in the household, and our results are robust to multiple tests. However, after separating the sample geographically by local gender norms, we observe measurable effects on decision-making outcomes only in areas where norms and elite attitudes were more favorable toward women's land ownership and economic participation. This suggests that a supportive cultural and political environment is a necessary condition for property transfers to meaningfully affect gender dynamics.

This research expands on theories of women's economic empowerment that model changes in power within the household as a bargaining game (e.g., Browning and Chiappori 1998), where the allocation of assets within the household shapes bargaining power and decision-making (Iversen and Rosenbluth 2006). Building on this seminal work, our theory emphasizes an individual's legal ownership of land as potentially offering a fundamental shift in power dynamics within the household. We trace a possible theory of change that flows from women's formal property ownership, to credit access, to increases in economic returns/productivity, and finally to greater agency in household decision-making. Each of these steps is subject to important scope conditions, including consideration of social norms (Carnegie et al. 2020).

According to the Myanmar Poverty and Living Conditions Survey from 2015, women comprised only 20% of formal landholders in Myanmar, though customary rights vary (Lambrecht et al. 2023). Formal written documentation of property rights matters greatly, as evidenced by the fact that nearly 80% of respondents in our survey said that having their name on a written document is what makes the land "theirs." This makes Myanmar an ideal setting in which to study the impact of formal land transfers, relative to places with more limited documentation in sub-Saharan Africa (e.g., Huntington and Shenoy 2021). On the other hand, norms or enforcement mechanisms may be more important in determining whether formal property rights lead to changes in power within the household (Brulé 2020; Carnegie et al. 2020), and on this dimension, Myanmar is considered by most observers to perform relatively poorly. Myanmar ranked in the bottom third of the United Nations Development Programme's 2021 Gender Inequality Index and the bottom sixth of the World Economic Forum's 2023 Global Gender Gap Index. This is an important consideration for contextualizing our results more broadly.

In 2013, the Myanmar Agricultural Development Bank (MADB), the country's dominant rural lender, rationed its loans by capping the amount of land eligible for agricultural lending at 10 acres. Households owning more than 10 acres of land were incentivized to break apart plots and formally register the surplus land in the name of another household member—often the wife of the current rights holder—in order

to access additional bank credit. Employing a regression discontinuity (RD) design, we compare households with land holdings just below 10 acres (who had no incentive to transfer land rights) to those just above this threshold. Our data come from a household survey conducted between November 2019 and January 2020, during which we interviewed husbands and wives in 2,534 households across 138 village tracts of the Ayeyarwaddy region in southern Myanmar. We collected information from both partners in each household on a wide range of demographic and economic outcomes, as well as household decision-making processes, perceptions of agency, social norms, and—through a demand elicitation exercise—women's willingness to pay for monetary autonomy.

We highlight two key findings with implications for public policy and future research. First, as predicted, the bank lending policy leads to an increase in formal property rights for women and subsequent change to their economic position and financial engagement in the household (specifically in the form of loans taken out in women's names). Second, despite these changes in *de jure* power, women's earnings and decision-making ability within the household do not change. Further analysis suggests that such changes are only likely to occur in places where local norms are supportive of women's land ownership and decision-making roles. Future work should therefore focus on designing policies that both encourage inclusive property rights and seek changes to intrahousehold power dynamics.

Our work contributes to the literatures on the formalization of property rights, the empowerment of women, and the intersection of public and private power (Cheema et al. 2023). An extensive literature in economics emphasizes the importance of formal *de jure* property rights for investment and labor market decisions (de Soto 2001; Field 2007; Galiani and Schargrodsky 2010). In most patriarchal societies, ownership and control of immovable property such as land and houses is restricted to men (Agarwal 1995), and spouses are often unable to have their names included on household property and land titles (Brown 2003; Savath, Fletschner, and Santos 2015). Our setting provides a unique opportunity to study the consequences of assigning property rights specifically to women.

If women obtain formal property, it could lead to empowerment, defined as the ability to make decisions about one's own life (Akter et al. 2017), with implications both within and outside the household (Meinzen-Dick et al. 2019). These benefits may follow directly from the economic returns to formal property rights (Agarwal 1997) or from noneconomic changes that nevertheless shape the position of women in the household (Harari 2019; La Ferrara and Milazzo 2017; Panda and Agarwal 2005) and their subsequent ability to exercise political preferences (Cheema et al. 2023). Previous studies on

women's land rights have focused on changes in land tenure laws, registration of informally held land, legal consultation on land registration, and encouragement of joint titling programs. Many of these find positive effects on measures of market engagement or empowerment (Ali, Deininger, and Goldstein 2014; Brulé and Gaikwad 2021; Holden, Deininger, and Ghebru 2011; Menon, Van der Meulen Rodgers, and Kennedy 2017; Wiig 2013), but others document neutral or even deleterious consequences (Bhalotra, Brulé, and Roy 2020; Roy 2015).2 In contrast, we examine a setting in which households have a financial incentive to title land in women's names, without a change in the overall legal system and without conferring new property rights to the household as a whole. Such voluntary changes could theoretically improve women's empowerment more than mandated legal changes—which could engender backlash—but as our findings demonstrate, there is a limit to the impact that can be expected from this type of voluntary property transfer.

PROPERTY RIGHTS AND RURAL FINANCE

All land in Myanmar is owned by the state, but the central government allocates long-term usage rights—which can be exchanged, sold, and mortgaged—and therefore are akin to private property rights.³ We refer to these usage rights as "property rights" for simplicity.

The two documents that confer the strongest property rights are the land grant for urban settings and the Form 7 for agricultural settings (such as the Ayeyarwaddy region, where our data were collected). The Form 7 is often referred to as a land-use rights certificate to signify that it provides tenure security (Mark 2016). While it is formally limited to agricultural work, nonfarm activities often take place on Form 7 land. In a recent survey of businesses with Form 7s, only 4% listed their primary sector as agriculture, with the rest listing manufacturing, retail trade, and services (Malesky, Dulay, and Peltovuori 2020).⁴

Myanmar's colonial history, as well as intermittent conflict between the state and armed groups in certain regions, has led to the uneven proliferation of documented property rights throughout the country. In addition to land grants and Form 7s, households may hold other land documents (such as Forms 105, 106, 15, or 39) that do not have the same exchange or mortgage privileges and cannot be considered a secure title (UN Habitat 2019). It is also common in Myanmar for families to hold Form 7s with the names of previous owners, together with an informal contract acknowledging the change of ownership. This informal contract, however, is not officially recognized as a tenure right by government authorities; formal transfer of the Form 7 is required to secure these rights (Mark 2016).

Following several decades of military rule, Myanmar capped a gradual transition to democratic governance when the National League for Democracy (NLD) won the 2015 parliamentary elections under the leadership of Nobel Laureate Aung San Suu Kyi. In January 2016, the NLD-controlled parliament approved a new National Land Use Policy following a public consultation process that, while far from comprehensively fair and inclusive, included domestic businesses, foreign investors, nongovernmental organizations, and regional/ethnic political groups. The main goal of the new Land Use Policy was to harmonize existing land laws and guide the development of new land. The policy clarified the legal rules for obtaining Form 7 rights, registration of those rights in a cadastral map, and utilization of rights for exchange and mortgage (Mark and Belton 2020).

As a result of legislative attempts to address legal barriers to women's land access and co-ownership of spousal property, there was no formal prohibition on women's sole or joint registration of a Form 7 in the 2016 National Land Policy (Mark 2016). In practice, however, joint registration was limited and few women received documented rights to agricultural land; 80% of farmland certificates (Form 7s) had only a man's name listed by 2016 (Lambrecht et al. 2023; Namati 2016). In many cases, cultural norms about a woman's role in Myanmar society limited equal access to formal property rights and, ultimately, agricultural decision-making (Akter et al. 2017; Carnegie et al. 2020). In our survey, 13% of respondents from landed families expressed the view that only men's names should be included on land documents (since men are the primary decision-makers), and a similar fraction of respondents expressed the view that having two names on a land certificate would lead to conflicts between couples. These attitudes were also shared by local leaders, as 22% of officials in our survey expressed the view that women should never make decisions about household plots and only 50% believed that a woman's name should be included on land documents.

The Myanmar Agricultural Development Bank

While private banks do exist in Myanmar, the dominant source of agricultural lending across the country is the

^{2.} Studies have also examined other economic interventions targeted at women, including cash transfers, microfinance initiatives, financial access, and business training programs (Almas et al. 2018; Ashraf et al. 2020; Duflo 2003; Field et al. 2021).

^{3.} In some cases, these usage rights can be rescinded by the local authorities for eminent domain or when the lease is violated by the user (Rhoads 2018).

^{4.} According to the 1953 Land Nationalization Act, Article 39, to change a parcel from "agricultural" to "nonagricultural" land, one must get permission from the State/Region Peace and Development Council.

MADB, which accounted for between 60% and 90% of bank lending in rural parts of the country in 2013 (Win 2013). The MADB is a government-owned entity, which is required by a 1997 statute to return 75% of its profits back to state coffers. In 2020 (prior to the 2021 military coup), the MADB operated 206 branches throughout the country and served over two million customers.

To obtain an MADB loan for a given plot, a potential recipient needed to present evidence of a Form 7, verification of a savings account at the MADB, proof of participation in a lending group,⁵ and approval by a village loan screening committee (Aung, Nguyen, and Sparrow 2019). Prior to the 2021 coup, the average interest rate on MADB agricultural loans was about 0.71% per month, or approximately 8.5% per annum (Luna-Martinez and Anantavrasilpa 2014). By comparison, the benchmark market interest rate in Myanmar from 2011 to 2019 was 10%.⁶ Strict lending criteria, including the Form 7 requirement, ensured very high MADB repayment rates, so while the MADB provided well over 60% of total rural credit in the country, they accounted for less than 35% of outstanding loans.

Loan sizes increased incrementally with plot size, but only up to a limit. Loan recipients received 100,000 Myanmar Kyat (MMK)—about \$100—per acre for paddy production (and MMK 20,000 for other crops), up to a maximum of 10 acres. Any plot larger than this was still only entitled to the maximum loan of MMK 1 million, and additional loans required a separate Form 7 in the name of a different party. Aung et al. (2019) verify the immediate effect of this policy, showing that farms just above the 10-acre threshold received loans that were \$18-\$24 per acre less than for those just below the threshold—up to a 25% reduction in loan size. The authors do not test for differences in plot size, though they do find slightly higher household income growth above the threshold. Critically, they find no difference in the agricultural yield or income from the sale of rice on either side of the threshold (Aung et al. 2019).

The potential for increased access to credit created a clear financial incentive for families with household plot sizes greater than 10 acres to divide the land within the household, register the additional land with a new Form 7, and apply for an additional loan under the new household member's name. According to our discussions in Myanmar and anecdotal conversations, many men decided to put land in their wives' names for this purpose, as it was logistically simple and guaranteed that the asset would remain in the immediate family.

CONCEPTUAL FRAMEWORK

Many empirical studies have verified that household decisionmaking does not follow a "unitary" model, in which a single decision-maker maximizes the utility of all household members (Chiappori et al. 2022; Lechene, Pendakur, and Wolf 2022; Rangel and Thomas 2019). Current theoretical frameworks seek to model intrahousehold power dynamics and their implications for economic and political outcomes (Browning and Chiappori 1998; Chiappori 1992; Iversen and Rosenbluth 2006), a key insight of which is that an individual's position within the household and their resultant ability to make decisions is in part dependent on their "outside option" (i.e., their best alternative to remaining in the household). Recent work has shown that giving women control over their finances enhances their outside option, leading to changes in household bargaining and, ultimately, their ability to influence household decisions (Deere and Doss 2006; Field et al. 2021; Meinzen-Dick et al. 2019).

Changes to the outside option—and consequently changes to women's bargaining power—can be influenced in many ways, and in our context, we focus on the acquisition of state-provided, written, *de jure* property rights. In particular, we highlight two important features of *de jure* rights that might strongly affect women's empowerment. First, *de jure* rights may lead to higher levels of investment and create new economic opportunities for rights holders (Field 2007). Second, because *de jure* rights signify an interaction between an individual and the state, their transfer could lead to more interactions with state officials and a greater presence in public spaces that enhances the impact of any economic benefits.

We define empowerment as the ability to make decisions about one's own life (Akter et al. 2017; Kabeer 1999), our primary measure of which is based on self-reported accounts of women's involvement in various dimensions of household decision-making. Scholars of women's empowerment have recently emphasized the importance of "critical consciousness" of an individual who moves from being an object to a subject (with agency) who takes power (Donald et al. 2020). Previous work has found that households in which both partners agree on the woman's decision-making power experience significantly better development outcomes, compared to households where the woman is only allowed to exercise decision-making in a circumscribed way (Ambler et al. 2021; Bussolo, Sarma, and Williams 2021). We operationalize this concept in a secondary measure of women's empowerment that compares women's and men's responses on the same dimension of decision-making. (The construction of both measures is described in more detail in app. A.)

^{5.} This condition was no longer necessary at the time of our survey.

^{6.} See https://tradingeconomics.com/myanmar/interest-rate.

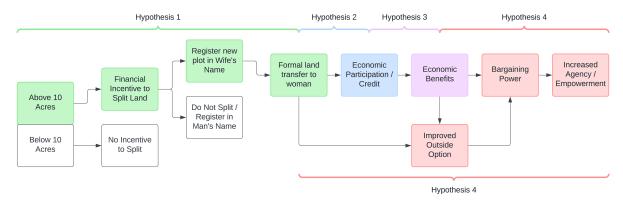


Figure 1. Conceptual framework. Compared to women in unexposed households, women in households exposed to financial incentives to split their land will report more property rights in their name (hypothesis 1); higher levels of economic participation, including more loans in their name (hypothesis 2); increased economic benefits, including agricultural income (hypothesis 3); and higher levels of empowerment, including more participation in household decision-making (hypothesis 4). Hypotheses 1 and 2 represent primary outcomes, whereas hypotheses 3 and 4 represent secondary, downstream outcomes.

Figure 1 illustrates our theory of change, for which we now discuss the scope conditions that each hypothesis depends upon. We begin with the initial argument:

H1. The bank policy will induce men to register land in their wives' names.

This requires the basic assumption that current landowners are willing to make a large asset transfer within the household, which may not be the case (see Mani 2020). It also assumes, should this asset transfer take place, that it will be made to a woman. Although we have heard anecdotally from colleagues in Myanmar that this is common, and—in the case of married couples—it seems that an asset transfer between spouses carries the least risk, there will undoubtedly be some households that choose beneficiaries that are men (e.g., sons or brothers).

H2. This transfer of *de jure* property rights should lead to more economic participation for women—as measured by the number of land-collateralized loans registered in their name.

But note that this depends on how well the banking system functions and whether titled land is an effective collateral for agricultural loans (e.g., Do and Iyer [2008] find no increase in bank lending following formal land titling).

H3. These property rights should then also lead to economic benefits for the holder, which we define as agricultural income generated from a given plot and any nonagricultural revenue generated by the landholder.

However, gaining access to credit would affect income only if credit constraints are the main barrier to agricultural productivity and if women are successfully able to deploy this additional capital. Such a change may not happen if there are other constraints to generating economic returns (e.g. knowledge or technology) or if there are barriers to women's economic participation unaffected by property rights. For example, de Mel, McKenzie, and Woodruff (2009) find that providing credit has a large effect on enterprises owned by men but no effect on those owned by women.

H4. If property rights create economic benefits for women, we also expect an increase in bargaining power within the household, leading to empowerment.

However, even in the absence of functioning credit markets or the existence of nonfinancial barriers to women's economic activity, it is possible that formal land rights affect women's empowerment directly—by increasing the credibility of the threat of leaving the marriage. Because legal ownership of a valuable asset confers more leverage and financial independence, we may expect women who own land to be unconditionally more involved in household decision-making. This means that hypothesis 4 can hold even if hypotheses 2 and 3 do not.⁷

Finally, social norms may play an important role in determining the relationship between obtaining rights and the outcomes we predict above. For example, even if husbands want to transfer land, disapproving local officials could prevent

^{7.} A fifth hypothesis, concerning the effect of women's land ownership on political knowledge, attitudes, and participation, is described and tested in app. F.

them from doing so. Where transfers are made, social norms may also limit the extent to which women can take advantage of the economic benefits or changes to their outside option. Our data indicate a prevalence of gender-biased views among land officials in Myanmar, which could make ownership changes difficult, and the relatively low levels of gender equality in the country suggest an environment in which property rights may not always lead to economic or social gain for women.

DATA AND MEASUREMENT

Our main source of data is a household survey conducted in the Ayeyarwaddy region of Myanmar from November 2019 to January 2020.8 The survey was conducted across 138 randomly selected village tracts in 14 out of 26 townships in the region. The sample represents rural households in a largely Burmese-speaking region of Myanmar, where women historically have had little control over land. Townships were selected as potential sites based on the availability of vacant land for a planned land-to-the-landless program.9

We surveyed 2,534 households across the 138 village tracts. Since we were interested in coregistration and other intrahousehold dynamics, our sample was restricted to households where both husband and wife were available; single-headed households were excluded. The survey team was directed to survey at least two households with land holdings greater than 10 acres in each village tract, and our sampling frame also included a local leader—either the Village Tract Administrator (who oversees land issues), the Village Leader, or an influential elder—and their spouse. The majority of survey questions were asked separately to both partners, enabling a comparison of their responses and assessment of each partner's independent knowledge of household activities.

Our main estimation sample consists of 1,657 households, in which both the man and the woman report nonzero ownership of land (landless households are excluded from our analysis). The median land holding reported in our estimation sample was 8 acres, and the vast majority (88%) of households report possession of at least one Form 7, which represents formal legal title to agricultural land. Women's formal claims to land assets are very low in this setting: only 9.4% of households have any Form 7 that includes the wife's name, according to women's responses (men report this figure at 8.9%), and only 5.8% of households report any plot of land with the wife's name exclusively on the Form 7. Our main outcome variables measure access to loans, patterns of

agricultural and nonagricultural economic activities, and women's empowerment. See appendix A for details regarding the calculation of these variables and full summary statistics.

EMPIRICAL STRATEGY

Simply comparing outcomes across households in which women have formally recognized property rights and those in which they do not is likely to yield biased estimates. For instance, if only the most economically productive or otherwise empowered women manage to obtain formal titles to land, then our estimated association will overestimate the effects of formal land titling. On the other hand, if other family members are willing to allow land to be titled in a woman's name only if she is otherwise disempowered within the household, then this comparison would underestimate the strength of the relationship. What we need for valid identification is a factor that leads to a greater probability of formal titling in a woman's name, but that is not correlated with the woman's own characteristics. Such a factor is provided by the discontinuity built into the MADB's lending policy.

As described earlier, households owning more than 10 acres of land have a clear financial incentive to divide their land into multiple plots and register these under the name of a different member of the household (which may be the wife) to obtain additional loans from the MADB. As stated in hypothesis 1, we therefore expect households with land holdings greater than 10 acres to report a larger number of plots, a larger number of Form 7s, and a larger number of Form 7s registered in a woman's name. We can also examine whether outcomes related to economic activities and women's empowerment are systematically different in households with land holdings above 10 acres (hypotheses 2-4). However, since households with more than 10 acres of land are also likely to be different than those with less than 10 acres on other confounding dimensionsand these differences are likely to increase as we move further from the 10-acre threshold in either direction—we cannot trust broad comparisons between large and small landholders.

To this end, we examine the impact of financial incentives using an RD design to determine whether there is a sudden sharp increase in the land-holding structure for households that are just above the 10-acre threshold relative to those that are just below. Specifically, we run the following regression specification:

$$Y_h = \alpha + \beta AboveThreshold_h + f(Landholding_h) + \epsilon_h,$$
(1)

where Y_h is an outcome measure for household h, Landholding_h (the "running variable") is the total land owned by household h (in acres) and $AboveThreshold_h$ is an indicator

^{8.} See app. C for a detailed ethics statement, which guided our survey research

^{9.} Following the military coup of February 2021, the status of this program is uncertain.

that equals one if the household owns more than 10 acres of land. f() is a function that controls for any continuous relationship between total land holdings and our outcomes of interest so that we are only identifying effects that vary discontinuously at the same threshold as the bank lending policy. As has been argued in recent work, RD analyses should primarily focus on points close to the discontinuity (Stommes, Aronow, and Savje 2021), so we restrict our sample to a narrow bandwidth of land holdings around the 10-acre discontinuity and use a local linear polynomial for f(). To calculate optimal bandwidths, we use the algorithm from Calonico, Cattaneo, and Titiunik (2014), which optimizes the trade-off between greater precision obtained from a larger bandwidth (that retains more observations for estimation) and greater bias generated by observations further away from the discontinuity. 11

In appendix D, we present several tests of the validity of our RD strategy. First, we verify that other covariates do not show discontinuities at the 10-acre threshold. Second, we assess the smoothness of the "running variable" at the threshold and conclude that the observed bunching does not reflect strategic changes to land holding in response to the bank policy. Third, we test whether we have sufficient statistical power to identify significant effects. To ensure that underpowered estimates, where they exist, are not responsible for null results, we implement a randomization inference (RI) approach as described in Cattaneo, Frandsen, and Titiunik (2015), in which inference is based on the sharp null hypothesis that each individual treatment effect is zero. Compared to the standard hypothesis that the average effect is zero, the sharp null is easier to reject and thus provides a useful robustness check in RD models with relatively few observations. In the tables, RI p values are reported beneath each regression result in addition to the RD robust standard errors.

REGRESSION RESULTS

We present results of the RD analysis below, examining each of our hypotheses in turn. We discuss how the MADB's financial incentives to transfer property affect measures of land rights, economic outcomes, and women's empowerment.¹²

Land rights

Our results provide empirical support for hypothesis 1. As expected, having more than 10 acres of land results in a significantly higher number of plots, consistent with the hypothesis that the MADB lending policy incentivizes plot divisions within the household (table 1, column 1). Households above the 10-acre threshold also have more Form 7s, which are required for these plots to be used as collateral for MADB loans (table 1, column 2).

Most importantly, households above the threshold are 15 percentage points more likely to have at least one Form 7 with the wife's name on it. Since the Form 7 is the single legally recognized document of land ownership, this result indicates a formal transfer of property rights. In other words, women above the 10-acre threshold are more likely to have legally documented land-use rights. Almost all of this increase is driven by Form 7s with the woman's name registered exclusively (signifying sole control), as would be required for the lending policy (table 1, columns 3 and 4). The magnitude of these coefficients implies that households above the threshold own one additional plot on average and that only one-fifth of the additional Form 7s are registered in the woman's name (table 1, columns 2 and 3).

These results are also presented graphically in figure E.1, where we show binned outcome values on both sides of the 10-acre threshold, with a quadratic relationship fit separately to either side. The graphs show a clear upward jump to the right of the 10-acre threshold for all measures of land holdings and property rights.

Economic outcomes

Our analysis also supports hypothesis 2. We find that women in households directly above the 10-acre threshold report a higher number of land-collateralized loans in their name, compared to those in households below the threshold (table 2, column 1); this result is corroborated by men's reports (table E.1, column 5). Both men and women also report a higher number of loans in the husband's name (table 2, column 2; table E.1, column 6), but this should be expected given that the lending policy does not uniquely encourage transfers to women. Combining the coefficients on men's and women's loans indicates that households above the 10-acre threshold have one additional loan on average, consistent with the table 1 finding of one additional plot for these same households. Thus, while the lending policy does incentivize land transfers and increased borrowing, only about one-fifth of these transfers benefit women directly. Again, this is consistent with our finding from table 1 that only one-fifth of Form 7s are being registered in a woman's name.

Our coefficient estimates are also bias-corrected using a quadratic polynomial (unless otherwise noted), as described in Calonico et al. (2014).

^{11.} Note that the optimal bandwidth is not constant across outcomes due to differences in the distribution of each variable.

^{12.} All results in the main text are estimated from women's responses. Estimates derived from men's responses are generally larger in magnitude (and noisier), though the two are rarely statistically different from one another. Table E.1 presents robust, bias-corrected RD estimates for men's responses, as well as less conservative, traditional RD estimates.

Table 1. Financial Incentives Lead to Greater Formal Property Rights for Women

	(1) Number of Plots with Nonmissing Plot Size	(2) Total Number of Form 7s in HH	(3) Household Has at Least 1 Form 7 in Wife's Name	(4) HH Has at Least 1 Form 7 in Wife's Name (Exclusive)	
Above 10 acres	.962*** (.283)	.751** (.365)	.153* (.087)	.150* (.085)	
RI p value	.000	.000	.000	.000	
Control mean	1.446	1.983	.069	.055	
Observations	404	353	428	427	
Bandwidth	2.133	2.402	2.625	2.599	

Note. Coefficients represent the robust RD effect estimates—with a cutoff defined at 10 acres—for women's responses. Robust standard errors are shown in parentheses, and the dependent variable for each specification is indicated in the column header. "RI p value" indicates alternative p values derived from the randomization inference procedure. "Control mean" is defined as the average of the dependent variable for observations between the lower limit of the RD bandwidth and RD cutoff, while "observations" indicates the total number of observations that fall within the chosen bandwidth. "Bandwidth" reports the size of the RD bandwidth (in acres), as calculated by the Calonico et al. (2014) optimal bandwidth procedure. HH, household.

Despite increased access to formal sector loans, we do not find any increases in economic revenue, as would have been predicted by hypothesis 3. We examine the total revenue generated from plots with the wife's name on the associated Form 7, as well as the total revenue generated from all household plots (table 2, columns 3 and 5). We find no significant differences between households with more than 10 acres of land and those with less. On the other hand, we do find a significant decline in total nonagricultural revenue

earned by the wife, suggesting that access to land-collateralized loans (which are reserved for agricultural use) may lead to greater focus on the agricultural sector, at the expense of other types of economic activity. Figure E.2 presents lending and income results graphically.

Women's empowerment

The results thus far confirm that the MADB lending policy incentivized a transfer of property rights and increased

Table 2. Financial Incentives Affect Access to Credit but Do Not Increase Revenues

	(1)	(2)	(3)	(4)	(5)
	Number of Loans in	Number of Loans in	Log Total Agricultural	Log Total Non-	Log Total Agri-
	Wife's Name (Land	Husband's Name	Revenue from Plots with	agricultural In-	cultural Revenue
	Collateralized)	(Land Collateralized)	Wife's Name on Form 7	come from Wife	from All Plots
Above 10 acres	.170*	.830***	610	-2.244*	1.660
	(.097)	(.270)	(4.560)	(1.254)	(1.218)
RI p value	.000	.000	.394	.000	.040
Control mean	.032	.814	10.494	2.253	11.626
Observations	404	404	78	434	574
Bandwidth	2.188	2.163	6.161	2.945	3.362

Note. Coefficients represent the robust RD effect estimates—with a cutoff defined at 10 acres—for women's responses. Robust standard errors are shown in parentheses, and the dependent variable for each specification is indicated in the column header. See table 1 notes for full details.

^{*} *p* < .10.

^{**} *p* < .05.

^{***} *p* < .01.

^{*} *p* < .10.

^{**} *p* < .05.

^{***} *p* < .01.

borrowing by women. Though we do not see effects on downstream economic outcomes, we now examine whether formal property rights and credit access lead directly to higher levels of women's decision-making within the household. Overall, we do not find any significant effects on these measures, falsifying hypothesis 4. Table 3 shows the RD results for all measures of women's agency in agricultural decisions. Women in households with more than 10 acres of land measure only 0.1 standard deviations higher on the decision-making index, a gap that is statistically insignificant. We also find no significant increases in women's agency as reported by their husbands, and a negative but also insignificant change is found in the probability of women "taking power" within the household.

Similarly, we find no significant effects on women's agency regarding expenditure decisions (table E.2), which is not surprising given the lack of effects on agricultural decision-making, where we expected effects to be more likely ex ante. The graphical representation of all empowerment outcomes can be seen in figures E.3 and E.4. Consistent with these null results, we also do not find any impact of formal property rights on the demand for autonomy, as measured by our demand elicitation exercise (app. B), nor do we find any effects on the political knowledge or views held by women (app. F).

Robustness checks

We conduct three robustness checks on the interpretation of all primary results outlined above. First, we show that results are not being driven by differences between rounders and nonrounders near the discontinuity. Second, we show that our findings are unique to the policy-relevant threshold of 10 acres and are not replicated at other nearby cutoffs. Finally, we discuss issues of power and the implications of the RI tests.

As discussed in appendix D, we observe differences between individuals that report exactly 10 acres of land and those that report precise amounts (Specifically, the former come from significantly larger households and are significantly less educated than the latter.). To the extent that we believe at least some of those who report exactly 10 acres are rounding down, and therefore incorrectly assigned to the control group, we may be concerned that education and household size are confounding treatment effect estimation. As a simple check against this concern, we report all regression results from an alternative specification that includes both household size and secondary education rate as control variables (table E.3). These results are very similar to our baseline estimates, providing reasonable assurance that our findings are not driven by differences between rounders and precise reporters.

Another potential objection to our analysis is that families with large plots may simply be more likely to subdivide. Such a tendency would call into question the unique incentive caused by the MADB policy and the validity of the counterfactual assumption we make about households directly below the 10-acre threshold. In figures E.5 and E.6, we test the validity of the 10-acre cutoff for both property rights and loan outcome variables by rerunning the RD specification at alternative cutoffs. The resulting coefficient plots demonstrate that the effects presented in the main analysis (tables 1 and 2) are most prominent at the 10-acre threshold. With the

Table 3. Financial Incentives Are Unrelated to Women's Agency in Agricultural Decisions

	(1) Index of Women's	(2) Index of Women's	(3) Agricultural	(4) Agricultural	(5) Agricultural
	Agency in Agricultural Decisions, Wife's Response	Agency in Agricultural Decisions, Husband's Response	Decisions Index: Wife Takes Power	Decisions Index: Husband Gives Power	Decisions Index: Wife and Husband Agree
Above 10 acres	.099	.444	503	.212	.564
	(.177)	(.430)	(.343)	(.224)	(.527)
RI p value	.268	.038	.000	.000	.000
Control mean	.077	.424	.636	.069	.330
Observations	580	403	271	267	271
Bandwidth	3.659	2.333	1.983	1.848	1.987

Note. Coefficients represent the robust RD effect estimates—with a cutoff defined at 10 acres—for women's (column 1) and men's (column 2) responses. (Columns 3–5 combine men's and women's responses.) Robust standard errors are shown in parentheses, and the dependent variable for each regression is indicated in the column header. See table 1 notes for full details.

exception of marginally positive effects on the number of plots at the 5- and 7-acre cutoffs, there are no other significant effects on outcomes related to property rights for all integer cutoffs between 5 and 15 acres. We also document positive effects on men's borrowing at the 5- and 12-acre cutoffs, but the only significantly positive coefficient on women's borrowing is observed at 10 acres. Thus, while the main RD results for two outcomes are replicated at cutoff values other than 10 acres, these do not include any outcomes relating to women specifically. There may be some unrelated reason for the jump in men's borrowing at 5 acres, but the MADB policy mechanism we have identified—and its effect on intrahousehold property transfers—appears to be unique to the 10-acre cutoff. In figures E.6-E.8, we reproduce the same plots for all downstream economic and women's agency outcomes as well, showing similar null effects for most alternative cutoffs above and below the policy-relevant 10-acre threshold.

Finally, one might also be concerned that the null results reported for downstream outcomes may simply be the result of underpowered inference due to small sample size. The power calculations shown in table D.2 indicate that we should expect about 50% of regressions to be sufficiently powered to detect effect sizes of at least 0.8 standard deviations for women's responses (at 80% power). Ex post, comparing results from the RI tests with standard inference, we find agreement in nine out of the 13 women's outcomes presented in tables 1-3greater than the 50% prediction. In the four cases of disagreement, we fail to reject the standard null hypothesis while rejecting the sharp null of the RI test, which is an indication that regressions are not sufficiently powered to detect average treatment effects (since the sharp null is easier to reject). While this may be a concern for the final three outcomes related to women's agency in agricultural decisions (table 3, columns 3-5), we observe a precise zero effect in the primary decision-making index (table 3, column 1). Though we cannot rule out the possibility that any one of our null results is underpowered, we take this as evidence that the majority of results are precisely estimated and that the conclusions of our analysis are not biased by small sample issues.

Heterogeneity analysis

As discussed in our conceptual framework, the fact that we observe an increase in women's land ownership—but no corresponding change in empowerment/agency—may be a product of the cultural environment in which these changes take place. In other words, if the prevailing social norms in our sample area are not favorable to progressive views on gender roles, then *de jure* tenure rights may not have *de facto* significance and could explain the failure to validate hypotheses 3 and 4.

To investigate this empirically, we rerun the regressions in table 3 on separate subsamples of the data, split into regions of "low" and "high" social norms as measured by two separate survey questions administered to the local leader: (1) "Do you think it is right for women to make decisions about their household's farmland?" (2) "Do you think it is your responsibility to support more women in your village (village tract) to acquire land tenure?" Leaders who selected "always" or "sometimes" in response to question 1 are coded as having "high beliefs," whereas those who selected "rarely" or "never" are coded as having "low beliefs." Similarly, leaders who responded "yes" to question 2 are assigned to a "high practices" category, whereas those who responded "no" are assigned to "low practices."

Table 4 reports the heterogeneous effects on women's agency for areas with low and high levels of these beliefs and practices.¹³ As predicted, the full sample results obscure important differences across cultural contexts. In villages where the local leader holds "high beliefs," we see that women in households above the 10-acre threshold score significantly higher on the agricultural decisions index relative to those just below. We also observe a positive effect in villages where the local leader maintains "high practices." On the other hand, in villages reflecting low levels of either beliefs or practices, we document the same null effects as observed across the full sample. This heterogeneous effect is not observed for the remaining four outcomes, however, as these are noisier measurements of agency.

Although sample size constraints prevent us from exploring the question fully, these results strongly suggest the importance of local norms in determining how *de jure* land transfers shape intrahousehold power dynamics. In areas where prevailing norms cut against women's participation in agricultural decisions (low beliefs) or areas in which leaders do not personally support growth in women's land tenure (low practices), legal ownership of land through the Form 7 has no teeth. Within areas in which local norms are conducive to women's decision-making and/or local leaders support pathways to women's land ownership, the Form 7 appears to confer more *de facto* power to its holder.

CONCLUSION

In this article, we use the (unintended) consequence of a bank lending policy as a means to examine the effects—on economic and social outcomes—of an exogenous transfer

^{13.} The "beliefs" and "practices" measures have a low correlation coefficient of 0.136, indicating that the questions capture two distinct dimensions of local norms. This helps explain the difference in magnitude observed between the two heterogeneous effects in table 4.

Table 4. The Effect of Financial Incentives on Women's Agency in Agricultural Decisions Depends on Local Norms

	(1) Index of Women's Agency in Agricultural Decisions, Wife's Response	(2) Index of Women's Agency in Agricultural Decisions, Husband's Response	(3) Agricultural Decisions Index: Woman Takes Power	(4) Agricultural Decisions Index: Husband Gives Power	(5) Agricultural Decisions Index: Wife and Husband Agree
Panel A: Beliefs					
Low leader beliefs	118 (.178)	.827 (1.187)	709*** (.166)	.408 (.576)	.260 (.584)
Control mean	.003	.586	.449	.118	.275
Observations	184	133	93	91	93
Bandwidth	3.659	2.333	3.659	3.659	3.659
High leader beliefs	.802***	1.011	452	046	1.728
	(.222)	(.660)	(.751)	(.047)	(1.647)
Control mean	.102	.392	.719	.042	.347
Observations	338	235	157	155	157
Bandwidth	3.659	2.333	3.659	3.659	3.659
Panel B: Practices					
Low leader practices	199	1.633	596	.001	1.021
	(.272)	(1.654)	(.722)	(.003)	(1.033)
Control mean	.042	.971	.649	.135	.243
Observations	101	72	45	45	45
Bandwidth	3.659	2.333	3.659	3.659	3.659
High leader practices	.482*	.852	574	.257	.927
	(.286)	(.761)	(.499)	(.441)	(1.019)
Control mean	.069	.315	.615	.050	.342
Observations	459	319	215	211	215
Bandwidth	3.659	2.333	3.659	3.659	3.659

Note. Coefficients are derived from the same regressions presented in table 3 but estimated for separate subsamples of the data. See text for a description of the criteria used to split the sample into "high" and "low" categories. Households from 16 (6) village tracts are dropped from the panel A (B) sample, as their respective leader did not provide an answer to the first (second) question.

of formal property rights to women, contributing to our understanding of how they gain power within the household. Many anti-poverty programs transfer assets or income to women (e.g., microfinance programs often target women borrowers) and either explicitly or implicitly attempt to confer a more prominent role in decision-making. Our research explores what happens when women instead gain access to *de jure* power as the result of a government

We show that the bank incentive does induce households to give women legal control over land, often the family's most

policy, moving beyond externally financed, donor-driven

programs that may not be sustainable.

important asset. However, *de jure* control over real assets does not lead to increases in women's economic activity, decision-making power, or autonomy—at least not over relatively short time periods. As has been documented in other work, cultural barriers to women's participation in household decision-making may constrain the impact of property transfers (Akter et al. 2017; Carnegie et al. 2020), and we see suggestive evidence of this in our data. After splitting the sample into regions of "high" and "low" gender norms, we observe positive effects on women's decision-making only in "high" areas. That we see evidence of heterogeneity at all, even within our own limited sample, demonstrates the importance of cultural

^{*} p < .10.

^{**} *p* < .05.
*** *p* < .01.

context in studying the gender impacts of property rights. We would be interested to see our methods replicated in other parts of the world, where existing institutions may be more supportive of women's agency within the household.

Our findings suggest that efforts to change power dynamics in the household must move beyond simple economic interventions. Even transferring legal control of large assets directly to women is insufficient in our context. Consequently, programs that focus exclusively on legal or economic empowerment overlook the entrenched politics that limit a woman's role in decision-making. In order to help evaluate the trade-offs that both men and women face when power is redistributed within the household, future research should explore the costs and benefits of changing the political and social dynamics of land ownership.

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REFERENCES

- Agarwal, Bina. 1995. A Field of One's Own: Gender and Land Rights in South Asia. Cambridge South Asian Studies. Cambridge University Press.
- Agarwal, Bina. 1997. "Bargaining' and Gender Relations: Within and Beyond the Household." Feminist Economics 3 (1): 1–51.
- Akter, Sonia, Pieter Rutsaert, Joyce Luis, Nyo Me Htwe, Su Su San, Budi Raharjo, and Arlyna Pustika. 2017. "Women's Empowerment and Gender Equity in Agriculture: A Different Perspective from Southeast Asia." Food Policy 69:270–79.
- Ali, Daniel Ayalew, Klaus Deininger, and Markus Goldstein. 2014. "Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot Evidence from Rwanda." Journal of Development Economics 110:262–75.
- Almas, Ingvild, Alex Armand, Orazio Attanasio, and Pedro Carniero. 2018. "Measuring and Changing Control: Women's Empowerment and Targeted Transfers." *Economic Journal* 128:F609–39.
- 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): 765–88.
- Ashraf, Nava, Natalie Bau, Corinne Low, and Kathleen McGinn. 2020. "Negotiating a Better Future: How Interpersonal Skills Facilitate Intergenerational Investment." *Quarterly Journal of Economics* 135 (2): 1095–151.
- Aung, Nilar, Hoa-Thi-Minh Nguyen, and Robert Sparrow. 2019. "The Impact of Credit Policy on Rice Production in Myanmar." *Journal of Agricultural Economics* 70 (2): 426–51.
- Bhalotra, Sonia, Rachel Brulé, and Sanchari Roy. 2020. "Women's Inheritance Rights Reform and the Preference for Sons in India." *Journal of Development Economics* 146:102275.

- Brown, Jennifer. 2003. "Rural Women's Land Rights in Java, Indonesia: Strengthened by Family Law, but Weakened by Land Registration." Washington International Law Journal 12 (3): 3.
- Browning, M., and P. A. Chiappori. 1998. "Efficient Intra-Household Allocations: A General Characterization and Empirical Tests." *Econometrica* 66 (6): 1241–78
- Brulé, Rachel E. 2020. "Reform, Representation, and Resistance: The Politics of Property Rights' Enforcement." *Journal of Politics* 82 (4): 1390–405.
- Brulé, Rachel, and Nikhar Gaikwad. 2021. "Culture, Capital, and the Political Economy Gender Gap: Evidence from Meghalaya's Matrilineal Tribes." *Journal of Politics* 83 (3): 834–50.
- Bussolo, Maurizio, Nayantara Sarma, and Anaise Marie Williams. 2021. "It Takes Two (To Make Things Right): Women's Empowerment and Couple Concordance in South Asia." Policy Research Working Paper Series no. 9545, The World Bank.
- Calonico, Sebastian, Matias Cattaneo, and Rocio Titiunik. 2014. "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica* 6 (6): 2295–326.
- Carnegie, Michelle, Peter Stuart Cornish, Khaing Khaing Htwe, and N. N. Htwe. 2020. "Gender, Decision-Making and Farm Practice Change: An Action Learning Intervention in Myanmar." *Journal of Rural Studies* 78:503–15.
- Cattaneo, Matias D., Brigham R. Frandsen, and Rocío Titiunik. 2015.
 "Randomization Inference in the Regression Discontinuity Design: An Application to Party Advantages in the U.S. Senate." *Journal of Causal Inference* 3 (1): 1–24.
- Cheema, Ali, Sarah Khan, Shandana Khan-Mohmand, and Asad Liaqat. 2023.

 "Canvassing the Gatekeepers: A Field Experiment to Increase Women
 Voters' Turnout in Pakistan." American Political Science Review 117 (1):
 1–21
- Chiappori, P. A. 1992. "Collective Labor Supply and Welfare." Journal of Political Economy 100 (3): 437–76.
- Chiappori, Pierre-André, José Ignacio Giménez-Nadal, José Alberto Molina, and Jorge Velilla. 2022. "Household Labor Supply: Collective Evidence in Developed Countries." In Klaus F. Zimmermann, ed., Handbook of Labor, Human Resources and Population Economics. Springer, 1–28.
- Deere, Carmen Diana, and Cheryl R. Doss. 2006. "The Gender Asset Gap: What Do We Know and Why Does It Matter?" *Feminist Economics* 12 (1–2): 1–50.
- de Mel, Suresh, David McKenzie, and Christopher Woodruff. 2009. "Are Women More Credit Constrained? Experimental Evidence on Gender and Microenterprise Returns." American Economic Journal: Applied Economics 1 (3): 1–32.
- de Soto, Hernando. 2001. "The Mystery of Capital." Finance & Development 38 (1). https://www.imf.org/external/pubs/ft/fandd/2001/03/desoto.htm.
- Do, Quy-Toan, and Lakshmi Iyer. 2008. "Land Titling and Rural Transition in Vietnam." *Economic Development and Cultural Change* 56 (3): 531–79.
- Donald, Aletheia, Gayatri Koolwal, Jeannie Annan, Kathryn Falb, and Markus Goldstein. 2020. "Measuring Women's Agency." Feminist Economics 26 (3): 200–26.
- Duflo, Esther. 2003. "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa." World Bank Economic Review 17 (1): 1–25.
- FAO (Food and Agriculture Organization). 2022. "Gender and Land Rights Database." Food and Agriculture Organization. https://www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/category/details/fr/c/1047633/.
- Field, Erica. 2007. "Entitled to Work: Urban Property Rights and Labor Supply in Peru." *Quarterly Journal of Economics* 122 (4): 1561–602.

- 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): 2342–75.
- Galiani, Sebastian, and Ernesto Schargrodsky. 2010. "Property Rights for the Poor: Effects of Land Titling." *Journal of Public Economics* 94 (9– 10): 700–29.
- Harari, Mariaflavia. 2019. "Women's Inheritance Rights and Bargaining Power: Evidence from Kenya." Economic Development and Cultural Change 68 (1): 189–238.
- Holden, Stein T., Klaus Deininger, and Hosaena Ghebru. 2011. "Tenure Insecurity, Gender, Low-Cost Land Certification and Land Rental Market Participation in Ethiopia." *Journal of Development Studies* 47 (1): 31–47.
- Huntington, Heather, and Ajay Shenoy. 2021. "Does Insecure Land Tenure Deter Investment? Evidence from a Randomized Controlled Trial." Journal of Development Economics 150:102632.
- ILO (International Labour Organization). 2019. "Employment in Agriculture, Female (% of Female Employment) (Modeled ILO Estimate)." World Bank. https://data.worldbank.org/indicator/SL.AGR.EMPL.FE.ZS.
- Iversen, Torben, and Frances Rosenbluth. 2006. "The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap." American Journal of Political Science 50 (1): 1–19.
- Kabeer, Naila. 1999. "Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment." Development and Change 30 (3): 435–64.
- La Ferrara, Eliana, and Annamaria Milazzo. 2017. "Customary Norms, Inheritance, and Human Capital: Evidence from a Reform of the Matrilineal System in Ghana." American Economic Journal: Applied Economics 9 (4): 166–85.
- Lambrecht, Isabel Brigitte, Kristi Mahrt, Nang Lun Kham Synt, Hnin Ei Win, and Khin Zin Win. 2023. "Gender Gaps in Land Rights: Explaining Different Measures and Why Households Differ in Myanmar." Agricultural Economics 54 (5): 728–41.
- 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.
- Luna-Martinez, Jose De, and Ratchada Anantavrasilpa. 2014. "Myanmar Agricultural Development Bank: Initial Assessment and Restructuring Options." Technical report, The World Bank.
- Malesky, Edmund, Dean Dulay, and Ville Peltovuori. 2020. "The Myanmar Business Environment Index 2020: Measuring Economic Governance for Private Sector Development." Technical report, The Asia Foundation.
- Mani, Anandi. 2020. "Mine, Yours or Ours? The Efficiency of Household Investment Decisions: An Experimental Approach." World Bank Economic Review 34 (3): 575–96.

- Mark, SiuSue. 2016. "Are the Odds of Justice "Stacked" Against Them? Challenges and Opportunities for Securing Land Claims by Smallholder Farmers in Myanmar." *Critical Asian Studies* 48 (3): 443–60.
- Mark, SiuSue, and Ben Belton. 2020. "Breaking with the Past? The Politics of Land Restitution and the Limits to Restitutive Justice in Myanmar." Land Use Policy 94:104503.
- Meinzen-Dick, Ruth, Agnes Quisumbing, Cheryl Doss, and Sophie Theis. 2019. "Women's Land Rights as a Pathway to Poverty Reduction: Framework and Review of Available Evidence." *Agricultural Systems* 172:72–82.
- Menon, Nidhiya, Yana Van der Meulen Rodgers, and Alexis R. Kennedy. 2017. "Land Reform and Welfare in Vietnam: Why Gender of the Land-Rights Holder Matters." Journal of International Development 29 (4): 454–72.
- Moghadam, Valentine M. 1990. "Gender, Development, and Policy: Toward Equity and Empowerment." Working paper, United Nations University World Institute for Development Economics Research.
- Namati. 2016. "Gendered Aspects of Land Rights in Myanmar: Evidence from Paralegal Casework." Technical report, Namati.
- Panda, Pradeep, and Bina Agarwal. 2005. "Marital Violence, Human Development and Women's Property Status in India." World Development 33 (5): 823–50.
- Rangel, Marcos, and Duncan Thomas. 2019. "Decision-Making in Complex Households." Working paper no. 26511, National Bureau for Economic Research.
- Rhoads, Elizabeth. 2018. "Forced Evictions as Urban Planning? Traces of Colonial Land Control Practices in Yangon, Myanmar." State Crime Journal 7 (2): 278–305.
- Roy, Sanchari. 2015. "Empowering Women? Inheritance Rights, Female Education and Dowry Payments in India." *Journal of Development Economics* 114:233–51.
- Savath, Vivien, Diana Fletschner, and Florence Santos. 2015. Land Titling and Women's Decision-Making in West Bengal. In Caroline Archambault and Annelies Zoomers, eds., Global Trends in Land Tenure Reform. Routledge, 151–70.
- Stommes, Drew, P. M. Aronow, and Fredrik Savje. 2021. "On the Reliability of Published Findings Using the Regression Discontinuity Design in Political Science." Working paper.
- UN Habitat. 2019. "Guidance Note on Land Issues in Myanmar." United Nations Commission on Refugees, and Norwegian Ministry of Foreign Affairs.
- Wiig, Henrik. 2013. "Joint Titling in Rural Peru: Impact on Women's Participation in Household Decision-Making." World Development 52:104–19
- Win, Nilar. 2013. "Experiences of Myanmar Agricultural Development Bank Program on Value Chain Finance on Agriculture." Country Report of Myanmar.