

Women's Legal Rights and Gender Gaps in Property Ownership in Developing Countries¹

Isis Gaddis (ORCID: [0000-0002-4450-0723](https://orcid.org/0000-0002-4450-0723))

Rahul Lahoti (ORCID: [0000-0001-6148-0835](https://orcid.org/0000-0001-6148-0835))

Hema Swaminathan (ORCID: [0000-0002-1822-1704](https://orcid.org/0000-0002-1822-1704))

Abstract

Women's property ownership matters for their well-being and agency, broader economic prosperity, and children's development. Yet, until recently, lack of data has constrained further exploration of gender differences in property ownership in the developing world. Using data from 41 developing countries, this paper seeks to fill this gap, by investigating gender gaps in the incidence of property ownership among couples and the factors associated with these gaps, focusing on the role of legal systems. We find that in almost all countries husbands are more likely to own property than wives. Across countries in our sample, husbands are, on average, 2.7 times more likely than wives to own property alone, and 1.4 times more likely to own property alone or jointly. Within countries, gender gaps in the incidence of property ownership are most pronounced for disadvantaged groups – i.e., the rural population and the poorest quintile. These gender gaps reflect a variety of factors, including discriminatory laws with respect to inheritance, property ownership, marital regimes, and protection from workplace discrimination. Countries with more gender egalitarian legal regimes have higher levels of property ownership by married women, especially housing, suggesting that legal reforms are a potential mechanism to increase women's property ownership.

JEL: D13, D31, J16, P48

Keywords: Gender gaps, legal discrimination, property ownership, intra-household inequality

Isis Gaddis, World Bank, Washington, DC, USA, and Institute of Labor Economics (IZA), Bonn, Germany. Email: igaddis@worldbank.org. Rahul Lahoti, UNU-WIDER, Helsinki, Finland. Email: rahul.lahoti@wider.unu.edu. Hema Swaminathan, Centre for Public Policy, Indian Institute of Management Bangalore, Bengaluru, India. Email: hema.swaminathan@iimb.ac.in.

1. Introduction

In most countries around the world, there are profound differences between men and women in ownership, use and control over assets and wealth. Gender gaps emerge prominently in ownership of land and housing property, which are important assets for the poor in developing countries and the primary means to store wealth in rural communities. However, the disproportionate concentration of property in the hands of men is not desirable. There is incontrovertible evidence that women's property ownership matters not only for gender equality, but also for their well-being and agency, for improving intergenerational human development outcomes, and advancing economic prosperity (see Meinzen-Dick et al 2019; United Nations 2019 for an overview of the literature).

Yet, we do not have an extensive understanding of the extent of gender differences in property ownership or the factors driving these gaps. Household surveys, the primary data source for information on the possession and use of assets, traditionally collect this data for the household as a single unit, thereby obscuring gender differences. Recent efforts, mainly through specialized surveys on individual-level asset data, have started addressing this issue (see Doss et al 2020 for a review). This literature documents sizable gender gaps in asset ownership in developing countries in Africa, Asia and Latin America (e.g., ADB 2017; Deere et al 2013; Jacobs et al 2011; Kes et al 2011; Kilic and Moylan 2016). However, differences in methodology across studies impede broader comparative analysis and limit the conclusions that can be drawn for developing countries at large.

This paper contributes to the emerging literature on gender gaps in property ownership using nationally representative data collected by the Demographic and Health Survey (DHS) program. Recent rounds of the DHS project (starting in 2010) collect data from men and women of

reproductive age on whether they own any land or housing property. The DHS is particularly suited for the analysis of gender differences in the likelihood of owning property as eligible respondents are personally asked about their ownership of land and housing property, instead of relying on proxy information given by other household members. The DHS data have been previously used to provide estimates of land ownership by women and men for 8 (Doss et al 2015) and 28 countries (Gaddis et al 2018) countries in Africa.

This research, to the best of our knowledge, is the first to take a global perspective on gender gaps in the ownership of property. Its main contribution is twofold. First, using data from 41 developing countries across the world we document gender gaps in the probability of owning property and explore descriptive patterns within and across countries. Second, we use multivariate analysis to assess in greater detail what factors are correlated with women's likelihood to own property and intrahousehold gender gaps in the chances of owning property, with a particular focus on the role of legal systems. We find that there is substantial variation in gender gaps across countries, but in almost all countries men are more likely to own property than women. Within countries, gender gaps in the likelihood of property ownership are larger for the more disadvantaged population groups – that is, they are larger in rural than in urban areas, and larger for the poorest than for the richest wealth quintiles. But what drives these gender gaps? While the analysis in this paper cannot establish causality, the multivariate analysis shows that women's disadvantage in property ownership is associated with discriminatory norms and laws with respect to inheritance, property ownership, marital regimes and protection from workplace discrimination. Countries with more gender egalitarian legal regimes generally have higher incidence of property ownership by married women. The relationship between these legislations and the chances of women owning property holds across rural and urban areas and is much stronger for housing than

for land ownership. These results suggest that gender-equitable legislative reforms could be an important avenue to increase the proportion of women owning property.²

2. Women and Property

2.1 Women's pathways to property ownership

There is well-documented evidence that women's rights to property and other assets are positively associated with a range of development outcomes, including women's empowerment and well-being, agricultural productivity, child nutrition and education, and their household's ability to exit and stay out of poverty. Thus, the imperative of gender equality coupled with a broader development agenda requires a more egalitarian distribution of assets between men and women. This leads us to a discussion of pathways by which women obtain ownership of land and housing property, and the constraints they encounter relative to men. We focus particularly on marriage and inheritance, which, in most developing countries, are the principal channels for both women and men to acquire property. For example, the Gender Asset Gap project shows that most agricultural parcels are inherited in Ecuador (53 percent), Ghana (59 percent) and Karnataka, India (86 percent). Similarly, between 34 percent (Karnataka) and 45 percent (Ghana) of all housing lots and between 8 percent (Ecuador) and 57 percent (Karnataka) of principal residences are received as inheritances. The section also discusses, although in less detail, purchase as a channel of property acquisition for individuals. Within each pathway, gender gaps can emerge from an interaction between households, markets and social norms or institutions (World Bank 2011).

We begin with the first pathway, marriage, by reviewing how basic institutional rights to property ownership sometimes change for women upon marriage. According to the 2020 Women, Business and the Law (WBL) database, married women face legal restrictions on property

ownership in 19 out of 190 countries for which data are available. While property rights of unmarried women are no longer included as a separate indicator in the 2020 WBL, earlier versions of the data showed that unmarried women typically have the same rights as unmarried men (Gaddis et al 2018). This demonstrates that, from a legal perspective, discriminatory provisions often do not apply to all women but to married women specifically, whose legal status changes, sometimes profoundly, upon marriage (Hallward-Driemeier and Hasan 2013).

Today's property rights of women in marriage often have historical roots. British common law was particularly unfavorable to women, owing to the doctrine of 'couverture', whereby a woman's legal status was subsumed by her husband upon marriage. Roman and Islamic legal traditions generally allowed married women to retain their legal personality (Deere and Doss 2006). Nowadays, women's and men's ability to own property during marriage and after its dissolution is governed by marital property regimes and other laws specifying how nonmonetary contributions to the marriage – for example, childcare or other unpaid domestic work from a stay-at-home spouse – are taken into consideration for the distribution of property between spouses. The most common marital regimes are full community of property, which considers all assets as joint property of the couple, partial community of property, which considers assets acquired during the marriage as joint property but allows spouses to retain assets brought into the marriage, and separation of property, where all property is individually owned.³ Overall, women are expected to fare better under community property regimes, which recognize women's role in the accumulation of marital property through child-rearing and other unpaid work, than under separation of property regimes, which reinforce gender gaps in economic and labor market opportunities (Deere and Doss 2006; Deere et al 2013; Joshi et al forthcoming). Further, under separation of property, women face the

prospect of losing all assets and property in the event of a divorce, unlike under full or partial community of property (Anderson 2018).

Figure 1 shows for each country whether the law provides for the valuation of nonmonetary contributions (see Online Appendix, Table A1, for data definitions). As described in World Bank (2020a), the indicator is coded affirmatively if there is an explicit legal recognition of nonmonetary contributions (and the law provides for equal or equitable division of the property or the transfer of a lump sum to the stay-at-home spouse) or if the default marital property regime is full, partial or deferred community (because, as discussed above, these regimes implicitly recognize nonmonetary contributions at the time of property division). This indicator, newly introduced in 2020, therefore combines the marital regime with other laws regulating nonmonetary contributions. While many countries recognize non-monetary contributions to the marriage, gaps remain in as many as 30 percent of the countries, largely concentrated in the Middle East and North Africa, South Asia and Sub-Saharan Africa.

Figure 1 about here

Inheritance can be even more salient than marriage for property acquisition. Statutory inheritance laws contain several provisions that play a role for gender gaps in property ownership, such as stipulations regarding the partibility of inheritance and the degree of testamentary freedom. They also interact with marital regimes – for example, inheritance rights for widows are particularly relevant under separation of property regimes, where women cannot automatically claim ownership of their deceased husband’s estate (Deere and Doss 2006; Hallward-Driemeier and Hasan 2013). Figure 2 displays two key aspects of inheritance regimes – the extent to which the legal code provides for equal treatment of sons and daughters (Figure 2a) and of male and

female surviving spouses (Figure 2b). About 23 percent of countries discriminate on each of these aspects, with a strong overlap in countries that discriminate with respect to both, children and spouses. These countries are largely in the Middle East and North Africa, in parts of Sub-Saharan African as well as South and South East Asia.

Figure 2a about here

Figure 2b about here

Finally, women may be disadvantaged in market-based forms of property acquisition, primarily due to gender gaps in economic opportunities and earnings. In most countries, fewer women than men are in the labor force, and when they do work, they tend to be disproportionately engaged in less profitable sectors and occupations and achieve lower levels of earnings (World Bank 2011). Even in the case of formal sector employment, women may be disadvantaged due to pervasive gender wage gaps across countries. Given the importance of earnings for property acquisition, we consider if countries have any law that mandates equal remuneration for work of equal value (Figure 3), which is one of the legal mechanisms to address gender pay gaps. More than half the countries (about 54 percent) do not explicitly disallow gender discrimination in pay; these are mainly all countries in South Asia, a majority in South East Asia, and a smattering in Sub Saharan Africa and South America. In addition (not shown), 11 percent of countries impose restrictions on a woman's legal capacity and ability to get a job or pursue a trade or profession.

Figure 3 about here

2.2 Empirical expectations

Before moving on to discuss our data, we lay out our hypothesis of how we expect the legal variables to be associated with women's property ownership. We expect that laws discriminating against women in property ownership or in the workplace may have a negative association with their ability to own any land or housing, either solely or jointly with someone else. The law regarding valuation of nonmonetary contributions captures two related pathways to asset accumulation – via equal rights for women in marital and spousal assets (if the law recognizes full or partial community of property as the default marital property regime) and by recognizing women's contribution to social reproduction and the care economy. The gendered division of labor and expectations that women are responsible for the home in practically every country constrain women's ability to fully realize their potential in the labor market. Laws that recognize non-monetary contributions implicitly compensate women for lost earnings by granting them an equal or equitable share of matrimonial property, or by providing for the transfer of a lump sum to the stay-at-home spouse, in the case of marriage dissolution. Therefore, we expect this measure to be positively associated with the probability that women will own property.

Laws that discriminate against daughters in natal inheritance and against women in their capacity as spouses are also anticipated to impede property ownership by women. As a corollary, we expect gender-egalitarian inheritance regimes to be positively correlated with women's property ownership. Laws that discriminate against women in the workplace, e.g., in terms of securing employment, can negatively impact women's earnings. Conversely, laws that prohibit (gender) discrimination in employment or remuneration, e.g., 'equal pay for work of equal value' laws, are expected to positively affect women's earnings. We therefore hypothesize that discriminatory laws, or the lack of laws mandating equality in the workplace, will be inversely

correlated with women's property ownership by impacting their ability to purchase property. Finally, we also consider two restrictions on women's legal capacity that could negatively affect property ownership. One measure considers if men and women have equal ownership rights to immovable property. This picks up discrimination by gender not only in the legal ability to own property but also in the legal treatment of spousal property. The other measure considers restrictions on women's employment prospects, i.e., if women need additional documentation or spousal permission to work. We hypothesize that inability to control and administer their property will deter women from property ownership. Restrictions on women's ability to seek employment will negatively affect their earnings abilities. Legal constraints apart, women in such conservative societies may not want to expose themselves and their families to informal social sanctions that may accompany labor market participation (Htun et al 2019).

It is worth noting a few caveats to how laws may play out in real life. Even when laws prohibit gender-based discrimination in employment and remuneration there are many factors that, singly or in combination, can lead to gender gaps in economic opportunities. These include gender differences in access to productive resources (e.g., land and other property, capital and labor) and investment security (Goldstein and Udry 2008; O'Sullivan et al 2014), organizational practices (Bertrand 2020) or sticky social norms (Alesina et al 2013; Gaddis and Klasen 2014; Giuliano 2017; Klasen 2019; Jayachandran 2021). As a result, women typically earn and control a smaller share of household income than men and are hence, disadvantaged in accumulating savings for property investment. Moreover, women may face disproportionate barriers in access to financial products commonly used to finance land and housing acquisitions, especially savings accounts and mortgages (Demirgüç-Kunt et al 2018) and may face discrimination in property markets due to lack of bargaining power (Deere and Leon 2003). Even in those developing countries where most

property is currently acquired through inheritance; these factors may assume greater importance in the future as property markets come into play through better secured property rights.

Additionally, many couples in developing countries cohabit without being legally married. This arrangement often does not guarantee the same marital rights that may exist for legal marriages, and thus, could be particularly disadvantageous for women in the event of marital dissolution.⁴ Finally, legislative frameworks do not operate independently of the cultural milieu and prevailing social norms. Jacobs and Kes (2015) find in two countries in Sub-Saharan Africa, that despite constitutional guarantees of gender equality, customary practices may disadvantage women in property ownership. In India, women do not typically inherit land from their parents even though the law prohibits discrimination between sons and daughters (Lahoti et al 2016). Further, the fear of social sanctions and losing natal family support ensures that women often do not exercise their legal rights (Landesa 2013).

3. Descriptive patterns of gender gaps in the ownership of land and housing

3.1. DHS data on women's and men's property ownership

Most household surveys gather data on the asset and property ownership for the household as a single unit (“does this household own any...”) from a single respondent, often the person deemed to be the ‘most knowledgeable household member’ or the ‘head of the household’. However, to assess gender gaps in ownership it is necessary to have data on which individuals within the household own the asset (Kilic and Moylan 2016).

One of the few survey programs that provide data on individual-level property ownership for developing countries across different regions is the DHS, where surveys conducted under the 6th phase or later (from approximately 2010 onwards) typically include the questions (a) “do you own

any land either alone or jointly with someone else?” and (b) “do you own this or any other house either alone or jointly with someone else?” in the women’s and men’s questionnaires. And unlike many other surveys, the DHS protocols do not use proxy respondents but interview husbands and wives separately from each other and in private (ICF International 2012). Asking individuals directly about their ownership rights over assets is generally assumed to best capture their personal perceptions and avoid biases from proxy respondents (Doss et al 2020). Based on a review of DHS questionnaires, we identified 41 countries with data on women’s and men’s property ownership (see Online Appendix, Table A2). Since there are only few countries with data on women’s and men’s property ownership from multiple DHS rounds, the data are (to date) only suitable for cross-sectional analysis of gender gaps in property ownership.⁵

Besides these advantages, it is important to acknowledge that there are dimensions of property ownership on which the DHS data cannot provide answers. First, the DHS data only capture the incidence of men and women owning any land and/or housing, and do not provide information on the monetary value of these assets. Second, ownership itself is a complicated context in societies shaped by legal pluralism and informal claims to the property. As discussed in Schlager and Ostrom (1992), property rights can be described along a continuum, which ranges from authorized user to claimant, proprietor and ultimately owner. In this spirit, Kilic and Moylan (2016) distinguish between reported owners, economic owners, documented owners and holder of various bundles of rights. These differing ownership and use rights do not necessarily fall together (Doss et al 2020; Slavchevska et al 2021).⁶ The DHS questions that were added to the 6th round, capture a concept closest to that of reported ownership but cannot distinguish between different forms of ownership or provide information about the security of ownership.⁷ Moreover, even though the DHS are fairly standardized, regional differences in tenure systems may affect the interpretation

of questions about individual ownership. Likewise, because the DHS data ask about land and housing in general and do not refer to specific assets (e.g., a specific parcel of land, or a specific residential unit) they do not allow ‘reconciling’ intra-household discrepancies in perceptions about ownership (see Doss et al 2020 for a discussion).

This paper reports on two different concepts of reported ownership, depending on whether a respondent owns property alone or jointly with someone else, typically (but not always) his/her spouse. The DHS questions on individual property ownership provide four response categories – (1) “alone only”, (2) “jointly only”, (3) “both alone and jointly”, and (4) “does not own”. In the analysis, the category ‘sole ownership’ combines options (1) and (3), while the category ‘sole and joint’ combines options (1), (2) and (3). Joint ownership of property is a common occurrence in many of the countries included in this study, and gender gaps are generally smaller than in sole ownership. There are reasons to expect that joint ownership rights may be weaker than individual ownership rights. Joint property ownership does not necessarily mean that men and women have equal rights; women may be disadvantaged in decision-making when their interests do not align with those of their husbands (Agarwal 2003; Doss et al 2014; Jacobs and Kes 2015). On the other hand, joint ownership may be preferable in contexts where women face high social cost in obtaining sole ownership rights (Jackson 2003). There is also no clear policy path for advancing sole property ownership for married men and women, given that housing property is typically non-partible, while land property is partible only to a certain degree due to concerns around land fragmentation. Given these considerations, the main indicator used in this paper is the sole and joint ownership combined. However, sole ownership is often reported separately, where this is thought to provide further insights. In the interest of parsimony, land and housing ownership is in

some analyses combined into a single indicator of property ownership, which equals unity if a woman or man owns land and/or housing, and zero otherwise.

A limitation of the data is that there is no further information on the property owned by the individual including, the area, size or value of land or housing, if the (agricultural) land is irrigated, or the location of the property. Alternatively, data on property values, if available, would have been illuminating from a gender perspective. Evidence suggests that conditional on owning land, women's plots are, on average, smaller than men's plots (Swaminathan et al 2012; Kieran et al 2015, 2017; Kumar and Quisumbing 2012; United Nations 2019). Thus, even when there are negligible gender gaps in the incidence of land ownership, there could be significant gender inequality in the land area owned, and thus, wealth.

Our analysis is based on the DHS's 'couple's sample', that is men and women who were both interviewed, lived in the same household and named each other as a spouse. Comparing husbands and wives allows us to focus on the intra-household property allocation, whilst abstracting from gender differences in marital status and other demographic factors. The couple's sample also helps to explore how gender gaps within households may be related to differences between husbands and wives. Our analysis excludes currently unmarried and other married individuals whose spouse was not interviewed, while DHS data by design exclude older women irrespective of marital status (only women in the reproductive age range of 15-49 years are eligible for DHS interviews).⁸ These exclusions imply that the data used in this paper are only representative of married (or cohabitating) couples of reproductive ages, and cannot be used to draw inferences about property ownership of other demographic groups, such as unmarried or older women and men. Widows may be more or less likely to own property than married women, depending on laws governing marital property regimes and the inheritance of spousal assets, as well as other demographic forces.

Under the separation of property marital regime, divorced women, and widows, are more likely to lose property during marital dissolution. This disadvantage can be reinforced if, in addition, inheritance laws discriminate against female surviving spouses. On the other hand, older women are, on average, more likely than younger women to have acquired property either through purchase or due to the death of a parent.

To better understand how the DHS couple's sample (used in this paper) relates to the broader individual sample (of all women aged 15-49 years), we compare key parameters of women in the couple's sample to the overall sample of women in the DHS data (Online Appendix, Table A3). Women in the couple's sample have slightly higher rates of property ownership than the average women sampled for the DHS. They also have more children (boys and girls), are about 2.5 years older and more likely to have no education, but the work patterns are broadly similar.

The descriptive analysis focuses on the absolute gender gap, that is the percentage point difference between the share of men and women who report owning property. The drawback here is that absolute gaps do not provide information on the incidence of male and female property ownership, that is how high or low ownership rates may be.⁹ However, our outcome variable in the multivariate analysis is the incidence of land and housing ownership by married/cohabiting women and, in some specifications, the intrahousehold gender gap; detailed statistics on the incidence of property ownership at the country level are reported in Table A4 (Online Appendix).

3.2 Patterns across countries

Married women's disadvantaged position in the likelihood of owning property is widespread and systematic. Figure 4 shows the percentage point difference between men and women in the incidence of land and housing ownership at the country level (a positive value indicating that more

men than women own the asset). In all but one country (Comoros), women are less likely than men to claim sole as well as sole and joint ownership over land and housing. For most countries, gender gaps in the ownership of land are greater than in the ownership of housing. Gender gaps are more nuanced if one combines sole and joint ownership (panel b). But even if joint ownership is taken into consideration, married men are considerably more likely than married women to own land and housing in most countries included in our analysis.

On average, across the 41 countries in our sample, 55 percent of husbands own any property (land or housing) alone, compared to only 20 percent of wives, a 2.7-fold difference. Taking joint ownership into consideration, husbands are 1.4 times more likely to own property, with 76 percent of married men and only 54 percent of married women reporting either sole or joint property ownership.¹⁰

The largest gender gaps in property ownership are found in Sub-Saharan Africa, especially West Africa (see Figure 4). However, there is large variation between African countries, with gender gaps being much smaller in Southern Africa than in other parts of the continent. Outside of Africa, gender gaps are also sizeable in South Asia, Europe and Central Asia and the Middle East and North Africa (though the latter is based on just one country, Jordan). They are much smaller in East Asia and the Pacific and in Latin America and the Caribbean.

Figure 4 about here

Are gender gaps in property ownership smaller in countries with higher levels of income? Perhaps surprisingly, there is only a weak negative correlation between log GDP per capita and the gender gap in the likelihood of owning property (with a bivariate correlation coefficient of -0.33) at least for the levels of income found in this sample of countries.¹¹ This is consistent with

the observation that, across Africa, the legal and economic rights of women are not strongly linked to income (Hallward-Driemeier and Hasan 2013). It suggests that economic growth in isolation may not necessarily reduce gender inequalities (Klasen 2020).

The results also show that, at least at the country level, gender gaps in the ownership of land and housing often go together. The bivariate correlation between the (absolute) gender gap in sole ownership of land and housing across countries is 0.95; it is 0.93 for the sole and joint ownership combined. In other words, in countries where women are less likely than men to own land, they are also less likely than men to own housing, and vice versa. One explanation is that in rural areas land and housing is often considered as a combined asset (Kes et al 2011). Another one is that acquisitions of both assets are governed by similar formal and informal laws, regulations, and norms. In the remainder of this section, we collapse information on both variables into a single indicator of property ownership, which equals unity if a woman or man owns the land and/or housing (the sole vs. joint ownership distinction is maintained).

3.3 Patterns within countries

How are gender gaps shaped by urbanization? Though we lack panel data or repeated cross-sections to explore trends over time, we can compare gender gaps between urban and rural areas. Own land has a central role in rural areas, as the main place to live and produce, but is less relevant in towns and cities where most jobs are outside of agriculture and housing can be rented. In urban areas, housing and residential land play a larger role than agricultural land, but even though city dwellers tend to earn more than their rural compatriots, they are often less likely to own a home (Pendall et al 2016 for the United States; Eurostat 2015 for European Union countries; Sato et al 2011 for China). This reflects partly that land is relatively scarce in urban areas, leading to high-

priced real estate, but also better access to financial services, as an alternative means to store wealth. Because of this, some caution must be exercised in comparing ownership of land and housing property across rural and urban areas.

Figure 5 plots gender gaps in property ownership by country, separately for rural and urban areas. Gender gaps in sole ownership are almost always larger in rural than in urban areas. This pattern holds for the most part, though less pronounced, also for gender gaps in sole and joint ownership, though there are some exceptions. This, however, does *not* mean that women are more likely to own property if they live in urban areas. It rather reflects that urban men are much *less* likely to own property than their rural counterparts.

Figure 5 about here

To further investigate distributional patterns, we estimate gender gaps by quintile, using the DHS household-level wealth index. As shown in Figure 6, gender gaps in sole property ownership are in most countries larger for the poorest than for the richest quintile, though there are some countries where the opposite pattern holds (Burundi, Jordan, and Mozambique). This income gradient is weaker for joint ownership, where nine out of 40 countries (excluding Comoros) display larger gaps for the richest than poorest quintile. These differences in gender gaps along the distribution reflect a considerable degree of rural-urban differences. In other words, the poorest quintile is more likely to live in rural areas, where – as shown in Figure 5 – gender gaps in the incidence of property ownership are larger than in urban areas.

Figure 6 about here

4. Multivariate analysis of women’s property ownership

4.1 Model specification

This section investigates what factors are statistically associated with an individual’s likelihood to own property in a multivariate regression framework. This has the advantage that, unlike with the descriptive statistics, we can control for confounding factors. For example, despite recent gains in girls’ school enrollments, adult women still have lower levels of education than men in many of the countries in our sample, and this may have an impact on their likelihood of property ownership. In addition, regression analysis is a useful way to summarize the relationship between various explanatory variables and our outcome of interest, wife’s property ownership, even as we are careful not to make causal claims due to the cross-sectional nature of the data.

We estimate the following model:

$$Y_{irc} = \beta W_c + \gamma K_c + \delta G_{rc} + \zeta X_{irc} + \eta Z_{irc} + \omega + \varepsilon_{irc} \quad (1)$$

where Y_{irc} is a binary variable that equals unity if the wife (living in sub-national region r , country c) owns any property (housing or land), either alone or jointly with the husband or others; and zero otherwise. We estimate a linear probability model (LPM), rather than a logit or probit model for ease of exposition.¹² Standard errors are clustered at the country level, because our main variables of interest (laws) do not vary within countries.

W_c is a vector of country-specific legal variables that might have an impact on married women’s likelihood of property ownership (see Online Appendix, Table A1, for further details on the data definitions). These include the WBL variables discussed in section 2, which indicate the role of gender discrimination in the country’s legal system – i.e., whether the law recognizes nonmonetary contributions to marital property (Figure 1), and if men and women have equal inheritance rights (Figures 2a and 2b). Given the large degree of overlap between the countries

that discriminate by gender on natal inheritance and spousal inheritance, the two variables on inheritance are merged into a single variable, which equals unity (equal inheritance rights) if the law neither discriminates between male and female surviving spouses nor between sons and daughters. Other variables included are if men and women have equal ownership rights to immovable property, if the law mandates equal remuneration for work of equal value (Figure 3), and if the law allows for a woman to get a job or pursue a trade or profession in the same way as a man without any additional restrictions or permissions. The WBL variables under consideration in the empirical analysis broadly reflect the pathways to property ownership by women discussed in section 2.

K_c is the second vector of country-specific variables representing both historical and current cultural attitudes and social norms surrounding gendered roles and responsibilities, and gender equality more broadly, that may enhance or diminish the effectiveness of current anti-discriminatory legislations (Deere et al 2013; Giuliano 2017), as well as the country's level of development. While gender inequality can be all encompassing and affects women from the cradle to the grave, we focus on those cultural attributes that we believe could be correlated with property rights. Following the definitions of Alesina et al (2013), we control for the absence of private property, rules governing post-marital residence, and family structure. The authors revisit Engels (1902) argument regarding the emergence of private property being detrimental for women's autonomy. According to Engels (1902), the control of private property by men also led to control and suppression of women to protect paternity. In certain regions, such as South Asia, patrilocality is often accompanied by residence with the husband's extended family with differential impacts on women's agency and wellbeing (Khalil and Mookerjee 2019); this could also impact their property rights. It is also plausible that in patrilocal societies, girls may be denied a share of natal

inheritance, particularly in rural areas, citing their inability to administer the property. Based on ethnographic data in Giuliano and Nunn (2018), we also control for traditional marriage practices of exchange such as bride price and dowry that may impact women's property ownership. We include controls that measure the proportion of groups in a country whose ancestors followed certain traditional marriage transfer practices like bride price, dowry, other or no transfer.¹³ We include these variables as women's property rights have been shown to be shaped in large part by the transfers received at the time of marriage (Anderson 2007; Anderson and Bidner 2015). Recent literature has also shown the importance of these practices for female education, age of marriage, and well-being of the wife (Ashraf et al 2020; Corno et al 2020; Lowes and Nunn 2018). Lastly, this set includes religion of the current population to pick up deep-seated social attitudes to gender equality including women's rights to own and use property. Even in countries with constitutional guarantees for gender equality, religious beliefs may drive much of what is commonly accepted and practiced in societies and therefore affect women's property ownership (see, for example, Evans 2015 for qualitative evidence from Senegal). We also control for GDP per capita and its square. This is a proxy for a potentially non-linear relationship between the economic development of the country and gender gaps in property ownership.

G_{rc} controls for the share of currently married (or in union) women who disagree with all reasons justifying wife-beating as a control variable. This variable is computed at the level of sub-national regions (r , typically, first-tier administrative regions in each country) and captures attitudes towards domestic violence, serving as a proxy for local gender norms that may place women in a subordinate position.

X_{irc} is vector of characteristics of the couple i . These include (separately) the wife's and husband's number of sons and daughters ever born, age and age squared, years of education (as a

categorical variable) and employment status as well as the husband-wife education gap and a variable that equals unity if both spouses are working. Z_{irc} is a vector of household characteristics and includes who in the survey is assigned the head of the household. ε_{irc} is an error term.

We run three different models, all with world region fixed effects (ω) that control for unobservable characteristics across world regions. The first model includes the WBL variables and per capita GDP (linear and squared); the second one adds the cultural and social norms related variables; the final third model adds characteristics of the couple and household.

As discussed earlier, gender gaps in the likelihood of property ownership are strongly influenced by the urban-rural makeup of the sample, with gender gaps generally being much larger in rural than urban areas. We, therefore, run the regressions separately for urban and rural areas. We also run the models separately for ownership of land and housing. Each of the regressions is run on the couple's sample, pooling observations from 41 countries for housing ownership, and from 39 countries for land ownership. In total, our analysis amounts to 213,898 couples for housing (142,585 in rural areas and 71,313 in urban areas) and 211,310 couples for land ownership (141,024 in rural areas and 70,286 in urban areas).¹⁴ Mean statistics for all variables used in the regressions are shown in Table A5 (Online Appendix) for the urban and rural subsamples.

Besides the DHS data for the couple's sample, the paper draws on the following country-level databases (see also Online Appendix, Table A1). The *Women Business and the Law* (WBL) program provides data on laws and regulations constraining women's property ownership and economic opportunities (World Bank 2020a).¹⁵ The *World Development Indicators* (WDI) provide data on GDP per capita (World Bank 2020b). Data on historical-cultural attitudes and social norms are from Alesina et al (2013) and from Giuliano and Nunn (2018), while the data on the countries' largest religions are drawn from *The Association of Religion Data Archives* (Harris et al 2019).

4.2 Results

Table A5 (Online Appendix) shows descriptive statistics for our analysis sample. Considering the WBL variables we see that the equal remuneration law has the lowest coverage in the sample -- only about 15 to 18 percent in urban and rural areas, respectively. Effectively, the share of the population benefitting from such laws is likely even lower, as employment-related legislations do not extend to the informal sector that employs a large proportion of workers in developing countries. Equal ownership rights to immovable property and the variable whether a women can get a job in the same way as a man have the widest coverage, applying to more than 90 percent of the sample. Women's incidence of housing ownership is higher than land ownership, and a greater proportion of rural than urban women own some property.

Turning to the regression analysis, we find that women living in countries with more gender-egalitarian legal regimes are more likely to own property in both urban and rural areas. We first discuss the results for housing ownership (Table 1). In urban areas, three legal variables, except for the laws providing for equal inheritance rights and laws not imposing additional restrictions on women's work, are positively and significantly associated with women's chances of owning a house across all models. More gender-equitable legislation providing for equal ownership rights for men and women is associated with a 21 to 24 percentage point increase in the probability to own the house; legislation valuing non-monetary contributions to the marriage is associated with a 11 to 18 percentage point increase; and legislation mandating equal remuneration for equal work is associated with a 10 to 11 percentage point increase in women's chances of owing the house. In rural areas, equal ownership rights are associated with a 25 to 26 percentage point increase in women's likelihood of house ownership across the models. The valuation of non-monetary contributions is associated with 21 percentage point increase in women's housing ownership in

the first model, but it loses significance once we introduce other controls. In rural areas, the other three legal variables do not significantly impact women's likelihood of owning a house.

In the case of land, the results are qualitatively similar, but the associations are weaker and significant for only a few legal variables (Table 2). In urban areas, women living in countries where laws provide for the valuation of non-monetary contributions are 8 to 12 percentage point more likely to own land. Controlling for current religion, historical cultural attitudes and a rich set of couple and household attributes, the other legal variables no longer remain significant. In rural areas, the laws providing for equal ownership rights are significantly associated with women's likelihood of land ownership. For land, the fact that most WBL variables lose significance once the analysis controls for current religion and historical cultural variables (i.e., comparing columns (1) and (2) for both urban and rural areas) may be explained by the high correlation between the WBL variables and other country-level historical variables reflecting social norms around inheritance and family structures, which suggests that legislative changes may not be as effective in increasing women's land ownership in environments with adverse social norms.

We briefly discuss our historical and current controls at the country level. Confirming the descriptive analysis, there is no significant relationship between per capita GDP and married women's likelihood to own property, which suggests that economic prosperity *per se* is not a key driver of women's property ownership. There is no significant correlation between the country's largest religion and women's chances of owning property (except for a negative correlation between the category 'other religion' and women's housing ownership).¹⁶ Counterintuitively, a higher share of married women disagreeing with wife beating is negatively associated with women's housing ownership in urban areas. With respect to the variables reflecting historical-cultural attitudes and gender norms, only the absence of historical inheritance rights is significantly

associated with women's property ownership across the models. The absence of inheritance rights historically is linked to the absence of private property rights *per se*, which according to Engels (1902) implies a relatively more gender egalitarian society. A high prevalence of extended families in rural areas has a negative association with women's land ownership, reflecting perhaps a larger number of claimants to immovable property reducing women's chances of even joint ownership. A higher proportion of the population following matrilocality (patrilocal) in the society historically is associated with higher (lower) property ownership among women, but the effects are not statistically significant. Countries that have a higher proportion of the population who historically had no exchange or other forms of exchange, but no dowry or bride price, are associated with a higher incidence of women's property ownership as compared to countries where bride price was more prevalent, except for land ownership in urban areas.

Model (3) includes a rich set of couple and household characteristics. Individual attributes such as age and education of women show the expected associations for property ownership – older women are more likely to own property as are highly educated women (mostly greater than 13 years of education). Rather surprisingly, women's own employment is either negatively associated (mostly in urban locations) or has no association (mostly in rural locations) with their likelihood of ownership. Highly educated husbands in urban areas are associated with a higher probability of women owning any property. Wives' property ownership in urban areas is positively impacted when both spouses are working, reflecting greater purchasing ability. Being assigned head of household is beneficial for wives in rural areas when compared to the husband being the head. A wife being considered a head is not a common occurrence in our sample of married couples and possibly reflects traditions where lineage is through the woman and/or she is considered a key decision maker.¹⁷ However, a household member other than the husband being assigned the head

has negative effects on women's property ownership in rural areas, and across locations if the head is female. This headship structure is indicative of an extended family, where the couple is living with parents or other relatives. Thus, other members are more likely to own the property; even if the husband owns the property, it will likely be joint with other household members and not necessarily with his wife.

The regional fixed effects are large and statistically significant in model (1), with all regions experiencing lower ownership rates of immovable property compared to East Asia and the Pacific. However, the regional dummies for Europe and Central Asia, South Asia and Sub-Saharan Africa turn insignificant once we control for religion, community attitudes towards domestic violence, and historical social norms (in model (2)), indicating that the relative disadvantage of these three regions can be explained by these variables.¹⁸ Conversely, the regional fixed effects for the Middle East and North Africa and for Latin America and the Caribbean (except for land in urban areas) tend to stay negative and significant in models (2) and (3), which suggests that women in those regions are disadvantaged by forces that are not accounted for by our regression models. However, it is important to note that both regions are represented by only a few countries in our sample (Middle East and North Africa: Jordan; Latin America and the Caribbean: Colombia, Haiti) so that the results are not easily generalizable.

Table 1 about here

Table 2 about here

The WBL database also provides summary measures of gender egalitarian laws in each country across various domains. The relevant domains we consider are assets, workplace, pay and entrepreneurship, which broadly map to the marriage, inheritance, and purchase pathways to

property discussed earlier. In each domain, WBL calculates a summary score that varies between 0 and 100. A score of less than 100 indicates the existence of restrictive laws and regulations affecting women's rights in that domain. For example, a score of less than 100 in the asset domain depicts at least one legal constraint on women's property rights. In the previous models, we investigated the impact of a few gender-egalitarian laws and regulations on women's property ownership. To test the robustness of our results, we replace the individual measures with summary measures of gender egalitarian laws in the relevant domain (Table 3).

We find that our results are robust even when we rely on these broader measures of legislative gender equality. The results are qualitatively similar to our main models. Gender egalitarian laws in the asset domain have a positive and highly significant correlation with women's property ownership. Gender egalitarian laws about participation in workplace and against pay discrimination are associated with a higher likelihood of women's property ownership in urban areas. Surprisingly, egalitarian laws in entrepreneurship – women's access to credit, their ability to sign a contract, open a bank account and register a business in the same way as men – are negatively associated with women's probability of land ownership in urban areas. It might be the case that in countries with more gender egalitarian laws in entrepreneurship, there are more off-farm opportunities leading to women gravitating away from agriculture and, hence, lower land ownership.

Table 3 about here

Till now, we have discussed the impact of gender-egalitarian laws on women's property ownership. Next, we analyze how the intra-household pattern of property ownership is correlated with laws using a multinomial regression model. The dependent variable has three categories -

no one in the household owns the asset, the husband owns the asset alone or jointly with someone else (but not the wife) and the wife owns the asset alone or jointly with someone else (including her husband). The results are qualitatively similar (Tables 4 and 5) to the results from the LPM model. Women in countries with more egalitarian laws are more likely to own property than women in countries with less egalitarian laws. The impact is stronger for housing than for land. Even the magnitude of estimates is similar as in the LPM models. Specifically, equal ownership rights and the valuation of non-monetary contributions are positively associated with women's likelihood of housing ownership. Equal remuneration laws also show a positive association, but only in urban areas. Counterintuitively, there is a negative (and marginally significant) relationship between the absence of laws restricting women's jobs in rural areas with their probability of owning a house. Turning to land, recognition of non-monetary contributions in urban areas and equal ownership rights in rural areas are significantly correlated with the probability of women's land ownership. Laws providing for equal inheritance rights are not correlated with the probability of women owning land or housing.

Egalitarian laws reduce the probability of no one in the household owning property, especially for housing. The impact of these laws on husbands' chances of owning property is either insignificant or negative across models, except for the job discrimination law which increases husbands' chances of owning land significantly.

Table 4 about here

Table 5 about here

5. Conclusions

This paper investigates the extent of gender gaps in the incidence of property ownership – land and housing – for married couples, and the factors associated with these gaps in developing countries, focusing on the role of legal systems. Using DHS data from 41 developing countries, we show that in almost all countries husbands are more likely to own property than wives and gender gaps are most prominent among the rural population and the poorest quintile. In regional terms, the largest gender gaps in property ownership are found in Sub-Saharan Africa, especially West Africa. However, there is also considerable variation between African countries, and the gaps are much smaller in Southern Africa. Outside of Africa, gender gaps are also large in South Asia, Europe and Central Asia and the Middle East and North Africa (though with regards to the latter, we only have data for Jordan). They are much smaller in East Asia and the Pacific and in Latin America and the Caribbean.

The disadvantage in property ownership experienced by married women reflects a variety of factors, most importantly discriminatory property laws. Broadly, countries with more equal legal regimes for women are associated with higher probability of property ownership by women. The relationship between the legislation and women's property ownership is stronger for housing than for land ownership. Similarly, the relationship is stronger in urban as compared to rural areas. Our results suggest that equal rights to own property and laws providing for the valuation of non-monetary contributions may matter more for married women's property ownership than inheritance rights and laws mandating equal remuneration for equal work. The inheritance laws included in the models relate to inheritance from parents and to inheritance from spouse (in event of a death). This lack of association could therefore reflect our analytical sample excluding widows and older women who would have potentially benefitted from egalitarian inheritance laws more

than married women of reproductive age. What seems to matter most for married women and their likelihood of owning property are equal property rights as well as the marital regime and if their unpaid reproductive labor is valued. The fact that property, particularly agricultural land, purchases are not frequent is reinforced by the lack of association of the laws related to employment with the likelihood of land ownership, especially in rural areas. Legislations related to remuneration seem to make a difference only for housing in urban areas. Remuneration laws will make an impact only for women employed in the formal sector and are, hence, likely to be more relevant in urban than in rural areas. Even as individual measures may or may not show an association with the chance of property ownership, an overall egalitarian legislative framework governing assets and the labor market, is certainly relevant.

Even though we have controlled for a range of country-level and individual characteristics in our model some of the association between laws and women's property ownership might capture omitted variables that are also positively associated with egalitarian laws. Egalitarian laws come up by a process of advocacy by groups or social movements demanding these rights and a certain level of acceptance of rights by the society. It is also likely that in these countries, there is greater monitoring of the enforcement of such laws by civil society. Thus, the association between egalitarian laws and women's property ownership observed here is a culmination of the process that results in making laws and changing gender norms in society. This could explain why the associations are stronger in urban areas; possibly there is greater awareness among urban women regarding the laws and their rights in matters related to property, accompanied by a demand for effective implementation.

While our results suggest that legislative gender equality is important, it cannot fully account for gender differences in wives' property ownership across world regions. In our first specification,

which includes the six WBL variables and per capita GDP, the regional fixed effects remain large and statistically significant, with all regions experiencing lower ownership rates of immovable property among married women than East Asia and the Pacific. However, the regional dummies for Europe and Central Asia, South Asia and Sub-Saharan Africa turn insignificant once we control for religion, community attitudes towards domestic violence, and ethnographic variables, which suggests that the relative disadvantage of these regions can be explained by historical and current social and religious norms. Conversely, the regional fixed effects for the Middle East and North Africa and for Latin America and the Caribbean tend to stay negative and significant even with a broad set of country-level and individual-level controls, which indicates that women in those regions are disadvantaged by forces that are not fully accounted for by our regressions.

The results in this paper are consistent with recent studies showing that legislative reforms can affect women's property ownership. For example, Deininger et al (2013, 2019) argue that inheritance reforms in India, which removed discriminatory provisions against girls, had a positive effect on the likelihood of daughters to inherit land and increased the amount of assets (including land) daughters brought into marriage.¹⁹ Likewise, impact evaluation studies show that land registration programs (e.g., land demarcation, titling or certification) that promote joint registration of both spouses can improve land ownership and tenure security among women and reduce gender gaps when coupled with a conducive legislative framework (O'Sullivan 2017; Ali et al 2014; Goldstein et al 2018). This paper also complements the growing body of literature that documents a relationship between legislation aimed at promoting (gender) equality and women's economic opportunities (e.g., Hallward-Driemeier et al 2017; Islam et al 2019; Hyland et al 2020).

However, the effectiveness of legislative changes is conditioned by sticky social norms in an environment where women are in general seen as less valuable than men (Deere et al 2013). These

may even lead to perverse effects as found by Bhalotra et al (2020) in India, where the inheritance reforms increased female feticide. Moreover, in areas with traditional social norms and large gender gaps in property ownership, men may underestimate women's preference for owning immovable property, thus leading to information asymmetries (Najjar et al 2020). This might open another channel for improving women's property ownership – correcting or updating husband's beliefs about the preferences of their wives (e.g., using an intervention that is similar in spirit to Bursztyrn et al 2020). Our results also provide an argument for deepening legislative reforms by enacting new anti-discriminatory laws (e.g., moving away from a separation of property marital regime, promoting equal pay for work of equal value), enhancing the ambit of current laws (e.g., extending employment laws to the formal and informal sector), and working towards more effective implementation of existing laws.

Our results offer insights on future work in this area, particularly regarding the kinds of information to be collected in specialized asset surveys to further the analytic agenda of reducing gender gaps in property ownership and wealth. The DHS are not the appropriate vehicle for detailed asset data collection but given their extensive geographic coverage and regularity even one additional question on property value would be an immense contribution to our understanding of gender inequality in this area. For a comprehensive and nuanced understanding of this complex topic, we need information on various related domains. How property assets are acquired by both men and women would help in understanding where the gaps originate from, why they persist, and provide insights on inheritance patterns. Data on various dimensions of ownership – reported, legal and rights-based – could unpack what asset ownership means for the individual. Individuals may not be legal owners of property, but still enjoy decision-making power over how the property is used or to whom it is bequeathed. The marital regime affects a great proportion of women,

irrespective of their education or employment status. Information on women and men's understanding of these laws would be valuable in designing strategies to move towards an egalitarian distribution of property. Additionally, panel data of individual property ownership, or at least repeated cross-sections, would allow researchers to measure changes in women's and men's property ownership over time and support the identification of causal relationships.

Data availability

The Demographic and Health Surveys are available at <https://dhsprogram.com/Data/> (see Online Appendix, Table A2, for details on the surveys used). The Women, Business and the Law data are available at <https://wbl.worldbank.org/en/wbl>. Other data sources are referenced in the text of this manuscript (as well as in Online Appendix, Table A1). All data sources are available free of charge.

Notes

¹ The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent. We would like to thank Kathleen Beegle, Bénédicte de la Brière, Markus Goldstein, Caren Grown, Dominique van de Walle and two anonymous reviewers for valuable comments. We gratefully acknowledge the assistance of the World Bank's cartography unit in preparing figures 1-3. Of course, all errors are our own.

² This literature is extensively reviewed in Meizen-Dick et al (2019), United Nations (2019) and World Bank (2011).

³ A special case is 'deferred community of property', in which the separation of property applies until the marriage is dissolved, when the rules of full or partial community of property come into effect (World Bank 2015).

⁴ DHS data does not collect information on the legal status of the marriage – i.e., whether it is formally registered or not.

⁵ The DHSs for South Africa and Liberia collected data only on housing ownership, but the countries are still included in the analysis. We do not include datasets that collect data on women's (but not men's) property ownership, or vice versa. In those countries where data on women's and men's property ownership are available from multiple DHS rounds, only the most recent survey is used. Datasets released after June 18, 2020 are not considered.

⁶ For example, in many parts of Africa, village chiefs, kinship groups and extended families may engage in specific aspects of property transactions (Pande and Udry 2006; Doss et al 2015). Based on data for Senegal, Lambert et al (2014) show that even though 17 percent of women inherited some land from their parents, only 2 percent have land to bequest to their heirs, suggesting that women's land ownership rights are often revocable.

⁷ DHSs conducted under the 7th and 8th rounds collected additional information on the availability of title deeds. However, this data is not yet available for a large cross-section of countries.

⁸ For men, age ranges vary across countries, with many surveys interviewing men aged 15-54, or 15-59 years, typically in a sub-sample of households.

⁹ For example, two countries with the same absolute gender gap in property ownership may have different shares of men and women owning property (say 20 and 10 percent in country A vs. 70 and 80 percent in country B). It is likely that country B has norms that allow women to acquire and retain property. The alternative would be to report relative gender gaps, which are measured as the percent difference in the incidence of property ownership between men and women. Thus, relative gender gaps are larger in country A, where men are twice as likely to own property than women, compared with country B, where male ownership is just 14 percent higher than female ownership. However, relative gender gaps can be imprecisely estimated in cases where female ownership is low and are – as the percent difference of an indicator itself reported in percent – somewhat less intuitive.

¹⁰ These estimates are computed as an unweighted average across countries.

¹¹ In our sample, 2015 GDP per capita varies between \$228 (Burundi) and \$7,572 (Colombia), measured in constant 2010 US\$.

¹² The results (not shown but available on request) are qualitatively and quantitatively very similar if we estimate a probit model instead of a linear probability model.

¹³ There are some groups in a few countries where information on ancestral practices is missing. There is missing information in 3 countries impacting less than 0.2 percent of their population. In addition, information on ancestral practices is missing entirely for one country (Timor Leste).

¹⁴ As noted in section 3, two countries (South Africa and Liberia) only collect data on housing and not on land ownership, which explains the smaller sample size for the regressions on land ownership. A few additional observations drop out once we control for couple and household characteristics due to missing values.

¹⁵ Unlike in section 2, where we reported the most recent WBL data (referring to 2020), the multivariate analysis draws on the data referring to 2015 (from the 2020 WBL edition), which are closer in timing to the DHS data in our sample (see Online Appendix, Table A2).

¹⁶ The ‘other religion’ variable equals to one in four countries – India, Nepal (both Hinduism), Myanmar (Buddhism) and Togo (traditional faiths).

¹⁷ The proportion of women who are head of the household is likely to be higher among all households as compared to our sample, which includes only couple households.

¹⁸ We find that it is the inclusion of ancestral variables (absence of inheritance, extent of matrilocality and patrilocality, and nuclear and joint families) that turn the regional variables insignificant. Inclusion of religion and community attitudes towards domestic violence does not impact the significance of the regional variables.

¹⁹ Roy (2015), however, argues that the reforms of the Hindu Succession Act failed to increase the likelihood of women inheriting property as parents appear to be ‘gifting’ land to their sons in order to circumvent the law.

References

- ADB (Asian Development Bank). 2017. *Key Indicators for Asia and the Pacific 2017*. 48th Edition. Manila: Asian Development Bank.
- Agarwal, Bina. 2003. "Gender and Land Rights Revisited: Exploring New Prospects via the State, Family and Market." *Journal of Agrarian Change* 3(1-2): 184-224.
- Alesina, Alberto, Paola Giuliano and Nathan Nunn. 2013. "On the Origins of Gender Roles: Women and the Plough." *Quarterly Journal of Economics* 128(2): 469-530.
- Ali, Daniel A., 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.
- Anderson, Siwan. 2018. "Legal Origins and Female HIV." *American Economic Review* 108(6): 1407-39.
- Anderson, Siwan. 2007. "The Economics of Dowry and Brideprice." *Journal of Economic Perspectives* 21(4): 151-74.
- Anderson, Siwan, and Chris Bidner. 2015. "Property Rights over Marital Transfers." *Quarterly Journal of Economics* 130(3): 1421-84.
- Ashraf, Nava, Natalie Bau, Nathan Nunn and Alessandra Voena. 2020. "Bride Price and Female Education." *Journal of Political Economy* 128(2): 591-641.
- Bertrand, Marianne. 2020. "Gender in the Twenty-First Century." *AEA Papers and Proceedings* 110: 1-24.
- 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: 1-15.
- Bursztyjn, Leonardo, Alessandra L. González and David Yanagizawa-Drott. 2020. "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia." *American Economic Review* 110(10): 2997-3029.
- Corno, Lucia, Nicole Hildebrandt and Alessandra Voena. 2020 "Age of Marriage, Weather Shocks, and the Direction of Marriage Payments." *Econometrica* 88(3): 879-915.
- 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.
- Deere, Carmen Diana and Magdalena Leon. 2003. "The Gender Asset Gap: Land in Latin America." *World Development* 31(6): 925-47.
- Deere, Carmen Diana, Abena D. Oduro, Hema Swaminathan and Cheryl Doss. 2013. "Property Rights and the Gender Distribution of Wealth in Ecuador, Ghana and India." *Journal of Economic Inequality* 11: 249-65.
- 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): 114-41.
- Deininger, Klaus, Songqinq Jin, Hari K. Nagarajan and Fang Xia, 2019. "Inheritance Law Reform, Empowerment, and Human Capital Accumulation: Second-Generation Effects from India." *Journal of Development Studies* 55(12): 2549-71.
- Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar and Jake Hess. 2018. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank.

- Doss, Cheryl, Caitlin Kieran and Talip Kilic. 2020. "Measuring Ownership, Control, and Use of Assets." *Feminist Economics* 26(3): 144-68.
- Doss, Cheryl, Chiara Kovarik, Amber Peterman, Agnes Quisumbing and Mara van den Bold. 2015. "Gender Inequalities in Ownership and Control of Land in Africa: Myth and Reality." *Agricultural Economics* 46(3): 403-34.
- Doss, Cheryl, Sung Mi Kim, Jemimah Njuki, Emily Hillenbrand and Maureen Miruka. 2014. "Women's Individual and Joint Property Ownership: Effects on Household Decisionmaking" IFPRI Discussion Paper 01347. Washington, DC: International Food Policy Research Institute.
- Engels, Friedrich. 1902. *The Origin of the Family, Private Property, and the State*. Chicago, IL: Charles H. Kerr & Company.
- Eurostat. 2015. *People in the EU: Who Are We and How Do We Live?* Luxembourg: Publications Office of the European Union.
- Evans, Ruth. 2015. "Working with Legal Pluralism: Widowhood, Property Inheritance, and Poverty Alleviation in Urban Senegal." *Gender & Development* 23(1): 77-94.
- Gaddis, Isis and Stephan Klasen. 2014. "Economic Development, Structural Change, and Women's Labor Force Participation: A Reexamination of the Feminization U Hypothesis." *Journal of Population Economics* 27(3): 639-81.
- Gaddis, Isis, Rahul Lahoti and Wenjie Li. 2018. "Gender Gaps in Property Ownership in Sub-Saharan Africa." Policy Research Working Paper 8573. Washington, DC: World Bank.
- Giuliano, Paola. 2017. "Gender: An Historical Perspective." NBER Working Paper 23635. Cambridge, MA: National Bureau of Economic Research.
- Giuliano, Paola and Nathan Nunn. 2018. "Ancestral Characteristics of Modern Populations." *Economic History of Developing Regions* 33(1): 1-17.
- Goldstein, Markus and Christopher Udry. 2008. "The Profits of Power: Land Rights and Agricultural Investment in Ghana." *Journal of Political Economy* 116(6): 981-1022.
- Goldstein, Markus, Kenneth Hounghbedji, Florence Kondylis, Michael O'Sullivan and Harris Selod. 2018. "Formalization without Certification? Experimental Evidence on Property Rights and Investment." *Journal of Development Economics* 132: 57-74.
- Hallward-Driemeier, Mary, Bob Rijkers and Andrew Waxman. 2017. "Can Minimum Wages Close the Gender Wage Gap? Evidence from Indonesia." *Review of Income and Wealth* 63(2): 310-34.
- Hallward-Driemeier, Mary and Tazeen Hasan. 2013. *Empowering Women. Legal Rights and Economic Opportunities in Africa*. Washington, DC: World Bank.
- Harris, Jaime, Robert R. Martin, Sarah Montminy and Roger Finke. 2019. Cross-National Socio-Economic and Religion Data. 2011. Version Feb. 10, 2019. Retrieved from: <http://www.thearda.com/Archive/Files/Descriptions/ECON11.asp> (accessed August 17, 2020).
- Htun, Mala, Francesca R. Jensenius and Jami Nelson-Nuñez. 2019. "Gender-Discriminatory Laws and Women's Economic Agency." *Social Politics: International Studies in Gender, State & Society* 26(2): 193-222.
- Hyland, Marie, Simeon Djankov and Pinelopi K. Goldberg. 2020. "Gendered Laws and Women in the Workforce." *American Economic Review: Insights* 2(4): 475-90.
- ICF International. 2012. Demographic and Health Survey Interviewer's Manual. MEASURE DHS Basic Documentation No. 2. Calverton, MD: ICF International.

- Islam, Asif, Silvia Muzi and Mohammad Amin. 2019. "Unequal Laws and the Disempowerment of Women in the Labour Market: Evidence from Firm-Level Data." *Journal of Development Studies* 55(5): 822-44.
- Jackson, Cecile. 2003. "Gender Analysis of Land: Beyond Land Rights for Women?" *Journal of Agrarian Change* 3(4): 453-80.
- Jacobs, Krista and Aslihan Kes. 2015. "The Ambiguity of Joint Asset Ownership: Cautionary Tales from Uganda and South Africa." *Feminist Economics* 21(3): 23-55.
- Jacobs, Krista, Sophie Namy, Aslihan Kes, Urmilla Bob and Vadivelu Moodley. 2011. "Gender Differences in Asset Rights in KwaZulu-Natal, South Africa." Gender Land and Asset Survey. Washington, DC: International Center for Research on Women (ICRW).
- Jayachandran, Seema. 2021. "Social Norms as a Barrier to Women's Employment in Developing Countries." *IMF Economic Review* 69: 576-95.
- Joshi, Kaushal, Arturo M. Martinez, Mildred Addawe, Christian Flora Mae Soco and Hema Swaminathan. Forthcoming. "Contextualizing Individual-Level Asset Data Collection: Evidence from Household Surveys." *Journal of Development Studies*.
- Kes, Aslihan, Krista Jacobs and Sophie Namy. 2011. *Gender Differences in Asset Rights in Central Uganda*. Gender Land and Asset Survey. Washington, DC: International Center for Research on Women (ICRW).
- Khalil, Umair and Sulagna Mookerjee. 2019. "Patrilocal Residence and Women's Social Status: Evidence from South Asia." *Economic Development and Cultural Change* 67(2): 401-38.
- Kieran, Caitlin, Kathryn Sproule, Agnes Quisumbing and Cheryl Doss. 2017. "Gender Gaps in Landownership Across and Within Households in Four Asian Countries." *Land Economics* 93(2): 342-70.
- Kieran, Caitlin, Kathryn Sproule, Cheryl Doss, Agnes Quisumbing and Sung Mi Kim. 2015. "Examining Gender Inequalities in Land Rights Indicators in Asia." *Agricultural Economics* 46(S1): 119-38.
- Kilic, Talip, and Heather Moylan. 2016. "Methodological Experiment on Measuring Asset Ownership from a Gender Perspective: Technical Report." Washington, DC: World Bank.
- Klasen, Stephan. 2019. "What Explains Uneven Female Labor Force Participation Levels and Trends in Developing Countries?" *World Bank Research Observer* 34(2): 161-97.
- Klasen, Stephan. 2020. "From 'MeToo' to Boko Haram: A Survey of Levels and Trends of Gender Inequality in the World." *World Development* 128: 1-10.
- Kumar, Neha and Agnes Quisumbing. 2012. "Inheritance Practices and Gender Differences in Poverty and Well-Being in Rural Ethiopia." *Development Policy Review* 30(5): 573-95.
- Lahoti, Rahul, Suchitra J. Y. and Hema Swaminathan. 2016. "Not in Her Name: Women's Property Ownership in India." *Economic and Political Weekly* 51(5): 17-9.
- Landesa. 2013. "The Formal and Informal Barriers in the Implementation of the Hindu Succession (Amendment) Act 2005." New York, NY: Landesa Rural Development Institute and UN Women.
- Lambert, Sylvie, Martin Ravallion and Dominique van de Walle. 2014. "Intergenerational Mobility and Interpersonal Inequality in an African Economy." *Journal of Development Economics* 110: 327-44.
- Lowes, Sara, and Nathan Nunn. 2018. "Bride Price and the Well-Being of Women." In *Towards Gender Equity in Development*, by Siwan Anderson, Lori Beaman and Jean-Philippe Platteau (eds.), Oxford University Press, pp. 117-38.

- 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.
- Najjar, Dina, Bipasha Baruah and Aman El Garhi. 2020. "Gender and Asset Ownership in the Old and New Lands of Egypt." *Feminist Economics* 26(3): 119-43.
- O'Sullivan, Michael, Arathi Rao, Raka Banerjee, Kajal Gulati and Margaux Vinez. 2014. *Levelling the Field: Improving Opportunities for Women Farmers in Africa*. Washington, DC: World Bank and ONE Campaign.
- O'Sullivan, Michael. 2017. "Gender and Property Rights in Sub-Saharan Africa. A Review of Constraints and Effective Interventions." Policy Research Working Paper 8250, Washington, DC: World Bank.
- Pande, Rohini and Christopher Udry. 2006. "Institutions and Development: A View from Below." In *Advances in Economics and Econometrics: Theory and Applications, Ninth World Congress*, by Richard Blundell, Whitney K. Newey and Torsten Persson (eds.), Cambridge University Press, pp. 349-412.
- Pendall, Rolf, Laurie Goodman, Jun Zhu and Amanda Gold. 2016. *The Future of Rural Housing*. Research Report. Washington, DC: Urban Institute.
- Roy, Sanchari. 2015. "Empowering Women? Inheritance Rights, Female Education and Dowry Payments in India." *Journal of Development Economics* 114: 233-51.
- Sato, Hiroshi, Terry Sicular and Ximing Yue. 2011. "Housing Ownership, Incomes, and Inequality in China, 2002-2007." CIBC Working Paper 2011-12, Centre for Human Capital and Productivity (CHCP). London, ON: University of Western Ontario.
- Schlager, Edella and Elinor Ostrom. 1992. "Property-Rights Regimes and Natural Resources: A Conceptual Analysis." *Land Economics* 68(3): 249-62.
- Slavchevska, Vanya, Cheryl R. Doss Ana Paula de la O Campos and Chiara Brunelli. 2021. "Beyond Ownership: Women's and Men's Land Rights in Sub-Saharan Africa." *Oxford Development Studies* 49(1): 2-22.
- Swaminathan, Hema, Rahul Lahoti and Suchitra J. Y. 2012. "Gender Asset and Wealth Gaps: Evidence from Karnataka." *Economic and Political Weekly* 47(35): 59-67.
- United Nations. 2019. Guidelines for Producing Statistics on Asset Ownership from a Gender Perspective. New York, NY: Department of Economic and Social Affairs.
- World Bank. 2011. *World Development Report 2012: Gender Equality and Development*. Washington, DC: World Bank.
- World Bank. 2015. *Women, Business and the Law 2016: Getting to Equal*. Washington, DC: World Bank.
- World Bank. 2020a. *Women, Business and the Law 2020*. Washington, DC: World Bank.
- World Bank. 2020b. World Development Indicators. Washington, DC: World Bank. Retrieved from <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators> (accessed June 20, 2020).

Tables

TABLE 1: Correlates of wives' probability to own housing, linear probability model

	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Legal framework of the country:						
Men and women have equal ownership rights to immovable property	0.241*** (2.76)	0.208** (2.53)	0.235*** (2.93)	0.264*** (2.73)	0.258*** (2.85)	0.249*** (2.96)
Law provides for the valuation of non-monetary contributions	0.180*** (4.30)	0.112** (2.23)	0.114** (2.31)	0.205*** (2.79)	0.092 (1.64)	0.079 (1.44)
Law provides for equal inheritance rights	0.087* (1.76)	0.063 (1.25)	0.071 (1.43)	0.089 (1.60)	0.040 (0.58)	0.037 (0.56)
Law mandates equal remuneration for equal work	0.098* (1.79)	0.098** (2.16)	0.107** (2.49)	0.123 (1.27)	0.039 (0.64)	0.040 (0.70)
A woman can get a job in the same way as a man	-0.136 (-1.31)	-0.047 (-0.59)	-0.063 (-0.81)	-0.069 (-0.87)	-0.102 (-1.28)	-0.101 (-1.34)
Other country or subnational controls:						
In GDP pc	-0.316 (-0.97)	0.005 (0.01)	0.086 (0.29)	-0.660 (-1.34)	-0.278 (-0.73)	-0.128 (-0.36)
In GDP pc, squared	0.018 (0.79)	-0.002 (-0.09)	-0.009 (-0.45)	0.035 (1.06)	0.009 (0.37)	-0.001 (-0.05)
Religion (ref: Catholic/Orthodox Christian)						
Other Christian		-0.028 (-0.42)	-0.008 (-0.13)		0.097 (1.20)	0.099 (1.28)
Muslim		0.016 (0.18)	0.024 (0.27)		-0.096 (-0.85)	-0.087 (-0.81)
Other		-0.172* (-1.89)	-0.196** (-2.23)		-0.248* (-1.92)	-0.277** (-2.32)
Share of married women disagreeing with wife beating (subnational level)		-0.170*** (-2.85)	-0.178*** (-3.11)		-0.187 (-1.58)	-0.183 (-1.61)
Absence of inheritance		0.195*** (3.37)	0.225*** (3.89)		0.191*** (3.13)	0.233*** (3.43)
Matrilocal societies		-0.038 (-0.23)	-0.016 (-0.10)		0.037 (0.18)	0.063 (0.31)
Patrilocal societies		-0.207 (-1.62)	-0.186 (-1.52)		-0.124 (-0.85)	-0.092 (-0.67)
Nuclear family		-0.145 (-0.57)	-0.149 (-0.62)		-0.056 (-0.19)	-0.048 (-0.18)
Extended family		-0.209 (-1.66)	-0.171 (-1.42)		-0.234 (-1.58)	-0.212 (-1.53)
Ancestral marriage custom (ref: bride price)						
Other or no exchange		0.254* (1.93)	0.228* (1.75)		0.513*** (3.32)	0.506*** (3.42)
Dowry		0.125 (1.12)	0.183 (1.68)		0.199 (1.15)	0.255 (1.58)
Missing		0.203 (0.99)	0.088 (0.44)		-0.022 (-0.11)	-0.083 (-0.42)
World region (ref: East Asia & Pacific)						
Europe & Central Asia	-0.254*** (-3.53)	0.082 (0.65)	-0.015 (-0.13)	-0.376*** (-3.80)	0.057 (0.32)	0.018 (0.11)

Latin America & Caribbean	-0.325*** (-4.74)	-0.393*** (-3.43)	-0.350*** (-3.09)	-0.254*** (-2.96)	-0.492*** (-3.13)	-0.482*** (-3.19)
Middle East & North Africa	-0.462*** (-4.24)	-0.237 (-1.68)	-0.329** (-2.39)	-0.470*** (-5.86)	-0.336** (-2.18)	-0.399** (-2.67)
South Asia	-0.164*** (-2.70)	0.154 (1.19)	0.126 (1.09)	-0.260*** (-5.12)	0.017 (0.10)	0.017 (0.10)
Sub-Saharan Africa	-0.339*** (-5.84)	-0.101 (-0.76)	-0.148 (-1.26)	-0.367*** (-4.60)	-0.153 (-0.94)	-0.178 (-1.20)
Characteristics of the wife:						
Wife's total number of sons ever born			0.010** (2.59)			0.011*** (3.51)
Wife's total number of daughters ever born			0.010** (2.36)			0.006*** (2.77)
Wife's age in years			-0.000 (-0.06)			0.010*** (3.90)
Wife's age in years, squared			0.000 (1.57)			-0.000** (-2.50)
Wife's education (ref: none)						
1 to 4 years of education			0.016 (1.43)			0.026* (1.90)
5 to 8 years of education			0.016 (1.14)			0.019 (0.86)
9 to 12 years of education			0.002 (0.12)			0.021 (1.30)
13 or more years of education			0.031 (1.34)			0.051** (2.04)
Wife's type of work (ref: not working)						
Services			-0.053*** (-2.97)			-0.031 (-1.62)
Agriculture			0.025 (0.79)			0.026 (1.13)
Industry/manual			-0.055*** (-3.10)			-0.014 (-0.59)
DK/missing/other			-0.052** (-2.34)			-0.039 (-1.05)
Characteristics of the husband:						
Husband's total number of sons ever born			0.001 (0.33)			-0.003 (-1.21)
Husband's total number of daughters ever born			-0.002 (-0.87)			-0.002 (-1.36)
Husband's age in years			0.009 (1.60)			0.003 (0.50)
Husband's age in years, squared			-0.000 (-1.19)			-0.000 (-0.41)
Husband's education (ref: none)						
1 to 4 years of education			0.030 (1.38)			0.018* (1.75)
5 to 8 years of education			0.042* (1.98)			0.010 (0.93)
9 to 12 years of education			0.041* (1.87)			-0.009 (-0.61)

13 or more years of education			0.080** (2.66)			-0.003 (-0.17)
Husband's type of work (ref: not working)						
Services			-0.024 (-1.33)			-0.042** (-2.24)
Agriculture			0.023 (1.10)			-0.035 (-1.39)
Industry/manual			-0.040** (-2.03)			-0.049** (-2.41)
DK/missing/other			-0.035 (-1.51)			-0.053* (-1.84)
Characteristics of the couple:						
Both spouses are working			0.036** (2.21)			0.016 (0.59)
Husband-wife education gap			-0.003* (-1.77)			0.001 (0.34)
Household headship (ref: husband is head)						
Wife head of household			0.026* (1.79)			0.061** (2.31)
Other male household head			-0.035 (-1.20)			-0.084** (-2.63)
Other female household head			-0.076*** (-2.88)			-0.163*** (-3.45)
Constant	1.717 (1.48)	0.584 (0.47)	-0.018 (-0.02)	3.354* (1.88)	2.205 (1.50)	1.395 (1.01)
Observations	71,313	71,313	71,122	142,585	142,585	142,324
R ²	0.05	0.07	0.11	0.08	0.12	0.14

Note: Data for 41 countries from 2010-18. *t* statistics in parentheses. Dependent variable is wife's housing ownership (sole and joint) as a binary variable (yes/no). Coefficients after OLS estimation. Standard errors clustered at the country level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Source: DHS.

TABLE 2: Correlates of wives' probability to own land, linear probability model

	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Legal framework of the country:						
Men and women have equal ownership rights to immovable property	0.152 (1.54)	0.058 (0.56)	0.087 (0.91)	0.201** (2.53)	0.155* (1.89)	0.157** (2.03)
Law provides for the valuation of non-monetary contributions	0.120** (2.64)	0.092* (1.90)	0.089* (1.86)	0.170*** (2.76)	0.051 (0.89)	0.037 (0.62)
Law provides for equal inheritance rights	0.087** (2.24)	-0.007 (-0.13)	0.004 (0.09)	0.121** (2.26)	0.066 (1.13)	0.065 (1.16)
Law mandates equal remuneration for equal work	0.114** (2.17)	0.062 (1.11)	0.074 (1.46)	0.122 (1.32)	0.004 (0.05)	0.009 (0.13)
A woman can get a job in the same way as a man	-0.090 (-0.78)	0.002 (0.02)	-0.018 (-0.18)	-0.055 (-0.80)	-0.092 (-1.14)	-0.093 (-1.22)
Other country or subnational controls:						
ln GDP pc	0.128 (0.29)	0.376 (0.78)	0.430 (0.99)	-0.457 (-0.84)	-0.093 (-0.21)	0.065 (0.16)
ln GDP pc, squared	-0.012 (-0.42)	-0.027 (-0.85)	-0.032 (-1.12)	0.021 (0.56)	-0.005 (-0.16)	-0.016 (-0.56)
Religion (ref: Catholic or Orthodox)						
Other Christian		-0.056 (-0.73)	-0.028 (-0.39)		0.139 (1.54)	0.141 (1.67)
Muslim		-0.030 (-0.35)	-0.014 (-0.16)		-0.065 (-0.69)	-0.050 (-0.52)
Other		0.042 (0.41)	0.035 (0.36)		-0.173 (-1.31)	-0.203 (-1.64)
Share of married women disagreeing with wife beating (subnational level)		-0.107 (-1.60)	-0.114* (-1.79)		-0.108 (-1.09)	-0.096 (-0.99)
Absence of inheritance		0.098** (2.04)	0.121** (2.62)		0.077 (1.20)	0.123* (1.80)
Matrilocal societies		0.207 (0.90)	0.193 (0.94)		0.110 (0.57)	0.151 (0.79)
Patrilocal societies		-0.119 (-0.81)	-0.110 (-0.79)		-0.035 (-0.23)	-0.003 (-0.02)
Nuclear family		-0.082 (-0.28)	-0.104 (-0.37)		-0.111 (-0.40)	-0.063 (-0.24)
Extended family		-0.132 (-0.96)	-0.101 (-0.77)		-0.240* (-1.89)	-0.232* (-1.95)
Ancestral marriage custom (ref: bride price)						
Other or no exchange		-0.000 (-0.00)	0.009 (0.06)		0.382** (2.40)	0.351** (2.26)
Dowry		-0.015 (-0.13)	0.013 (0.12)		0.139 (0.72)	0.177 (0.99)
Missing		0.054 (0.25)	-0.016 (-0.08)		0.100 (0.50)	0.038 (0.19)
World region (ref: East Asia & Pacific)						
Europe & Central Asia	-0.324*** (-6.76)	-0.078 (-0.47)	-0.141 (-0.94)	-0.362*** (-6.03)	-0.025 (-0.15)	-0.044 (-0.29)
Latin America & Caribbean	-0.212*** (-2.90)	-0.163 (-1.36)	-0.134 (-1.13)	-0.273*** (-2.99)	-0.395*** (-2.96)	-0.372*** (-2.82)

Middle East & North Africa	-0.251*	-0.130	-0.190	-0.341***	-0.291*	-0.337**
	(-1.99)	(-0.83)	(-1.23)	(-4.68)	(-1.76)	(-2.16)
South Asia	-0.123**	0.004	-0.031	-0.259***	-0.104	-0.078
	(-2.07)	(0.02)	(-0.17)	(-5.14)	(-0.52)	(-0.43)
Sub-Saharan Africa	-0.202***	-0.027	-0.083	-0.313***	-0.204	-0.221
	(-3.57)	(-0.15)	(-0.51)	(-4.67)	(-1.10)	(-1.34)
Characteristics of the wife:						
Wife's total number of sons ever born			0.006*			0.009***
			(1.93)			(3.85)
Wife's total number of daughters ever born			0.008**			0.005**
			(2.34)			(2.24)
Wife's age in years			0.006**			0.006**
			(2.38)			(2.34)
Wife's age in years, squared			-0.000			-0.000
			(-1.00)			(-1.21)
Wife's education (ref: none)						
1 to 4 years of education			0.001			0.010
			(0.12)			(0.93)
5 to 8 years of education			0.018			0.018
			(1.39)			(1.06)
9 to 12 years of education			0.026			0.024*
			(1.52)			(1.69)
13 or more years of education			0.047**			0.055**
			(2.31)			(2.11)
Wife's type of work (ref: not working)						
Services			-0.041**			-0.037*
			(-2.34)			(-1.73)
Agriculture			0.074*			0.043
			(1.77)			(1.11)
Industry/manual			-0.055**			-0.047
			(-2.08)			(-1.46)
DK/missing/other			-0.016			-0.028
			(-0.62)			(-0.74)
Characteristics of the husband:						
Husband's total number of sons ever born			0.002			-0.001
			(1.00)			(-0.73)
Husband's total number of daughters ever born			-0.000			-0.000
			(-0.03)			(-0.29)
Husband's age in years			0.002			0.001
			(0.57)			(0.27)
Husband's age in years, squared			-0.000			-0.000
			(-0.13)			(-0.15)
Husband's education (ref: none)						
1 to 4 years of education			0.012			0.010
			(0.67)			(0.94)
5 to 8 years of education			0.030			0.013
			(1.49)			(1.10)
9 to 12 years of education			0.041**			0.006
			(2.09)			(0.53)
13 or more years of education			0.070**			0.011
			(2.47)			(0.55)

Husband's type of work (ref: not working)						
Services			-0.019*			-0.030
			(-1.77)			(-1.52)
Agriculture			0.068***			0.001
			(4.31)			(0.02)
Industry/manual			-0.030**			-0.046**
			(-2.27)			(-2.18)
DK/missing/other			-0.014			-0.055*
			(-0.68)			(-1.88)
Characteristics of the couple:						
Both spouses are working			0.038**			0.029
			(2.29)			(1.18)
Husband-wife education gap			-0.002			0.001
			(-0.97)			(0.43)
Household headship (ref: husband is head)						
Wife head of household			0.013			0.045*
			(0.98)			(1.92)
Other male household head			-0.014			-0.039*
			(-1.24)			(-1.69)
Other female household head			-0.031***			-0.088***
			(-2.88)			(-3.68)
Constant	-0.044	-0.896	-1.286	2.595	1.573	0.753
	(-0.03)	(-0.48)	(-0.77)	(1.33)	(0.96)	(0.49)
Observations	70,286	70,286	70,099	141,024	141,024	140,764
R^2	0.03	0.04	0.07	0.07	0.10	0.12

Note: Data for 39 countries from 2010-18. t statistics in parentheses. Dependent variable is wife's land ownership (sole and joint) as a binary variable (yes/no). Coefficients after OLS estimation. Standard errors clustered at the country level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *Source:* DHS.

TABLE 3: Correlates of wives' probability to own housing and land, summary measures of legislative gender equality, linear probability model

	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Housing ownership						
Assets	0.003** (2.57)	0.004*** (3.38)	0.004*** (3.27)	0.004*** (3.49)	0.003** (2.37)	0.003** (2.23)
Workplace	0.001 (1.01)	0.002** (2.29)	0.002** (2.23)	0.001 (0.67)	0.001 (0.78)	0.001 (0.68)
Pay	0.001 (1.61)	0.003*** (3.71)	0.002*** (3.44)	0.003** (2.44)	0.002 (1.66)	0.002 (1.61)
Entrepreneurship	-0.001 (-1.32)	-0.002 (-1.64)	-0.002 (-1.51)	-0.001 (-1.60)	-0.000 (-0.21)	-0.000 (-0.07)
Observations	71,313	71,313	71,122	142,585	142,585	142,324
R ²	0.05	0.07	0.11	0.08	0.12	0.14
Land ownership						
Assets	0.002** (2.50)	0.003*** (3.19)	0.003*** (2.88)	0.004*** (4.68)	0.003*** (2.71)	0.003** (2.39)
Workplace	0.001** (2.29)	0.002** (2.66)	0.002** (2.53)	0.000 (0.57)	0.000 (0.11)	-0.000 (-0.01)
Pay	0.002*** (3.95)	0.004*** (5.44)	0.003*** (5.18)	0.003*** (2.78)	0.001 (1.11)	0.001 (1.04)
Entrepreneurship	-0.002*** (-3.72)	-0.004*** (-3.20)	-0.004*** (-2.85)	-0.002** (-2.54)	-0.001 (-0.35)	-0.000 (-0.01)
Observations	70,286	70,286	70,099	141,024	141,024	140,764
R ²	0.04	0.05	0.08	0.08	0.10	0.12

Note: Data for 41 (housing)/ 39 (land) countries from 2010-18. Dependent variable is wife's housing/land ownership (sole and joint) as a binary variable (yes/no). Coefficients after OLS estimation. *t* statistics in parentheses. See Table 1, col. (3) for full list of independent variables included in the regressions. Standard errors clustered at the country level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *Source:* DHS.

TABLE 4: Correlates of intrahousehold patterns of housing ownership, multinomial logit (marginal effects)

	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Outcome 0: No one among the couple owns						
Men and women have equal ownership rights to immovable property	-0.166** (-2.05)	-0.151 (-1.43)	-0.204** (-1.96)	-0.076* (-1.79)	-0.086 (-1.45)	-0.092* (-1.69)
Law provides for the valuation of non-monetary contributions	-0.123*** (-2.75)	-0.123* (-1.92)	-0.136** (-2.23)	-0.088*** (-2.93)	-0.094** (-2.43)	-0.084** (-2.54)
Law provides for equal inheritance rights	-0.094 (-1.64)	-0.103* (-1.69)	-0.102 (-1.60)	-0.042* (-1.69)	-0.055 (-1.29)	-0.034 (-0.77)
Law mandates equal remuneration for equal work	-0.095** (-2.40)	-0.158*** (-3.20)	-0.152*** (-3.27)	-0.017 (-0.49)	-0.089** (-2.08)	-0.069* (-1.92)
A woman can get a job in the same way as a man	0.177** (2.25)	0.036 (0.39)	0.052 (0.57)	0.135*** (2.65)	0.057 (0.86)	0.045 (0.78)
Outcome 1: Only the husband owns either alone or jointly with others (but not the wife)						
Men and women have equal ownership rights to immovable property	-0.096 (-1.19)	-0.090 (-1.15)	-0.063 (-0.82)	-0.200** (-2.06)	-0.200*** (-2.76)	-0.180** (-2.57)
Law provides for the valuation of non-monetary contributions	-0.067 (-1.17)	0.010 (0.14)	0.018 (0.28)	-0.124 (-1.61)	-0.015 (-0.26)	-0.010 (-0.21)
Law provides for equal inheritance rights	-0.009 (-0.24)	0.015 (0.35)	0.005 (0.11)	-0.057 (-1.11)	-0.005 (-0.10)	-0.023 (-0.49)
Law mandates equal remuneration for equal work	-0.015 (-0.31)	0.049 (1.22)	0.035 (0.94)	-0.105 (-1.32)	0.028 (0.62)	0.010 (0.22)
A woman can get a job in the same way as a man	-0.028 (-0.46)	0.047 (0.87)	0.045 (0.86)	-0.038 (-0.51)	0.091 (1.52)	0.090 (1.58)
Outcome 2: Wife owns the house alone or jointly with husband or others						
Men and women have equal ownership rights to immovable property	0.262*** (2.93)	0.241*** (2.69)	0.267*** (3.09)	0.276*** (2.73)	0.286*** (3.26)	0.273*** (3.35)
Law provides for the valuation of non-monetary contributions	0.189*** (4.14)	0.113** (2.04)	0.118** (2.22)	0.212*** (2.83)	0.109** (2.08)	0.094* (1.88)
Law provides for equal inheritance rights	0.103** (2.03)	0.087 (1.42)	0.098 (1.62)	0.100 (1.64)	0.060 (0.89)	0.057 (0.85)
Law mandates equal remuneration for equal work	0.109* (1.94)	0.109** (2.02)	0.117** (2.29)	0.123 (1.24)	0.061 (0.93)	0.059 (0.95)
A woman can get a job in the same way as a man	-0.149 (-1.45)	-0.083 (-0.99)	-0.097 (-1.21)	-0.097 (-1.20)	-0.148* (-1.70)	-0.135* (-1.75)
Observations	71,313	71,313	71,122	142,585	142,585	142,324

Note: Data for 41 (housing)/ 39 (land) countries from 2010–18. t statistics in parentheses. Col 1 controls for world region fixed effects and GDP. Col 2 also controls for other country-level variables. Col 3 additionally controls for characteristics of the couple and household (see Table 1). Standard errors clustered at the country level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Source: DHS.

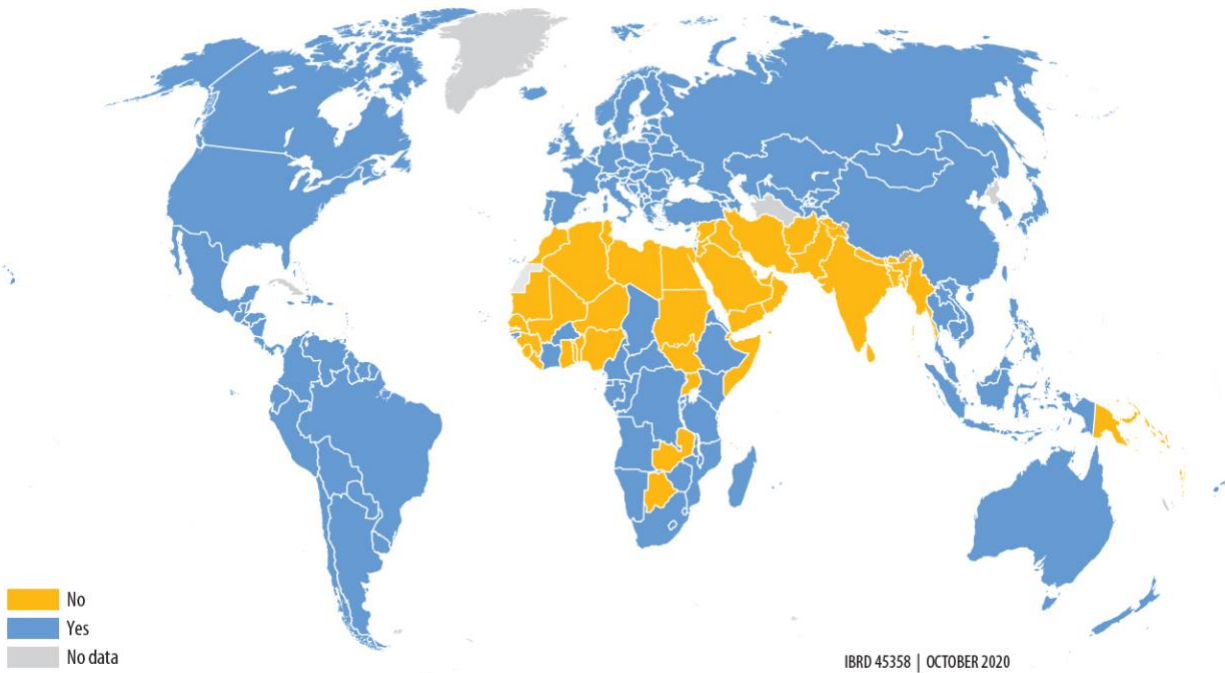
TABLE 5: Correlates of intrahousehold patterns of land ownership, multinomial logit (marginal effects)

	Urban			Rural		
	(1)	(2)	(3)	(1)	(2)	(3)
Outcome 0: No one among the couple owns						
Men and women have equal ownership rights to immovable property	-0.058 (-0.48)	0.037 (0.23)	-0.029 (-0.20)	-0.030 (-0.73)	-0.011 (-0.19)	-0.031 (-0.57)
Law provides for the valuation of non-monetary contributions	-0.094* (-1.87)	-0.113* (-1.81)	-0.112* (-1.90)	-0.053* (-1.66)	-0.045 (-0.87)	-0.033 (-0.70)
Law provides for equal inheritance rights	-0.082** (-2.03)	0.017 (0.31)	0.010 (0.18)	-0.067*** (-2.58)	-0.064 (-1.44)	-0.045 (-1.02)
Law mandates equal remuneration for equal work	-0.162*** (-4.06)	-0.144** (-2.09)	-0.144** (-2.37)	-0.028 (-0.70)	-0.069 (-1.43)	-0.054 (-1.32)
A woman can get a job in the same way as a man	0.038 (0.31)	-0.098 (-0.67)	-0.062 (-0.46)	0.062 (1.43)	0.000 (0.00)	-0.001 (-0.02)
Outcome 1: Only the husband owns either alone or jointly with others (but not the wife)						
Men and women have equal ownership rights to immovable property	-0.084 (-1.35)	-0.109 (-1.36)	-0.077 (-1.04)	-0.172** (-2.50)	-0.169*** (-3.37)	-0.150*** (-3.12)
Law provides for the valuation of non-monetary contributions	-0.024 (-0.77)	0.026 (0.54)	0.026 (0.60)	-0.117** (-2.08)	-0.021 (-0.42)	-0.017 (-0.39)
Law provides for equal inheritance rights	-0.003 (-0.15)	-0.021 (-0.88)	-0.030 (-1.19)	-0.052 (-1.25)	-0.024 (-0.64)	-0.042 (-1.16)
Law mandates equal remuneration for equal work	0.048 (1.57)	0.076** (2.28)	0.062** (1.99)	-0.093 (-1.35)	0.033 (0.82)	0.014 (0.34)
A woman can get a job in the same way as a man	0.046 (0.83)	0.115* (1.83)	0.100* (1.71)	0.006 (0.12)	0.119** (2.43)	0.114** (2.48)
Outcome 2: Wife owns land alone or jointly with husband or others						
Men and women have equal ownership rights to immovable property	0.142 (1.63)	0.072 (0.72)	0.107 (1.16)	0.202** (2.51)	0.180** (2.39)	0.181** (2.50)
Law provides for the valuation of non-monetary contributions	0.118*** (2.85)	0.087* (1.86)	0.086* (1.89)	0.170*** (2.77)	0.066 (1.19)	0.050 (0.90)
Law provides for equal inheritance rights	0.085** (2.42)	0.005 (0.09)	0.021 (0.41)	0.119** (2.19)	0.087 (1.48)	0.087 (1.48)
Law mandates equal remuneration for equal work	0.114*** (2.58)	0.068 (1.24)	0.082 (1.64)	0.121 (1.31)	0.036 (0.48)	0.040 (0.59)
A woman can get a job in the same way as a man	-0.084 (-0.84)	-0.018 (-0.18)	-0.038 (-0.41)	-0.068 (-1.02)	-0.119 (-1.57)	-0.113 (-1.58)
Observations	70,286	70,286	70,099	141,024	141,024	140,764

Note: Data for 41 (housing)/ 39 (land) countries from 2010-18. *t* statistics in parentheses. Col 1 controls for world region fixed effects and GDP. Col 2 also controls for other country-level variables. Col 3 additionally controls for characteristics of the couple and household (see Table 1). Standard errors clustered at the country level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *Source:* DHS.

Figures

FIGURE 1: Legal recognition of nonmonetary contributions to marital property



Note: 'Yes' denotes that the country's laws explicitly recognize nonmonetary contributions and/or that the marital property regime is full, partial or deferred community. *Source:* WBL 2020.

FIGURE 2a: Inheritance rights of children

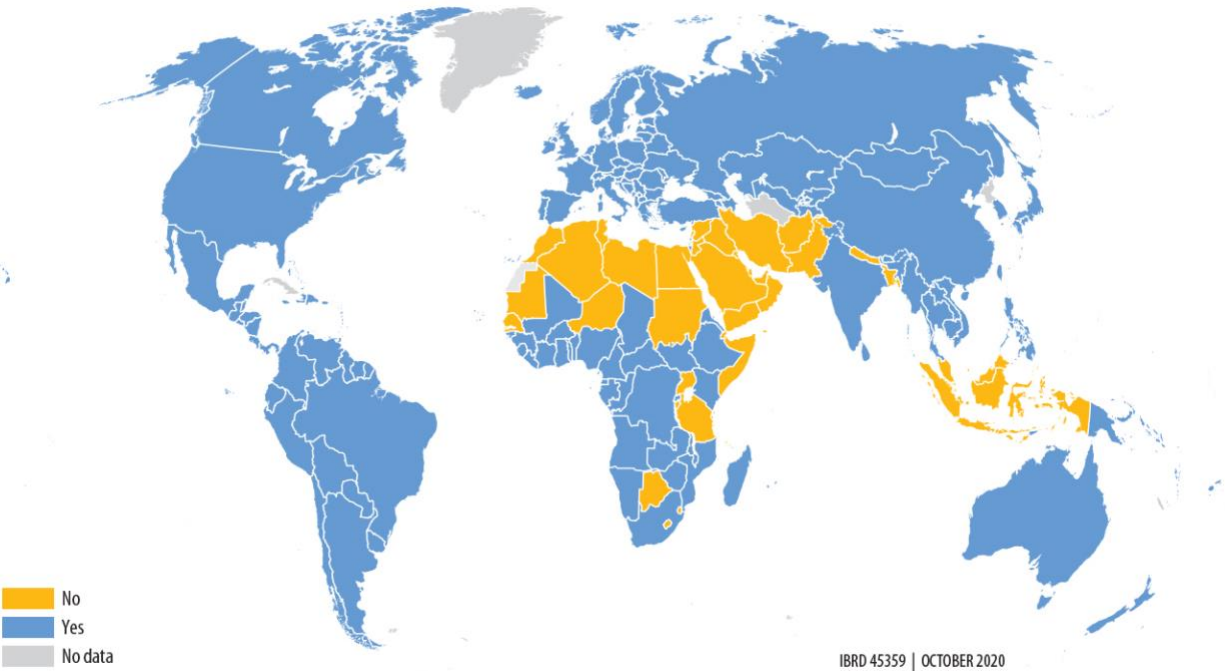
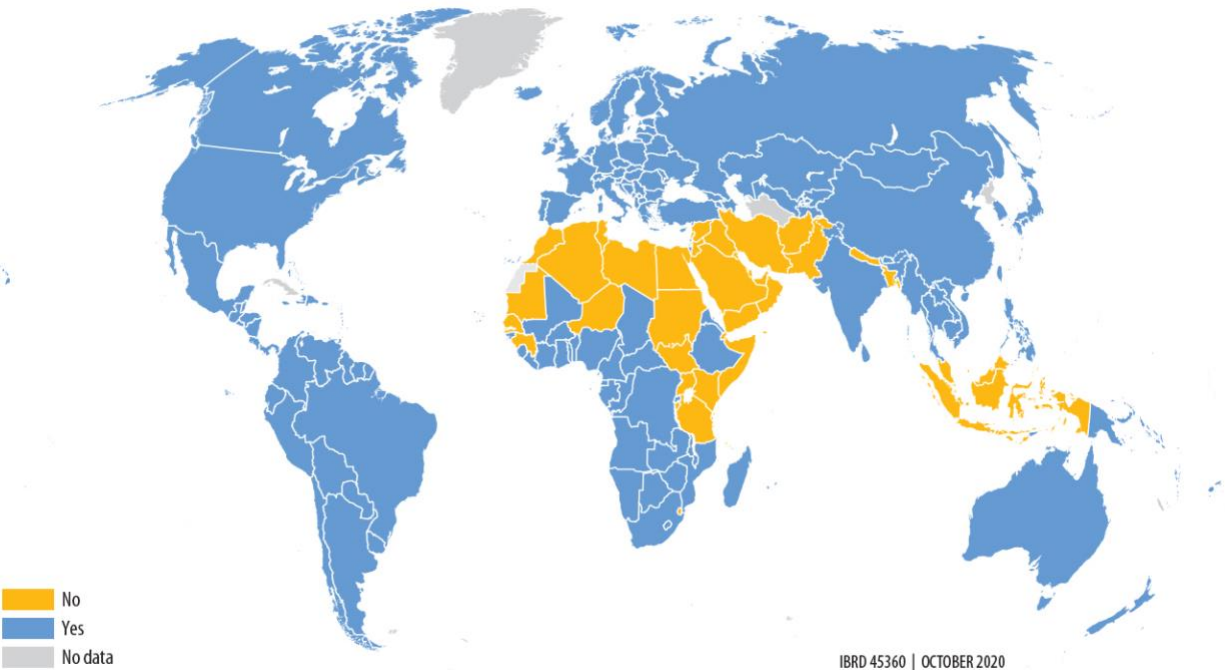
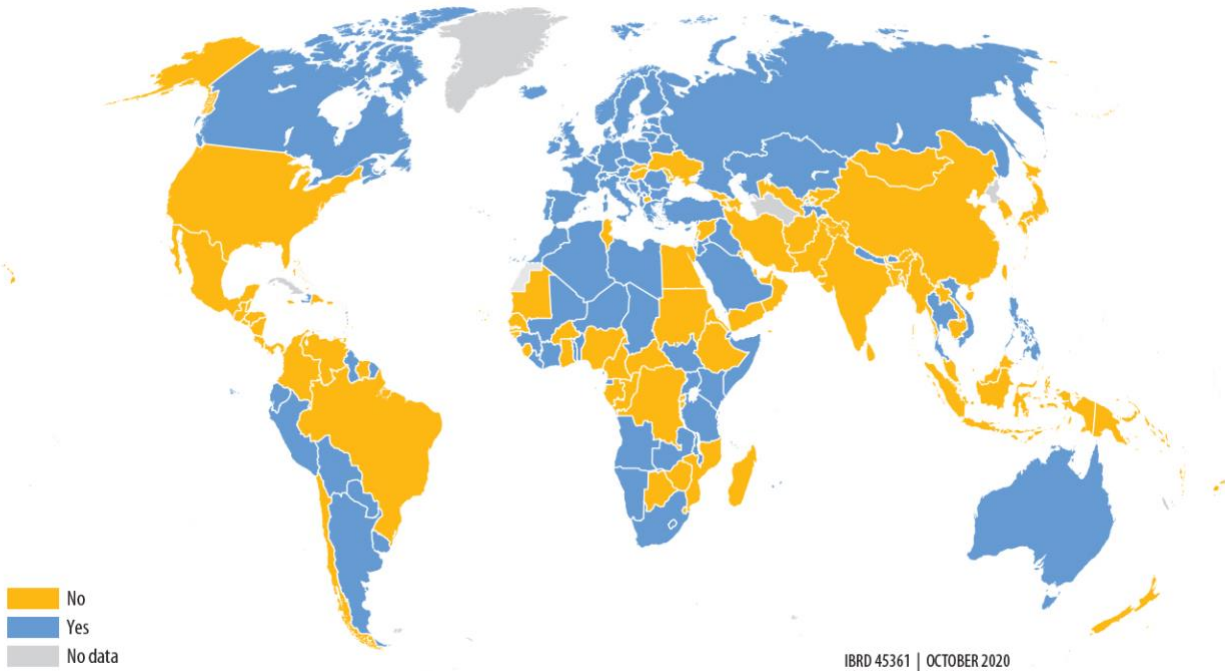


FIGURE 2b: Inheritance rights of spouses



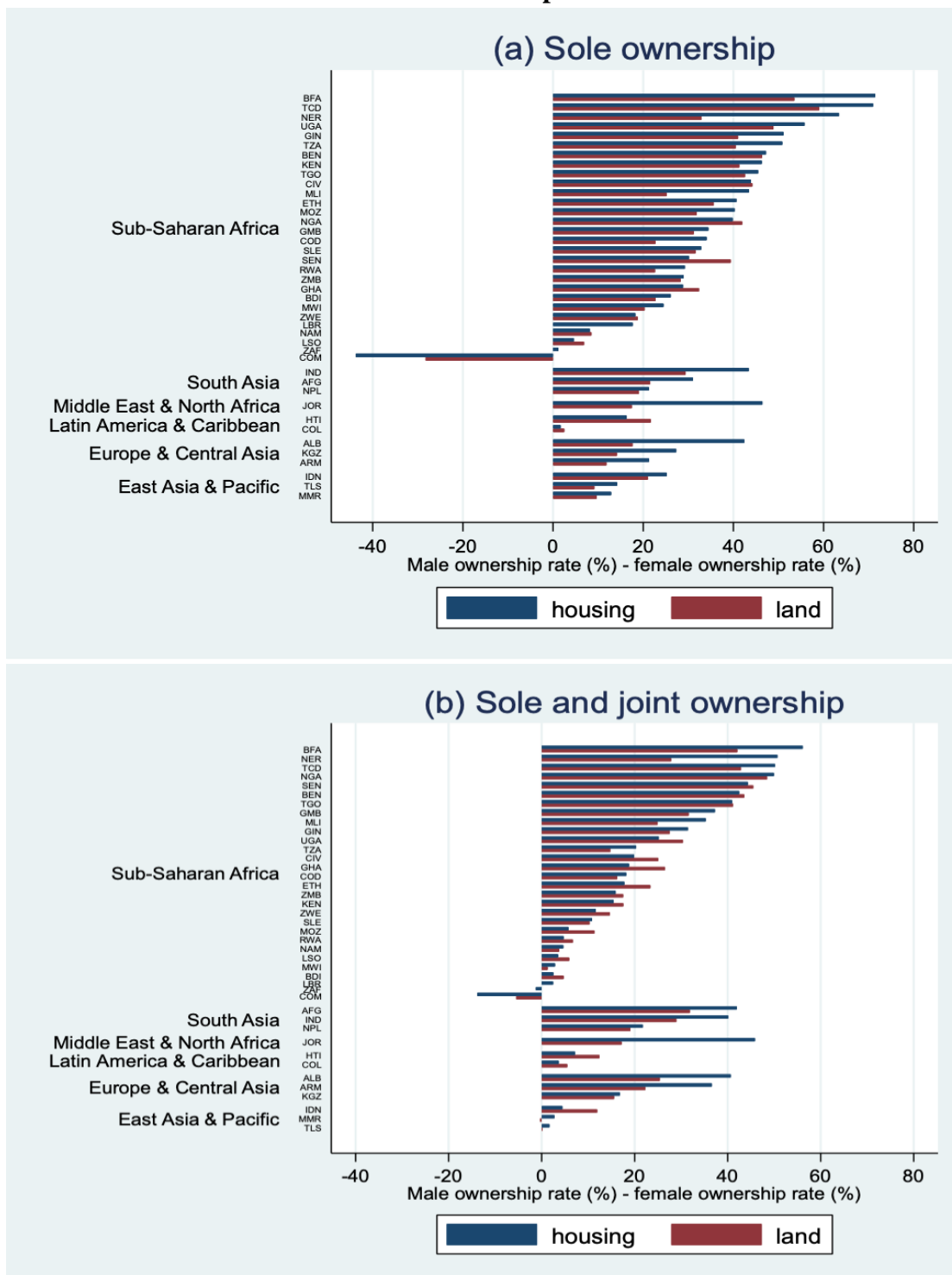
Note: 'Yes' denotes that the country's laws provide for equal treatment of male and female children and male and female surviving spouses, respectively. *Source:* WBL 2020.

FIGURE 3: Protection from discrimination in pay



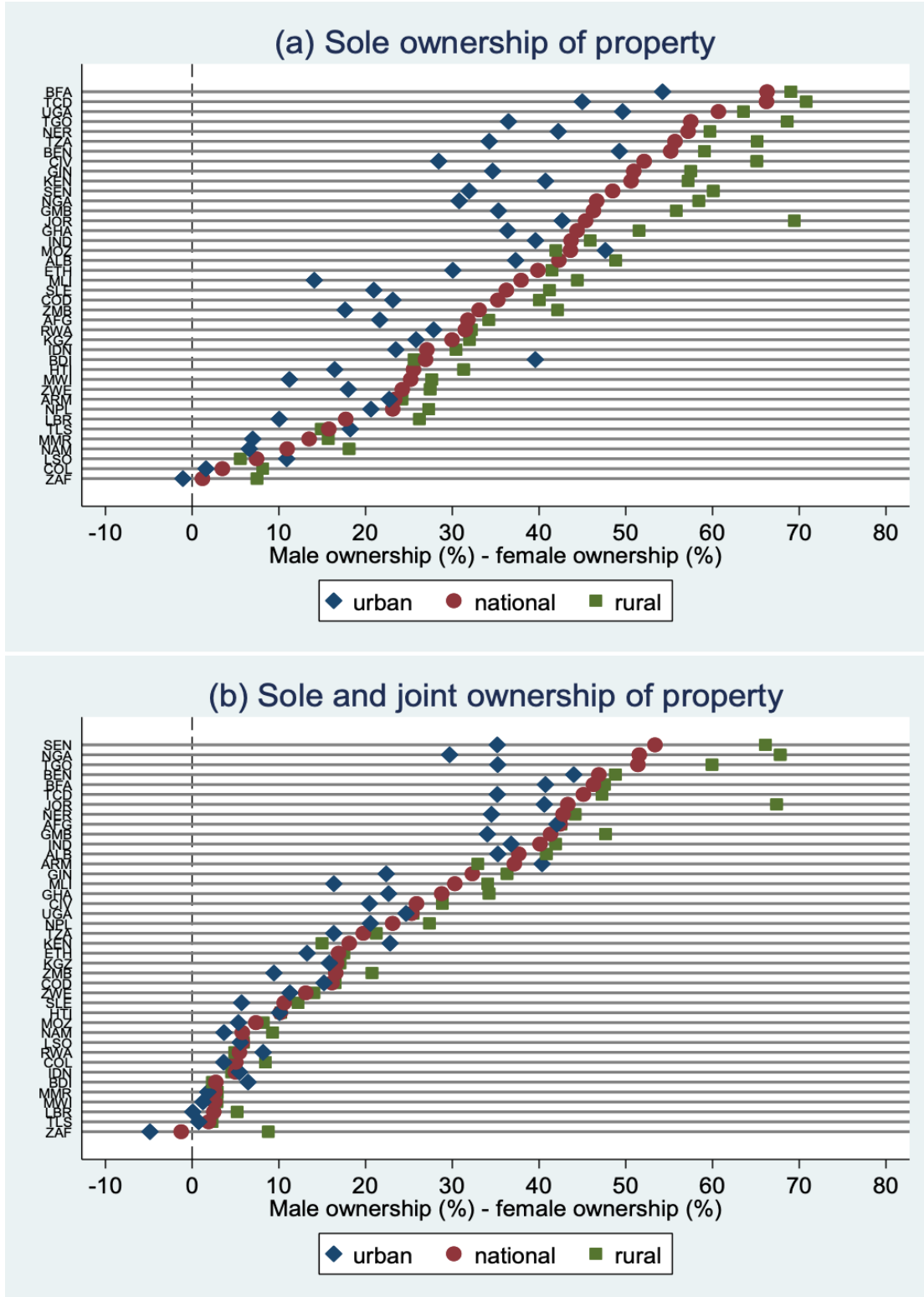
Note: 'Yes' denotes that the law mandates equal remuneration of women and men for work of equal value. *Source:* WBL 2020.

FIGURE 4: Gender gaps in the incidence of land and housing ownership among married couples



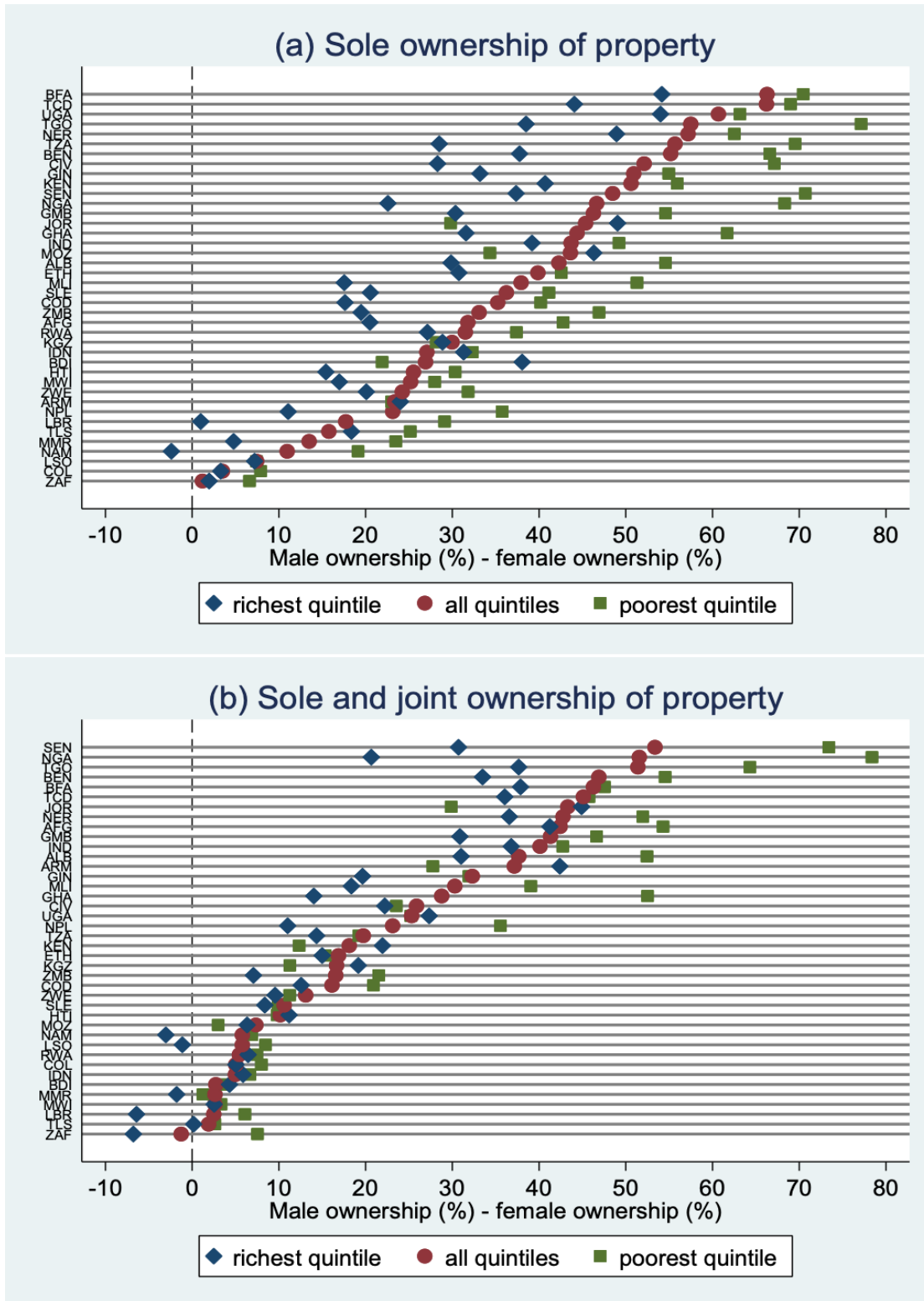
Note: Data for 41 countries from 2010-18. South Africa and Liberia only have data on housing ownership. Based on DHS couple's sample (i.e., married couples). Source: DHS.

FIGURE 5: Gender gaps in the incidence of property ownership among married couples, urban vs rural areas



Note: Data for 40 countries from 2010-18 (excluding Comoros). South Africa and Liberia only have data on housing ownership. Based on DHS couple's sample (i.e., married couples). Source: DHS.

FIGURE 6: Gender gaps in the incidence of property ownership among married couples, richest vs. poorest quintile



Note: Data for 40 countries from 2010-18 (excluding Comoros). South Africa and Liberia only have data on housing ownership. Based on DHS couple's sample (i.e., married couples). *Source:* DHS.

SUPPLEMENTAL MATERIAL

Table A1: Data Definitions

Variable	Definition	Source
Property ownership		
Land ownership - sole	Indicator variable that equals unity (Yes) if a woman or man reports owning any land either “alone only” or “both alone and jointly”. A value of zero (No) is assigned in all other cases.	DHS (see Table A2)
Land ownership - sole and joint	Indicator variable that equals unity (Yes) if a woman or man reports owning any land either “alone only”, “jointly only” or “both alone and jointly”. A value of zero (No) is assigned in all other cases.	
Housing ownership - sole	Indicator variable that equals unity (Yes) if a woman or man reports owning this or any other house either “alone only” or “both alone and jointly”. A value of zero (No) is assigned in all other cases.	
Housing ownership - sole and joint	Indicator variable that equals unity (Yes) if a woman or man reports owning this or any other house either “alone only”, “jointly only” or “both alone and jointly”. A value of zero (No) is assigned in all other cases.	
Property ownership - sole	Indicator variable that equals unity (Yes) if a woman or man reports sole land ownership and/or sole housing ownership. A value of zero (No) is assigned in all other cases.	
Property ownership - sole and joint	Indicator variable that equals unity (Yes) if a woman or man reports sole or joint land ownership and/or sole or joint housing ownership. A value of zero (No) is assigned in all other cases.	
Legal framework		
Men and women have equal ownership rights to immovable property	Indicator variable that equals unity (Yes) if no legal restriction related to property is applied to women or men based on gender. A value of zero (No) is assigned if legal restrictions on property ownership are applied based on gender, or if there are gender differences in the legal treatment of spousal property, such as granting the husband administrative control of marital property.	WBL (World Bank 2020a). Data in this paper refer to 2020 if reported in section 2, and to 2015 if used in the multivariate estimations in section 4.
Law provides for the valuation of non-monetary contributions	Indicator variable that equals unity (Yes) if there is an explicit legal recognition of non-monetary contributions (i.e., caring for children, taking care of the family home, or any other nonmonetized contribution from a stay-at-home spouse) and the law provides for equal or equitable division of the property or the transfer of a lump sum to the stay-at-home spouse based on nonmonetary contributions. It also equals unity if the default marital property regime is full, partial, or deferred community, because these regimes implicitly recognize nonmonetary contributions at the time of property division and benefit both spouses regardless of who purchased the property or holds title to it. A value of zero (No) is assigned if the default marital property regime is not full, partial, or deferred community of property, and there is no explicit legal provision providing for equal or equitable division of property based on nonmonetary contributions.	
Law provides for equal inheritance rights of sons and daughters	Indicator variable that equals unity (Yes) if there are no differences in the rules of intestate succession for transfer of property from parents to children. A value of zero (No) is assigned if there are gender-based differences in the recognition of children as heirs to property.	

Law provides for equal inheritance rights of male and female surviving spouses	Indicator variable that equals unity (Yes) if surviving spouses of either gender have the same inheritance rights. A value of zero (No) is assigned if there are gender-based differences in the inheritance rights of surviving spouses.	WBL (World Bank 2020a). Data in this paper refer to 2020 if reported in section 2, and to 2015 if used in the multivariate estimations in section 4.
Law provides for equal inheritance rights	Indicator variable that equals unity (Yes) if the law provides for equal inheritance rights of sons and daughters and of male and female surviving spouses. A value of zero (No) is assigned if there are gender differences in inheritance rights of children and/or surviving.	
Law mandates equal remuneration for equal work	Indicator variable that equals unity (Yes) if employers are legally obliged to pay equal remuneration to male and female employees who perform work of equal value. A value of zero (No) is assigned if the law limits the principle of equal remuneration to equal work, the same work, similar work, or work of a similar nature, if the law limits the broad concept of “remuneration” to only basic wages or salary, or if the law limits the principle of equal remuneration for work of equal value to the same place of business or same employer. For the purpose of this variable, “remuneration” refers to the ordinary, basic, or minimum wage or salary and any additional emoluments payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising from the worker’s employment, while “work of equal value” refers not only to the same or similar jobs but also to different jobs of the same value.	
A woman can get a job in the same way as a man	Indicator variable that equals unity (Yes) if there are no restrictions on a woman’s legal capacity and ability to get a job or pursue a trade or profession. A value of zero (No) is assigned if a husband can prevent his wife from working, or if permission or additional documentation is required for a woman to work but not a man. A score of 0 is also assigned if it is considered a form of disobedience with legal consequences, such as loss of maintenance, for a woman to work contrary to her husband’s wishes or the interests of the family.	
Assets (index)	Index based on the following five indicators (each coded as 0/1): (1) Do men and women have equal ownership rights to immovable property? (2) Do sons and daughters have equal rights to inherit assets from their parents? (3) Do male and female surviving spouses have equal rights to inherit assets? (4) Does the law grant spouses equal administrative authority over assets during marriage? (5) Does the law provide for the valuation of nonmonetary contributions? The index ranges from 0 (gender bias in each indicator) to 100 (no legal gender bias).	
Workplace (index)	Index based on the following four indicators (each coded as 0/1): (1) Can a woman get a job in the same way as a man? (2) Does the law prohibit discrimination in employment based on gender? (3) Is there legislation on sexual harassment in employment? (4) Are there criminal penalties or civil remedies for sexual harassment in employment? The index ranges from 0 (gender bias in each indicator) to 100 (no legal gender bias).	
Pay (index)	Index based on the following four indicators (each coded as 0/1): (1) Does the law mandate equal remuneration for work of equal value? (2) Can a woman work at night in the same way as a man? (3) Can a woman work in a job deemed dangerous in the same way as a man? (4) Can a woman work in an industrial job in the same way as a man? The index ranges from 0 (gender bias in each indicator) to 100 (no legal gender bias).	
Entrepreneurship (index)	Index based on the following four indicators (each coded as 0/1): (1) Does the law prohibit discrimination in access to credit based on gender? (2) Can a woman sign a contract in the same way as a man? (3) Can a woman register a business in the same way as a man? (4) Can a woman open a bank account in the same way as a man? The index ranges from 0 (gender bias in each indicator) to 100 (no legal gender bias).	

Other contemporary country or subnational variables

In GDP pc	Natural log of Gross Domestic Product per capita in 2015 (in constant 2010 U.S. dollars.)	WDI (World Bank 2020b)
Religion	Country's largest religion by proportion. This categorical variable distinguishes between (i) Catholic/Orthodox Christianity, (ii) Other Christian Denominations; (iii) Islam and (iv) Other (Non-Christian) Religions.	The Association of Religion Data Archives (Harris et al 2019)
Share of married women who disagree with all the reasons justifying wife-beating	Subnational (first-tier administrative region) share of married (or in union) women who disagree with all the reasons justifying wife beating, i.e., for burning the food; arguing with him; going out without telling him; neglecting the children; and refusing to have sexual intercourse with him.	DHS (see Table A2)

Historical country-level variables

Absence of inheritance	Share of a country's ethnic groups for which there is traditionally an absence of inheritance rights of real property (i.e. land; based on ethnographic data).	Alesina et al (2013)
Matrilocal societies	Share of a country's ethnic groups traditionally following matrilocal post-marital residency rules (based on ethnographic data).	
Patrilocal societies	Share of a country's ethnic groups traditionally following patrilocal post-marital residency rules (based on ethnographic data).	
Nuclear family	Share of a country's ethnic groups with a tradition of nuclear family structures (incl. independent monogamous and polygynous nuclear families; based on ethnographic data).	
Extended family	Share of a country's ethnic groups with a tradition of extended family structures (incl. minimal, small and large extended families; based on ethnographic data).	
Ancestral marriage custom	Share of a country's ethnic groups traditionally practicing the following marriage customs (based on ethnographic data): (i) bride price (i.e., bride price or wealth, bride service, or token bride price), (ii) dowry, (iii) other or no exchange (i.e., reciprocal gift exchange, sister or female relative exchanged, absence of consideration) and (iv) missing.	Giuliano and Nunn (2018)

Table A2: List of Demographic and Health Surveys included in this paper

Country	Year	Link
Afghanistan	2015	https://dhsprogram.com/what-we-do/survey/survey-display-471.cfm
Albania	2017-18	https://dhsprogram.com/what-we-do/survey/survey-display-525.cfm
Armenia	2015-16	https://dhsprogram.com/what-we-do/survey/survey-display-492.cfm
Benin	2017-18	https://dhsprogram.com/what-we-do/survey/survey-display-491.cfm
Burkina Faso	2010	https://dhsprogram.com/what-we-do/survey/survey-display-329.cfm
Burundi	2016-17	https://dhsprogram.com/what-we-do/survey/survey-display-463.cfm
Chad	2014-15	https://dhsprogram.com/what-we-do/survey/survey-display-465.cfm
Colombia	2015	https://dhsprogram.com/what-we-do/survey/survey-display-476.cfm
Comoros	2012	https://dhsprogram.com/what-we-do/survey/survey-display-443.cfm
Cote d'Ivoire	2011-12	https://dhsprogram.com/what-we-do/survey/survey-display-311.cfm
DRC	2013-14	https://dhsprogram.com/what-we-do/survey/survey-display-421.cfm
Ethiopia	2016	https://dhsprogram.com/what-we-do/survey/survey-display-478.cfm
Gambia	2013	https://dhsprogram.com/what-we-do/survey/survey-display-425.cfm
Ghana	2014	https://dhsprogram.com/what-we-do/survey/survey-display-437.cfm
Guinea	2018	https://dhsprogram.com/what-we-do/survey/survey-display-539.cfm
Haiti	2016-17	https://dhsprogram.com/what-we-do/survey/survey-display-503.cfm
India	2015-16	https://dhsprogram.com/what-we-do/survey/survey-display-355.cfm
Indonesia	2017	https://dhsprogram.com/what-we-do/survey/survey-display-522.cfm
Jordan	2017-18	https://dhsprogram.com/what-we-do/survey/survey-display-500.cfm
Kenya	2014	https://dhsprogram.com/what-we-do/survey/survey-display-451.cfm
Kyrgyz Rep.	2012	https://dhsprogram.com/what-we-do/survey/survey-display-383.cfm
Lesotho	2014	https://dhsprogram.com/what-we-do/survey/survey-display-462.cfm
Liberia	2013	https://dhsprogram.com/what-we-do/survey/survey-display-435.cfm
Malawi	2015-16	https://dhsprogram.com/what-we-do/survey/survey-display-483.cfm
Mali	2018	https://dhsprogram.com/what-we-do/survey/survey-display-517.cfm
Mozambique	2011	https://dhsprogram.com/what-we-do/survey/survey-display-362.cfm
Myanmar	2015-16	https://dhsprogram.com/what-we-do/survey/survey-display-454.cfm
Namibia	2013	https://dhsprogram.com/what-we-do/survey/survey-display-363.cfm
Nepal	2016	https://dhsprogram.com/what-we-do/survey/survey-display-472.cfm
Niger	2012	https://dhsprogram.com/what-we-do/survey/survey-display-407.cfm
Nigeria	2018	https://dhsprogram.com/what-we-do/survey/survey-display-528.cfm
Rwanda	2014-15	https://dhsprogram.com/what-we-do/survey/survey-display-468.cfm
Senegal	2017	https://dhsprogram.com/what-we-do/survey/survey-display-534.cfm
Sierra Leone	2013	https://dhsprogram.com/what-we-do/survey/survey-display-450.cfm
South Africa	2016	https://dhsprogram.com/what-we-do/survey/survey-display-390.cfm
Tanzania	2015-16	https://dhsprogram.com/what-we-do/survey/survey-display-485.cfm
Timor Leste	2016	https://dhsprogram.com/what-we-do/survey/survey-display-514.cfm
Togo	2013-14	https://dhsprogram.com/what-we-do/survey/survey-display-328.cfm
Uganda	2016	https://dhsprogram.com/what-we-do/survey/survey-display-504.cfm
Zambia	2018	https://dhsprogram.com/what-we-do/survey/survey-display-542.cfm
Zimbabwe	2015	https://dhsprogram.com/what-we-do/survey/survey-display-475.cfm

Table A3: Characteristics of wives in the couple’s sample compared to all women interviewed by the DHS

	(1)		(2)	
	Sample of couples		Sample of all interviewed women	
	mean	se	mean	se
Women’s land ownership (alone or joint)	0.367	(0.002)	0.300	(0.002)
Women’s house ownership (alone or joint)	0.461	(0.002)	0.373	(0.002)
Women's total number of sons ever born	1.656	(0.005)	1.321	(0.004)
Women's total number of daughters ever born	1.556	(0.005)	1.248	(0.004)
Women's age in years	31.911	(0.025)	29.437	(0.015)
Women's education				
No education	0.383	(0.003)	0.313	(0.002)
1 to 4 years of education	0.093	(0.001)	0.089	(0.001)
5 to 8 years of education	0.230	(0.001)	0.242	(0.001)
9 to 12 years of education	0.216	(0.002)	0.262	(0.001)
13 or more years of education	0.078	(0.001)	0.093	(0.001)
Women's type of work				
Not working	0.470	(0.003)	0.449	(0.002)
Services	0.225	(0.002)	0.250	(0.002)
Agriculture	0.222	(0.002)	0.201	(0.002)
Industry/manual	0.066	(0.001)	0.070	(0.001)
DK/missing/other	0.018	(0.001)	0.030	(0.001)
Urban	0.332	(0.003)	0.387	(0.003)
N	211,155		754,014	

Note: Data for 39 countries from 2010-18 (only includes observations with non-missing data on all variables). Standard errors clustered at the primary sampling unit level of each country, because the focus lies on the comparison of individual characteristics across the two DHS samples. This differs from other tables, which focus on the role of legal variables (measured at the country level), and where, hence, standard errors are clustered at the country level. The sample size in the couple’s sample (211,155) is significantly smaller than the sample size in the individual sample (754,014). A major contributing factor, besides the age and marital status exclusions described in the text, is that most DHS select a random share of households (e.g., 1/3) to be eligible for men’s/husband’s surveys. Since the couple’s sample requires that both partners were interviewed, this significantly reduces the sample size in the couple’s sample relative to the individual sample. *Source:* DHS.

Table A4: Incidence of husband's and wife's ownership of housing and land

Country	National								Urban								Rural							
	Housing				Land				Housing				Land				Housing				Land			
	Sole		Sole and joint		Sole		Sole and joint		Sole		Sole and joint		Sole		Sole and joint		Sole		Sole and joint		Sole		Sole and joint	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
Afghanistan	21.0	52.0	39.8	81.8	13.1	34.6	26.6	58.5	14.6	36.1	27.9	66.3	5.3	11.9	10.0	26.2	22.5	55.8	42.6	85.4	14.9	40.0	30.5	66.2
Albania	7.4	49.8	32.6	73.3	6.8	24.4	14.7	40.1	7.9	46.3	35.1	72.7	4.2	11.3	7.5	23.1	6.7	54.6	29.4	74.0	10.1	41.6	24.2	62.5
Armenia	4.0	25.3	45.1	81.7	1.6	13.4	16.0	38.3	4.4	26.1	41.6	81.6	0.4	5.6	4.8	13.3	3.3	24.2	49.7	81.8	3.1	23.7	30.6	71.1
Benin	5.2	52.5	18.6	61.1	7.7	54.0	17.5	61.1	4.6	45.4	14.6	52.6	6.2	44.6	12.3	50.1	5.6	57.1	21.2	66.6	8.6	60.2	20.9	68.3
Burkina Faso	5.3	76.8	37.6	93.8	12.8	66.3	38.8	80.9	4.1	56.3	33.7	76.1	4.6	37.7	19.9	44.4	5.5	81.4	38.5	97.8	14.6	72.8	43.1	89.2
Burundi	27.0	53.2	88.9	91.5	28.0	50.7	82.8	87.5	6.0	38.7	50.4	52.1	9.2	33.4	40.0	51.3	29.2	54.7	93.0	95.6	30.0	52.6	87.3	91.4
Chad	11.2	82.2	40.0	90.2	20.1	79.1	42.8	85.7	12.8	51.5	32.2	63.8	19.6	57.2	32.4	65.1	10.9	88.9	41.7	95.9	20.2	83.9	45.1	90.1
Colombia	9.1	10.8	37.4	41.1	5.9	8.4	15.3	20.8	9.6	10.3	33.9	36.6	5.2	6.0	10.7	14.2	7.8	12.0	45.9	52.1	7.7	14.4	26.5	37.0
Comoros	70.0	26.1	85.2	71.3	55.3	26.9	71.9	66.4	59.0	23.3	79.6	64.3	50.3	21.7	68.1	54.6	75.0	27.4	87.7	74.5	57.7	29.3	73.7	71.9
Cote d'Ivoire	9.7	53.6	43.1	63.0	10.0	54.2	39.4	64.5	6.4	22.1	23.3	28.4	4.7	24.3	17.0	33.3	11.5	70.9	54.0	82.0	12.8	70.6	51.6	81.6
DRC	13.7	47.7	53.6	71.8	13.5	36.2	47.6	63.8	8.5	29.5	29.6	45.7	8.3	21.2	24.2	35.2	15.7	55.0	63.2	82.2	15.5	42.2	56.8	75.1
Ethiopia	17.9	58.6	69.1	86.9	19.3	55.0	55.7	79.1	7.2	34.3	44.1	54.6	5.0	19.6	21.5	30.9	19.6	62.6	73.2	92.2	21.7	60.8	61.3	87.0
Gambia	7.5	41.9	24.1	61.4	6.1	37.3	19.2	50.8	5.7	24.2	18.8	41.7	6.9	34.6	18.0	47.4	9.0	57.4	28.8	78.6	5.3	39.6	20.1	53.8
Ghana	9.7	38.6	27.0	45.8	14.7	47.1	31.8	58.3	8.2	24.0	20.0	28.7	14.0	43.9	30.9	50.9	11.2	51.6	33.3	61.1	15.4	50.0	32.5	64.9
Guinea	14.1	65.3	45.4	76.9	15.9	57.0	39.5	67.1	9.6	40.8	26.4	48.0	3.7	18.7	11.5	22.9	16.0	75.2	53.1	88.5	20.9	72.5	50.8	84.9
Haiti	10.0	26.3	53.1	60.3	14.4	36.1	48.9	61.4	7.7	18.5	36.0	43.0	12.8	24.6	31.5	42.7	11.4	31.3	64.0	71.3	15.5	43.5	60.0	73.3
India	22.5	65.9	39.0	79.1	16.6	46.0	29.7	58.7	20.7	60.4	35.7	72.7	13.2	33.9	23.9	44.4	23.4	68.8	40.8	82.6	18.4	52.5	32.8	66.4
Indonesia	24.6	49.9	65.4	69.9	17.4	38.5	38.0	50.0	24.7	46.6	59.4	64.5	13.9	32.0	27.8	40.6	24.6	53.0	71.1	75.0	20.8	44.5	47.6	58.8
Jordan	7.4	53.9	10.1	56.0	3.7	21.2	7.1	24.3	7.2	50.9	9.9	53.1	3.5	18.6	6.7	21.4	10.0	80.8	12.4	82.5	5.4	44.4	10.2	49.7
Kenya	11.0	57.3	61.4	76.9	9.6	50.9	55.9	73.5	7.6	40.7	38.3	53.1	7.1	44.2	36.8	61.1	13.3	68.4	76.8	92.7	11.3	55.5	68.7	81.8
Kyrgyz Rep.	25.4	52.7	68.9	85.7	18.1	32.2	42.7	58.3	22.5	45.5	61.0	75.4	10.9	18.2	22.1	28.3	26.8	56.3	72.7	90.7	21.5	39.0	52.7	72.7
Lesotho	6.9	11.5	56.6	60.1	4.7	11.6	43.4	49.4	4.8	11.9	49.0	50.5	5.6	14.1	48.1	54.7	8.0	11.3	60.7	65.3	4.2	10.2	40.9	46.5
Liberia	12.4	30.1	42.3	44.8	n.a.	n.a.	n.a.	n.a.	9.6	19.6	30.1	30.2	n.a.	n.a.	n.a.	n.a.	15.5	41.7	55.7	60.9	n.a.	n.a.	n.a.	n.a.
Malawi	43.2	67.7	76.5	79.4	45.8	66.1	75.5	76.9	24.5	29.7	41.0	40.4	23.7	31.0	37.6	38.8	46.4	74.3	82.7	86.2	49.6	72.2	82.1	83.5
Mali	7.3	50.7	36.5	71.8	17.7	42.9	38.2	63.1	8.4	21.5	24.1	38.9	3.4	8.3	10.5	17.8	7.0	58.7	39.9	80.7	21.6	52.3	45.7	75.4
Mozambique	12.1	52.4	82.1	87.9	11.3	43.2	68.6	80.0	8.6	52.7	73.2	76.2	7.9	33.0	54.4	51.4	13.5	52.3	85.9	92.8	12.8	47.5	74.6	91.9

Myanmar	37.5	50.4	66.7	69.4	32.0	41.7	59.7	59.3	27.9	34.0	52.2	53.5	23.4	29.3	46.4	47.1	40.8	56.0	71.6	74.8	34.9	45.9	64.2	63.4
Namibia	30.4	38.6	56.4	61.0	19.5	28.0	37.6	41.4	29.2	35.9	56.1	59.9	16.0	24.8	32.1	38.5	32.5	43.1	56.8	62.9	25.1	33.2	46.7	46.2
Nepal	6.5	27.8	7.5	29.2	10.8	29.9	12.3	31.4	7.4	26.0	8.8	27.9	12.0	29.2	14.3	31.3	5.1	30.8	5.2	31.4	8.8	31.0	9.0	31.5
Niger	19.3	82.7	41.0	91.7	26.1	59.0	39.8	67.7	13.4	51.3	27.4	59.8	13.4	35.3	22.7	43.1	20.2	88.0	43.3	97.1	28.2	63.0	42.7	71.8
Nigeria	4.0	43.9	12.1	62.1	5.7	47.7	13.9	62.3	4.4	29.0	14.8	42.3	3.9	28.5	14.6	39.2	3.8	55.0	10.2	76.8	7.0	61.9	13.3	79.5
Rwanda	5.1	34.4	80.0	84.7	6.0	28.7	70.9	77.7	3.7	26.4	53.7	59.6	6.1	23.3	42.0	49.3	5.4	35.9	85.1	89.6	6.0	29.7	76.6	83.2
Senegal	1.5	31.7	8.0	52.4	4.2	43.6	7.2	52.7	2.4	21.6	7.7	34.4	4.0	25.9	6.2	29.8	0.9	38.7	8.2	65.0	4.4	56.1	7.8	68.7
Sierra Leone	11.3	44.2	52.6	63.4	9.5	41.1	48.6	58.9	7.4	22.5	28.4	32.4	6.9	23.8	29.2	34.8	12.5	51.2	60.5	73.6	10.3	46.8	54.9	66.8
South Africa	27.2	28.4	48.9	47.7	n.a.	n.a.	n.a.	n.a.	26.2	25.2	46.4	41.5	n.a.	n.a.	n.a.	n.a.	29.9	37.4	56.1	64.9	n.a.	n.a.	n.a.	n.a.
Tanzania	7.0	57.9	51.3	71.6	7.6	48.1	46.8	61.5	7.7	36.4	35.5	49.2	8.0	30.4	26.9	40.4	6.7	67.4	58.2	81.5	7.4	56.0	55.6	70.9
Timor Leste	55.7	70.0	94.8	96.4	47.8	56.9	80.7	80.9	59.7	77.0	91.5	92.5	33.1	34.2	50.5	43.0	54.3	67.5	95.9	97.8	52.9	64.9	91.3	94.2
Togo	5.9	51.4	14.7	55.6	7.3	49.9	12.9	54.1	5.6	27.9	9.3	30.7	7.2	34.9	11.1	39.6	6.1	63.9	17.5	68.8	7.4	57.9	13.9	61.7
Uganda	7.4	63.2	57.9	83.1	7.8	56.7	44.2	74.5	7.3	47.6	39.3	61.7	8.6	46.1	34.2	60.6	7.4	67.2	62.8	88.7	7.6	59.4	46.8	78.2
Zambia	12.4	41.4	53.0	68.9	7.5	35.8	41.1	58.7	13.3	26.7	31.5	36.8	4.7	14.1	13.9	21.3	11.9	50.0	65.5	87.6	9.1	48.5	57.0	80.5
Zimbabwe	6.3	24.6	53.2	64.8	4.7	23.5	44.0	58.7	7.5	18.1	37.5	41.1	5.1	15.9	23.3	36.2	5.6	27.9	61.2	77.0	4.5	27.4	54.7	70.3

Note: Data for 41 countries from 2010-18. South Africa and Liberia only have data on housing ownership. Based on DHS couple's sample (i.e., married couples). *Source:* DHS.

Table A5: Descriptive statistics

	Urban		Rural	
	mean	se	mean	se
Women's property ownership:				
Wife's land ownership	0.235	(0.018)	0.433	(0.035)
Wife's house ownership	0.364	(0.023)	0.509	(0.036)
Legal framework of the country:				
Men and women have equal ownership rights to immovable property	0.942	(0.032)	0.919	(0.046)
Law provides for the valuation of non-monetary contributions	0.414	(0.150)	0.329	(0.128)
Law provides for equal inheritance rights	0.727	(0.114)	0.721	(0.132)
Law mandates equal remuneration for equal work	0.148	(0.063)	0.178	(0.077)
A woman can get a job in the same way as a man	0.920	(0.045)	0.924	(0.043)
Other country or subnational controls:				
ln GDP pc (2015, in 2010 constant USD)	7.416	(0.220)	7.057	(0.187)
Largest religion by proportion				
Catholic or Orthodox	0.236	(0.123)	0.166	(0.076)
Other Christian	0.116	(0.056)	0.117	(0.059)
Muslim	0.338	(0.128)	0.367	(0.151)
Other	0.311	(0.198)	0.350	(0.217)
Share of married women disagreeing with wife beating (subnational level)	0.584	(0.058)	0.489	(0.056)
Absence of inheritance	0.082	(0.039)	0.052	(0.023)
Matrilocal societies	0.044	(0.021)	0.038	(0.021)
Patrilocal societies	0.748	(0.091)	0.816	(0.058)
Nuclear family	0.217	(0.060)	0.151	(0.035)
Extended family	0.581	(0.069)	0.606	(0.074)
Ancestral marriage custom				
Bride price	0.619	(0.102)	0.702	(0.105)
Other or no exchange	0.275	(0.096)	0.188	(0.062)
Dowry	0.097	(0.047)	0.099	(0.052)
Practice missing	0.008	(0.009)	0.010	(0.011)
World region:				
East Asia & Pacific	0.080	(0.065)	0.055	(0.040)
Europe & Central Asia	0.034	(0.024)	0.023	(0.016)
Latin America & Caribbean	0.137	(0.116)	0.046	(0.037)
Middle East & North Africa	0.031	(0.032)	0.004	(0.004)
South Asia	0.355	(0.191)	0.440	(0.198)
Sub-Saharan Africa	0.362	(0.127)	0.432	(0.159)
Characteristics of the wife:				
Wife's total number of sons ever born	1.406	(0.096)	1.779	(0.144)
Wife's total number of daughters ever born	1.319	(0.094)	1.673	(0.137)
Wife's age in years	32.498	(0.424)	31.610	(0.445)
Wife's education				
No education	0.210	(0.047)	0.469	(0.066)
1 to 4 years of education	0.065	(0.007)	0.107	(0.018)

5 to 8 years of education	0.224	(0.014)	0.233	(0.029)
9 to 12 years of education	0.337	(0.030)	0.155	(0.032)
13 or more years of education	0.164	(0.019)	0.036	(0.008)
Wife's type of work				
Not working	0.465	(0.102)	0.472	(0.078)
Services	0.378	(0.096)	0.149	(0.037)
Agriculture	0.063	(0.014)	0.301	(0.044)
Industry/manual	0.077	(0.009)	0.060	(0.007)
DK/missing/other	0.017	(0.009)	0.018	(0.011)
Characteristics of the husband:				
Husband's total number of sons ever born	1.602	(0.153)	2.155	(0.269)
Husband's total number of daughters ever born	1.485	(0.148)	2.003	(0.262)
Husband's age in years	38.040	(0.340)	37.262	(0.460)
Husband's education				
No education	0.132	(0.027)	0.323	(0.054)
1 to 4 years of education	0.069	(0.007)	0.118	(0.015)
5 to 8 years of education	0.228	(0.011)	0.266	(0.023)
9 to 12 years of education	0.361	(0.023)	0.229	(0.037)
13 or more years of education	0.210	(0.013)	0.064	(0.010)
Husband's type of work				
Not working	0.046	(0.012)	0.038	(0.008)
Services	0.505	(0.024)	0.197	(0.014)
Agriculture	0.112	(0.013)	0.546	(0.033)
Industry/manual	0.325	(0.016)	0.212	(0.023)
DK/missing/other	0.011	(0.004)	0.006	(0.003)
Characteristics of the couple:				
Both spouses are working	0.499	(0.102)	0.496	(0.073)
Husband-wife education gap (years)	1.044	(0.275)	1.475	(0.252)
Household headship				
Husband head of household	0.786	(0.028)	0.786	(0.038)
Wife head of household	0.033	(0.013)	0.017	(0.005)
Other male household head	0.134	(0.031)	0.166	(0.039)
Other female household head	0.046	(0.007)	0.031	(0.007)
N	70,088		140,754	

Note: Data for 39 countries from 2010-18 (only includes observations with non-missing data on all variables). Based on DHS couple's sample (i.e., married couples). Standard errors clustered at the country level. *Source:* DHS.