DECOMPOSING THE GENDER WEALTH GAP IN ECUADOR

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Abstract

This paper examines the pattern of wealth inequality across genders, for sole and then partnered household heads in Ecuador, at different points of the wealth distribution. We find stark contrasts with results for developed countries and important differences between sole versus partnered heads. In Ecuador, the wealth gap is larger among sole heads and the shape of the gap differs. Among sole heads, the gap favors men across the distribution and is largest at the lower tail. Among partnered heads, the gap is much less pronounced throughout the distribution, actually reverting at the lower tail. At the lower tail of the distribution, the gender gap is primarily associated with differing returns to covariates. At the median and upper quantiles, gender differences in endowments (ownership of savings accounts, education, and age) drive the gap. Gender bias in inheritance plays a significant role only at lower and median wealth levels.

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Introduction

Unlike the gender earnings gap, which has been amply studied in developing country contexts (World Bank, 2011), the gender wealth gap has only recently begun to receive attention. Moreover, rigorous analyses of the gender wealth gap have been limited to developed countries. These studies have demonstrated that while the gender wealth gap tends to favor men, the magnitude and sources of the gap vary depending upon factors such as marital status, the definition of wealth or whether the focus is on household or individual wealth. Further, while only a few studies have investigated the gender wealth gap across the wealth distribution, these show it can sometimes vary markedly from the mean.

This paper, drawing upon individual non-pension net wealth data for Ecuador, investigates the sources of the gender wealth gap among male and female sole household heads and compares these with the sources of the gap for heads who are partnered (married or in a consensual union). This comparison is important since the majority of studies-- being based on household wealth— are unable to differentiate between the wealth of husbands and wives in couple-headed households. The paper also contributes to the literature by providing a detailed decomposition of the gender wealth gap at different points of the wealth distribution using the unconditional quantile approach of Firpo et al. (2009). Further, unlike previous studies, we minimize reweighting error bias associated with gap decompositions by applying a new covariate balancing methodology developed by Imai & Ratkovic (2014). This more accurate estimation of the gap distribution is very relevant for policy, since it sheds light on whether a gender gap that is unfavorable to women is largest among the asset poor or the wealthy.

Ecuador provides an interesting case study since the default marital regime is partial community property, where all property acquired during the marriage is considered to be jointly owned by the couple. Thus, one would expect the aggregate gender wealth gap among partnered individuals to be generally small. Indeed, Deere et al. (2013) found that women who are married or in a consensual union own 44% of total couple wealth in Ecuador, compared to 19% in Ghana and only 9% in Karnataka, India. The authors argue that these differences are partly explained by the prevailing marital and inheritance regimes. In contrast to Ecuador, Ghana and Karnataka are characterized by the separation of property regime, where property acquired during the marriage belongs to the person who purchased it. Moreover, while in all three countries inheritances are considered to be the property of the spouse who inherits them, inheritance is much more gender equitable, both legally and in practice, in Ecuador than in the other two countries. Thus, differences in men's and women's labor force participation and earnings play a much greater role in framing women's acquisition of assets in these two countries than in Ecuador.

Given the relatively favorable institutional framework for women in Ecuador, it is not surprising that the gender wealth gap among partnered individuals is relatively small. Using the same data base for Ecuador as reported above, we find that while the mean male-to-female ratio is 1.25 among partnered heads, it is 1.81 among sole heads; this same trend holds at the median although the difference for partnered and unpartnered heads is smaller (tables 1 and 2). But to what extent does the gender wealth gap and, moreover, its sources vary according to the household's location in the wealth distribution?

Studies of the gender wage or earnings gap for Latin America tend to find that this gap in men's favor is largest at the lower end of the income distribution, particularly in the poorer countries of the region, including Ecuador (Ñopo, 2012; Gallardo & Ñopo, 2009).[1] To the extent

[1] Ñopo (2012) found that the gender earnings gap, controlling for observable and job characteristics, was greatest at the lower end of the distribution in Colombia, Ecuador, Peru, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Jamaica, and largest at the top end in Chile and Brazil. Other studies for Colombia have reported a U-shaped gender earnings gap (Badel & Peña, 2010), or if U-shaped, that the gap is larger at the lower end than at the top end (Hoyos et al., 2010; Ñopo, 2012), depending on the data set and the years under consideration.

that the accumulation of wealth is strongly conditioned by labor market participation and its returns, we expect the gender wealth gap to mirror the gender wage gap, being most pronounced at the lower end of the distribution. At the same time, much depends on the role of inheritance in the accumulation of wealth. We would expect a gender bias in inheritance to contribute to the gender wealth gap, but whether this bias is manifested at the upper or lower end of the distribution partly depends on whether the incidence of inheritance differs by wealth level.

In Ecuador, we find that the distribution of the raw gender wealth ratio is indeed largest at low wealth ranges, yet only for sole heads. From a peak of 2.66 at the 10th percentile, it then falls steadily to the 70th percentile before increasing once again at the top decile (1.80), suggesting a U-shaped distribution (table 1 and figure 1). Among partnered heads, the pattern is strikingly different, following an inverted U distribution, being lowest and in women's favor at the poorest decile (0.51), then increasing to a peak of 1.43 in the mid-range of the distribution before decreasing once again (table 2 and figure 2). While inherited assets play a significant role in explaining this gap, employment/earnings type does not. Moreover, returns to non-income factors such as parenthood, location, and parents' literacy have a much more important role in driving the gender gap for low income sole heads in Ecuador.

After reviewing comparable studies of the gender wealth gap for developed countries in the next section, we present the conceptual framework and empirical specification employed in this study. This is followed by the presentation of the data and then the results, and concluding thoughts.

What we know about the gender wealth gap in developed countries

One of the reasons that the gender wealth gap has been relatively understudied is because when data on asset ownership is collected in household surveys-- including in large scale wealth surveys--it has tended to be recorded at the household rather than the individual level, constraining a gender analysis. Analyses concerned with gender inequality have thus been limited to the study of household types: male vs. female headed or households made up or headed by a married couple. The main finding of these studies is that couple headed households tend to be wealthier on average than those made up of sole heads (Deere & Doss 2006; Schmidt & Sevak 2006; Yamokoski & Keister 2006; Gibson, Le & Scobie 2006).

The main rigorous gender analysis that can be carried out with household-level data is a comparison of sole male and female headed households.[2] Schmidt & Sevak (2006) in their analysis of non-pension wealth in the United States find that, controlling for individual characteristics, the wealth of sole male headed households is significantly greater than that of sole female headed households. Austen et al. (2014) report a similar finding in terms of the net worth (including pensions) of Australian sole heads.

Both these studies go beyond an analysis of the mean to investigate gender wealth differences among sole heads throughout the distribution, however their interpretation is limited due to the conditional nature of the regression analysis used. Schmidt & Sevak (2006) find that in the US there exists a gender gap in favor of men, which holds across the distribution and is greatest at the top quartile and then falls in magnitude. The authors do not investigate the determinants of the gap. For Australia, Austen et al. (2014) also find a large gap favoring men in the upper quartile of the distribution of net worth, smaller gaps at other points in the distribution,

[2] Gender analyses of households composed of couples are sometimes attempted by focusing on the sex of the respondent or the "financial reporter" (the best informed on financial matters) (Ruel & Hauser, 2013; Neelakantan & Chang, 2010), but since wealth data is collected at the household rather than the individual level, such analyses do not shed much light on the gender wealth gap between married men and women. Another approach utilized is to simply attach the household wealth file to each individual and via multiple regression analysis control for other characteristics (Denton & Boos, 2007), an approach we also find unsatisfactory for a gender analysis.

but a reversal of the gender gap at the lowest quartile.[3] They conclude that individual characteristics play a relatively small role in explaining the gender wealth gap and posit that the differences in the composition of men's and women's wealth portfolio may be the main source of the gap. Their decomposition analysis, using the Machado-Mata method, however, does not allow quantification of the contribution of specific factors to the gender wealth gap.

The main study that draws upon a national-level individual net wealth data (which includes private, but not public pensions) to analyze the gender wealth gap is by Sierminska et al. (2010) for Germany. They find a significant raw gender gap, of about 30,000 Euros, favoring men overall, and an even more pronounced gap among married individuals, almost 50,000 Euros. They also demonstrate that the relative gender wealth gap at the mean differs markedly by marital status, being largest among those who are partnered rather than unpartnered. They decompose the wealth gap among partnered individuals across the distribution and show that differences in characteristics—most importantly income and labor market characteristics—contribute the most to the gap at the mean, bottom and top of the distribution. Their method, however, fails to estimate the individual contributions of specific factors to total inequality.

Our paper is novel since besides using individual-level nationally representative data in the context of a developing country, we provide a detailed decomposition, allowing an estimation of the contribution of specific covariates to the gender gap across the wealth distribution, using a new approach based on unconditional quantile regressions. The unconditional quantile method allows us to show the marginal effect of small shifts in the

[3] Austen et al. (2014) exclude widows and widowers from their analysis of the net worth of single individuals since they consider their wealth to be more likely to have been accumulated as part of a couple over a longer period of time than other non-partnered individuals.

distribution of individual characteristics on the unconditional quantiles of the distribution of wealth.

Conceptual Framework and Empirical Specification

Consider a simple asset accumulation model with two periods for an individual *i*:

$$W_{1i} = (1 + r_i)(W_{0i} + Y_{0i} - C_{0i}) \tag{1}$$

where W_1 indicates assets in period 1, r is the return on assets and investment received by the individual, Y_0 is the initial income and C_0 is initial consumption. W_0 is the initial stock of assets. Thus, the asset wealth of an individual depends mainly on three aspects: her initial wealth, her ability to save/invest (*S*= *Y*- *C*), and the returns that she is able to obtain from those investments.

In our case we define two groups of individuals for which wealth formation may differ systematically, males and females, such that *i* = *M*, *F*. If we denote the return on assets and investments simply as a factor $\beta_i = (1 + r_i)$, use *X* to denote the vector of variables in period 0 influencing wealth in period 1, *X* = {*W*, *S*}, and allowing the return to be specific to each factor *X*, such that $\beta = \{\beta_{W,}\, \beta_S\}$; then, the mean wealth gap between groups can be expressed as:

$$\bar{W}_{1M} - \bar{W}_{1F} = \bar{X}_M \beta_M - \bar{X}_F \beta_F \tag{2}$$

By considering each of the right hand side terms in reference to a counterfactual treatment or reference situation represented by the term $\bar{X}_M \hat{\beta}_F$, which in this case represents women's average wealth if they had the characteristics of men, Eq. 2 can be rewritten as:

$$\bar{W}_M - \bar{W}_F = (\bar{X}_M - \bar{X}_F)\hat{\beta}_F + \bar{X}_M(\hat{\beta}_M - \hat{\beta}_F) \tag{3}$$

The first term on the right side of Eq. 3, $(\bar{X}_M - \bar{X}_F)\hat{\beta}_F$, is the composition or endowment effect and represents the part of the wealth gap that is due to differences in endowments or characteristics of men and women. The second term $\bar{X}_M(\hat{\beta}_M - \hat{\beta}_F)$ is the structure effect or unexplained part of the decomposition, which is due to differences in returns to the endowments as well as unobserved variables.[4] Thus, in our framework, the difference in asset accumulation between men and women can first be explained by gender differences in the endowments of initial assets, savings and investment (related to differences in income and consumption), and the differences in the returns to these factors.

Decomposing Beyond the Mean: An Unconditional Quantile Approach

In an effort to address the failure of the standard Oaxaca-Blinder decomposition method to take variations in differences across the distribution of an outcome into account, a number of procedures have been developed to decompose the gap in a particular outcome across the distribution. The most popular decomposition methods for distributional analysis that have been proposed include the residual imputation method (Juhn et al., 1993), the reweighting method (DiNardo et al., 1996), an approach using semiparametric hazard functions (Donald et al., 2000), and the conditional quantile regression approach (Machado & Mata, 2005). A major drawback of these methods is that they cannot straightforwardly be extended to the case of a detailed decomposition that can quantify the individual contribution of each variable to the structure and composition components of the gap (Fortin et al., 2011).

We use a decomposition procedure, based on unconditional quantile (UQ) regression, which allows a detailed decomposition of an outcome between two groups at any quantile of the distribution. The importance of using an unconditional regression is based on the broader interpretability of the estimated coefficients as marginal effects on the unconditional distribution of the outcome, wealth in our study, due to shifts in the distribution of covariates. Proposed by Firpo et al. (2009), this method relies on re-centered influence function (RIF) regressions that

[4] Oaxaca (1973) and Blinder (1973) were the first to divide the average differential into composition and structure effects.

can be implemented within a quantile regression approach. The key idea underlying RIF regressions is to transform the outcome variable examined to capture the influence of a small change in its distribution on a chosen distributional statistic, i.e. mean, quantile etc. Firpo et al. (2009) show that with this transformation, the average derivative of the unconditional quantile regression corresponds to the marginal effect on the unconditional quantile of a small location shift in the distribution of covariates, holding everything else constant.

For the τth quantile of the wealth distribution, the influence function is:

$$IF(q_\tau) = [\tau - I(Y \leq q_\tau)]/f_Y(q_\tau) \tag{4}$$

Then, the RIF for the τth quantile can be written as:

$$RIF(Y, q_\tau) = q_\tau + [\tau - I(Y \leq q_\tau)]/f_Y(q_\tau) \tag{5}$$

where $f_Y(q_\tau)$ represents the marginal density of Y at the point q_τ. $I(Y \leq q_\tau)$ is an indicator function specifying whether or not the value of the outcome is below the quantile. Once the dependent variable is transformed for each quantile, the unconditional quantile regressions may be performed by running a simple OLS regression of the new dependent variable on a set of covariates. The coefficient represents the marginal effects of an independent variable on the τth quantile. The RIF regression coefficients have both a conditional and unconditional interpretation. Mathematically, $E_X[RIF_\tau(Y)|X] = X\beta_\tau$ (see Firpo et al. (2009) for the mathematical proof). Since unconditional quantile regressions coefficients have an unconditional interpretation similar to OLS coefficients, the UQ estimates can be used to perform a standard Oaxaca-Blinder decomposition at any quantile τ.

For a detailed decomposition of the wealth gap at quantile τ, we estimate the RIF regressions for males:

$$RIF(W_M, q_\tau) = X_M\hat{\beta}_{\tau M} \tag{6}$$

And the RIF regressions for females:

$$RIF(W_F, q_\tau) = X_F\hat{\beta}_{\tau F} \tag{7}$$

From Eq. 2, we know that the estimate of the wealth gap at any quantile τ can then be expressed as follows:

$$W_{\tau M} - W_{\tau F} = \bar{X}_M\hat{\beta}_{\tau M} - \bar{X}_F\hat{\beta}_{\tau F} \tag{8}$$

Consider now a general counterfactual treatment $\bar{X}_C\hat{\beta}_{\tau C}$, where $\bar{X}_C$ is a matrix of reweighted covariates and $\hat{\beta}_{\tau C}$ are the estimates of the RIF regressions based on this reweighted sample. This counterfactual treatment shows women's wealth if they had the characteristics of men.[5] Using the counterfactual treatment $\bar{X}_M\hat{\beta}_F$, as in Eq. 3, we may not get reliable decomposition estimates given that the conditional expectation of wealth is unlikely to be linear.[6] By adding and subtracting this counterfactual treatment ($\bar{X}_C\hat{\beta}_{\tau C}$) to Eq. 8, the decomposition can be rewritten as:

$$W_{\tau M} - W_{\tau F} = \left(\bar{X}_M\hat{\beta}_{\tau M} - \bar{X}_C\hat{\beta}_{\tau C}\right) + \left(\bar{X}_C\hat{\beta}_{\tau C} - \bar{X}_F\hat{\beta}_{\tau F}\right) \tag{9}$$

Each of the two right terms of Eq. 9 can be rewritten as follows:

$$\left(\bar{X}_M\hat{\beta}_{\tau M} - \bar{X}_C\hat{\beta}_{\tau C}\right) = (\bar{X}_M - \bar{X}_C)\hat{\beta}_{\tau C} + X_M\left(\hat{\beta}_{\tau M} - \hat{\beta}_{\tau C}\right) \tag{10}$$

And

$$\left(\bar{X}_C\hat{\beta}_{\tau C} - \bar{X}_F\hat{\beta}_{\tau F}\right) = (\bar{X}_C - \bar{X}_F)\hat{\beta}_{\tau F} + \bar{X}_C\left(\hat{\beta}_{\tau C} - \hat{\beta}_{\tau F}\right) \tag{11}$$

Therefore, the overall wealth gap is expressed as:

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[5] We use the Imai & Ratkovic (2014) method, which introduces a robust estimation of propensity scores and weights such that the covariate balance is optimized. This method mitigates the potential misspecification of a propensity model and eliminates the need for continuous iteration in search of balance-satisfying model. The procedure is implemented in R using the CBPS package.

[6] As Barsky et al. (2002) explain, when the conditional mean function is not linear, the Oaxaca-Blinder decomposition may provide biased and inconsistent estimates of the structure and composition effects.

$$W_{\tau M} - W_{\tau F} = (\bar{X}_M - \bar{X}_C)\hat{\beta}_{\tau C} + \bar{X}_M\left(\hat{\beta}_{\tau M} - \hat{\beta}_{\tau C}\right) + (\bar{X}_C - \bar{X}_F)\hat{\beta}_{\tau F} + \bar{X}_C\left(\hat{\beta}_{\tau C} - \hat{\beta}_{\tau F}\right) \quad (12)$$

where $\bar{X}_M\left(\hat{\beta}_{\tau M} - \hat{\beta}_{\tau C}\right)$ is the pure structure effect (due to differences in returns or coefficients), $(\bar{X}_M - \bar{X}_C)\hat{\beta}_{\tau C}$ is a reweighting error which should be close to zero. $(\bar{X}_C - \bar{X}_F)\hat{\beta}_{\tau F}$ is the pure composition effect (due to differences in endowments or characteristics) and $\bar{X}_C\left(\hat{\beta}_{\tau C} - \hat{\beta}_{\tau F}\right)$ is the specification error linked to the non-linearity of the conditional expectation of wealth (Fortin et al., 2011). The contribution of a variable to the structure and composition components of the gap is obtained by substituting the specific average value and estimates of that variable from the RIF regressions in the appropriate expression. The overall gap at a particular quantile can be obtained by summing the contribution of all the variables.

Wealth and its Determinants

Our outcome variable, net wealth, is the sum of the values of gross physical and financial assets less debt and other financial obligations.[7] The determinants of wealth are, as shown in the conceptual framework, all the factors that directly or indirectly influence initial assets, savings and investment. The literature shows that inheritance remains the most direct path through which wealth is transferred across generations (Gale & Scholz, 1994) and any systematic differences between men and women will have an effect on the gender wealth gap. Schmidt & Sevak (2006) found that the receipt of an inheritance in the US was positively associated with wealth accumulation among both male and female sole heads in all parts of the wealth distribution. Similarly, Sierminska et al. (2010) found, for partnered individuals in Germany, that the value of inheritances received is positively associated with the net worth of both men and women. In their decomposition analysis of the wealth gap, intergenerational factors (including, besides

[7] Since the natural log for non-positive values is undefined and to avoid eliminating such observations, we applied the inverse hyperbolic sine transformation to our dependent variable (see Grabka et al., 2013) in order to account for these non-positive values and ease the influence of outliers.

inheritance, the education of an individual's mother and father) contributed minimally to the gender wealth gap. We control for the effect of inheritance by including a binary variable reflecting whether the individual has received real estate (a dwelling, housing plot, or agricultural land) as a gift or inheritance. We also account for savings motives, an impactor of wealth, by controlling for whether or not individuals have a formal savings account.[8]

Earnings and employment status are also important for wealth accumulation and impact wealth through the income effect. Those who work in good-paying, stable, and full time occupations will consistently earn more which in turn will increase their propensity to save and their ability to accumulate wealth (Dietz et al., 2003). It is well known that men and women have different experiences in the labor market. In the case of Ecuador, despite significant increases in female labor participation in recent decades, a persistent earnings gap favoring men remains (Gallardo & Ñopo, 2009). Since data on current and past earnings was not collected in our survey, we use information on the primary form of current employment. Individuals are classified as non-income earners, employers or self-employed, wage workers, or casual/domestic workers.[9]

Differences in factors such as marital status and education can positively affect the level of income and consumption, thus the level of savings, which will directly have an effect on asset accumulation. For sole heads, we differentiate between never-married, widowed, divorced, or separated individuals. Among sole heads, there is evidence for developed countries that divorced or separated women, as well as widows, have more wealth than never-married women given that

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[8] Included here are bank accounts (whether savings or deposit), and accounts with a savings & loan cooperative, or those with other private institutions, such as NGOs.

[9] The "non-income earner" category active includes those who did not list a primary or secondary occupation and those who are unpaid family workers. We use "casual or domestic worker" as the reference group.

women may benefit from separation by retaining some of the couple's wealth (Austen et al., 2014). As for partnered individuals, we consider whether the individual is married or in a consensual union. We expect married individuals to be wealthier than individuals in consensual unions since in Ecuador the latter is much more common among lower income groups. While couples living in consensual unions have the same property rights as married couples, they must meet certain requirements to obtain these and their unions be legally registered. Despite the fact that the registration process is simple and relatively inexpensive, consensual unions are rarely registered and women in these tend to feel less secure in their property rights, being less likely to claim joint ownership of property acquired during the union than married women (Deere et al., 2014). To account for the effect of education on wealth, we control for the number of years of schooling completed. Further, we control for intergenerational transfer of human capital on the wealth of individuals by including a set of dummy variables reflecting the literacy status of the individual's parents.

Differences in the number of children in the household could negatively affect savings through increases in consumption and decreased income generation opportunities, especially for women (Yomokoski & Keister, 2006). Thus, for both single and partnered individuals, we control for the number of children between zero and ten years that live in the household. We also control for geographical location, whether the individual lives in an urban or rural area, and in the sierra (highlands) or the coastal region, to account for geographical differences in opportunities across economic and gender groups. Income poverty is more pervasive in rural than urban areas; moreover, income and consumption inequality are more pronounced in the highlands than on the coast.[10] Further, we account for the individual's ethnicity. Ethnicity enters the model

[10] Retrieved from the Ecuadorian National Institute of Statistics and Census (INEC), www.ecuadorencifras.gob.ec

as a dummy variable indicating whether the individual is white or mestizo or of other ethnicities. There is evidence that indigenous ethnic groups and Afro-Ecuadorians, women in particular, earn less than individuals of other ethnicities (MacIsaac & Rama, 1997; García-Aracil & Winter, 2006).

Finally, it is well known that time has a positive effect on wealth accumulation. Younger individuals are expected to accumulate less wealth due to their position in the life cycle compared to older individuals (Modigliani, 1966). To capture the effect of time on wealth accumulation, we control for the individual's age. For a more practical interpretation of the constant term in our regressions and decompositions, we center the age variable around its minimum value (18 years).

Data and Descriptive Statistics

We use the nationally representative asset survey data from Ecuador (EAFF, Encuesta de Activos FLACSO-Florida) carried out in 2010 as part of the Gender Asset Gap Project (see Doss et al., 2014).[11] The survey employed a two-stage random sampling process. In the first stage, nationally representative primary sampling units were selected, and in the second stage, the appropriate number of households were drawn with equal probability. The respondents were the principal adult or couple who maintain the household and are most knowledgeable about the household's assets (herewith referred to as the heads).[12]

The survey included two instruments: a household questionnaire and an individual questionnaire. The household questionnaire was answered by either the sole head (in the case of

[11] EAFF 2010 will soon be publically available at www.flacsoandes.edu.ec (Bases Acceso Abierto) and may be obtained from the authors.

[12] The survey was preceded by six months of qualitative field work which informed the design of the survey protocol and questionnaires to minimize systematic measurement error in estimating household wealth. Focus group topics included knowledge of asset markets and prices, the process of acquisition of assets over the life cycle, and decision-making over asset acquisition, among other topics. Participant observation of asset markets was carried out as well (Deere & Catanzarite, 2016).

those who did not have a partner), or principal couple together whenever possible since the qualitative field work suggested that more reliable information could be collected on asset ownership and valuation by interviewing the couple together (Deere & Catanzarite, 2016).[13] This questionnaire collected socio-demographic information on each household member and individual-level asset ownership and acquisition information on each of the assets owned by a household member. The individual questionnaire was answered by at most two respondents separately and elicited detailed information on the physical assets owned (either individually or jointly) by each if they had not participated in the household assets inventory, and detailed data on financial assets and debt, among other topics. Some 2,892 households completed the household questionnaire and 4,668 heads, the individual questionnaire.

Table 3 presents the differences in mean characteristics between sole and partnered male and female heads.[14] Considering sole heads, on average, men are significantly older than women, with the average age difference being 4 years. Sole male heads are more likely to be never–married, while sole female heads are more likely to be divorced as well as to live with children ten years or younger. On average, men have completed more years of schooling than women (8.3 vs. 7.7 years). In terms of employment status, men are significantly more likely to be wage workers than women; they are also more likely to have a formal savings account.

Turning to the partnered sample, the average partnered male is 4 years older than the average partnered female. There is a slight significant difference in average years of schooling

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[13] Half of the couple headed households were interviewed together, representing 34.4% of the sample. In another 27.5% of the sample only one member of the couple answered the household questionnaire but both members answered the individual questionnaire separately; in only 4.6% of the sample only one member of the couple answered both the household and individual questionnaire. The remaining households are sole headed.

[14] Similar to Sierminska et al (2010), we examine the whole sample of partnered heads (married or in a consensual union) rather than men and women within the same partnership.

among partnered men and women and there are striking differences in terms of employment status. Partnered women are significantly more likely to be non-income earners than men, while partnered men are more likely to be employers, self-employed, wage workers, and casual or paid domestic workers.[15] Partnered men are more likely to have inherited real estate than partnered females (20% versus 18%) and are also more likely to own a formal savings account.

A few differences between the sole and partnered sub-samples are worth highlighting. Sole heads are older, more urban, slightly less educated and have fewer children than partnered heads. Moreover, sole heads are more likely than partnered heads to have inherited real estate, have a formal savings account and to be self-employed.

Results

Unconditional Quantile Regressions of Wealth Holdings

The unconditional quantile regression estimates for sole male and female heads, and then for partnered male and female heads, at the 10th, 50th and 90th percentiles are reported in Tables 4 and 5. The coefficients can be interpreted as the marginal effects of the explanatory variable (similar to the OLS regression) at the different quantiles.

From our regressions, the factors that more generally contribute to wealth accumulation across the distribution are: receipt of an inheritance, ownership of a formal savings account, more years of schooling, and age. This holds for both samples of heads (single and partnered). Having inherited real estate tends to have a larger effect for women than men in both samples, with the exception of partnered heads at the bottom and sole heads at the top of the distribution. The results also show that owning a formal account has a positive effect on wealth in general,

[15] Among the 83 partnered individuals who reported "domestic workers" as their primary occupation, there were only two men.

this effect being larger for sole women than for sole men, but larger for partnered men than for partnered women.

The marital status of sole heads is significantly associated with wealth holdings at the lower tail of the distribution. Widowed men have significantly lower wealth than never-married men, while divorced women fare better compared to never-married women. Among partnered heads, there is consistent evidence that men in consensual unions fare worse in wealth holdings than their married counterparts, particularly at the lower tail. Schooling is significant throughout the distribution in both samples, with the only exception being poor sole female heads. For partnered individuals, the effect of education tends to be more parallel by gender than for sole heads. For sole heads, the effect of schooling is larger for men than for women across the whole distribution. Finally, for sole heads, older age is only significantly correlated with wealth holdings for women at the median and 90th percentile, and for men at the median. In regards to partnered heads, the age variable is significant across quantiles.

Decomposition Results

The decomposition of the gender wealth gap at the 10th, 50th and 90th percentiles into the components explained by male-female differentials in characteristics (characteristics effect) and those due to the return on these characteristics (coefficients effect) is shown on Tables 6 and 7.

From Table 1, we know that the largest raw wealth gap is between the poorest sole male and female heads, with the 10th percentile value of wealth for men being more than twice that of women. In contrast, among partnered heads, at the lower tail of the distribution, we find a significant gap favoring women. The decomposition results show that, among sole heads, the pronounced gap at the 10th percentile stems largely from gender differences in returns on characteristics (coefficients effect), particularly women's lower returns based on location, to parents' literacy, and to parenthood. This result indicates that, in terms of wealth holdings, sole female heads face more discrimination in the highlands than on the coast, reflecting the more pronounced income and consumption inequality found in the highlands region. Also, the penalties associated with parenthood and parents' lack of formal education are larger for sole female than sole male heads. At the 10th percentile, gender differences in inheritance and ownership of a formal savings account also contribute to widen the gap while returns to being divorced or widowed, as opposed to never married, reduce it.

Among partnered heads, the detailed decomposition reveals that the gap favoring women can be partly explained by men's lower returns for being in a consensual union, as opposed to being married. As such, one can infer that the gender gap among those in consensual unions is smaller than that among married couples and at low wealth values favors women, partly because men in this range of the distribution have more outstanding debt than women. At this wealth level, differences in age, schooling attainment, and receipt of an inheritance serve to widen the gap.

At median wealth values, there exists a significant gender gap favoring men (ratio of 1.54) among sole heads, which is just slightly higher than the gap among partnered heads at this point of the distribution. Among both sole and partnered heads, the total endowments (characteristics) effect dominates the total returns (coefficients) effect, indicating that gender differences in productive characteristics account for more of the gap at this part of the distribution. The gender differences in receipt of inheritance, ownership of formal savings, educational attainment, and age are the main factors that positively contribute to widen the gap among sole and partnered heads. For sole heads, however, gender differences in returns to education also serve to increase the gap, whereas differences in returns to older age contribute to offset it.[16]

At upper wealth values, the gap is again larger for sole heads than it is for partnered heads. Among both sole and partnered heads, gender differences in men's favor in ownership of formal savings, educational attainment, and age contribute mostly to the gap. Unlike at lower wealth values, at the 90th percentile, gender bias in inheritance does not play a significant role in contributing to overall inequality. For partnered heads, the differences in returns to labor market characteristics also play a role in widening the gap, as evidenced by the higher returns to being an employer or self-employed individual as opposed to being a day laborer or domestic employee.

Discussion and Conclusion

Using sex-disaggregated asset data from Ecuador, this study has analyzed the extent and sources of the gender wealth gap across the wealth distribution, comparing the non-pension net wealth of sole male and female heads of household and then of partnered male and female heads at different quantiles of the distribution. The results suggest that there might be striking differences in the patterns of wealth accumulation by gender between developed and less developed countries.

First, with respect to the mean gender wealth gap, in Ecuador the gender wealth gap is much larger among sole heads than among partnered heads. In the only other study based on comparable individual level wealth data, for Germany, the opposite was found to be the case (Sierminska et al., 2010). This suggests that we should expect the mean gender wealth gap to

[16] These results are consistent with the higher coefficients of investment in education for sole male heads than for sole female heads in our wealth regressions. Similarly, the regressions show higher coefficients of older age for sole female heads than for sole male heads.

vary depending on such factors as the prevailing marital and inheritance regimes, including the specific features of divorce legislation and the inheritance rights of spouses, as well as the timing of inheritance and the opportunities for young people to accumulate assets prior to marriage through their labor efforts.[17] The relatively small gender wealth gap at the mean among partnered individuals confirms the importance of gender-equitable marital property and inheritance laws, such as those of Ecuador, in narrowing the gender wealth gap (Deere et al., 2013). This finding adds to the evidence that property regimes that support joint ownership of marital property and equal inheritance among children contribute to a lower gender wealth gap and should be encouraged in policy reforms.

Second, regarding the gender gap across the distribution of wealth, similar to the mean gender gap, it is greater among sole heads than partnered heads. Among sole household heads in Ecuador, the most pronounced gender gap was found at the lower end of the distribution, following a U-shaped pattern. Studies comparing the wealth of sole male and female heads for the US and Australia have found the largest gender wealth gap to be in the wealthiest quantile (Schmidt & Sevak 2006; Austen et al 2014). Whether the pronounced wealth gap in Ecuador in men's favor among sole heads at the bottom of the distribution is a feature of developing countries remains to be investigated. Focusing on partnered heads, we find a gap favoring women at the lower tail of the distribution. The gap increases and reverses at median values of wealth and decreases to a low level at higher percentiles values, following an inverse-U pattern.

[17] Since Ecuador and Germany have similar partial community property marital regimes (where all assets acquired during the marriage are split equally if the marriage is dissolved), where these two countries may differ most is in terms of the possibilities of young people accumulating assets prior to marriage. Gender inequality in either asset accumulation prior to marriage or in inheritance (which is considered individual property irrespective of its timing) would presumably be among the main factors in Germany contributing to a larger gender wealth gap among partnered individuals than those who are unpartnered.

In contrast, among married and cohabitating couples in Germany, Sierminska et al. (2010) found an increasing gap moving up the wealth distribution, being largest at upper quantiles.

Further, our finding regarding the largest gender wealth gap being among the poorest sole heads adds evidence to the long-standing debate over whether female household heads are poorer than male heads (Buvinic & Gupta, 1997; Medeiros & Costa, 2008) but with the important caveat that female headed households should not be compared to households that include both sole male heads and couple heads, but rather, to their pars. This finding also conforms to previous evidence for Ecuador and Latin America that the gender earnings gap (irrespective of household structure) is largest among the income-poor (Ñopo, 2012). This pattern is certainly alarming and merits continuing policy attention, such as the pursuit of more inclusive policies and social programs that aim at increasing the participation of female heads in the labor force and the returns to their labor.

Our detailed decompositions reveal that, at the bottom of the distribution, the notable gender wealth gap among sole heads is largely due to differences in the returns to individual characteristics, mainly women's lower returns based on location, to parent's literacy, and to parenthood. Yamokoski & Keister (2006) drew attention to how among young baby boomers in the US, parenthood played a stronger role than gender in explaining differences in the wealth of single (unpartnered) individuals. In Ecuador, in contrast, we find a motherhood penalty and one that falls squarely on the shoulders of the poorest sole female heads. This suggests that in developing country contexts the provision of childcare may be a particularly important policy in facilitating the labor force participation of female heads and reducing the gender asset gap among the asset poor.

Gender inequality in inheritance plays a more pronounced role in explaining the gender asset gap in Ecuador, among both sole and partnered heads, at lower and median wealth values compared to the asset wealthy. This suggests that even in countries where marriage and inheritance laws promote gender equity, particular emphasis should be placed on enhancing legal literacy, particularly at lower levels of the wealth distribution. Gender differences in the incidence of having savings accounts contribute to the gender wealth gap in men's favor in Ecuador fairly consistently across the wealth distribution. Efforts aimed at the financial inclusion of women should continue to be promoted vigorously.

Overall, the contribution of differences in schooling attained to the gender gap was small, and consistently smaller than that of gender differences in inheritance or having a savings account. This result confirms the well noted gains in Ecuador, as in most of Latin America, in gender equality with respect to educational levels. With respect to the returns to education, in our analysis we only found significant potential discrimination against women at the median level of wealth and only among sole heads.

In terms of returns based on occupational position, we found potential discrimination against self-employed (employer) women in the upper wealth level and only among partnered heads. This may be because those at the upper wealth level are more likely to have formal businesses compared to those at other points in the wealth distribution (where self-employment is more likely to be in the informal service sector) and there is a very large gap in men's and women's business wealth in Ecuador (Deere & Contreras, 2011). The labor literature for developed countries shows that self-employment negatively affects women's earnings, particularly for wives and mothers in non-professional occupations (Budig, 2006; Fairlie, 2006), and Ecuadorian women in wealthier quantiles are more likely to resemble women in developed countries than their less wealthy counterparts.

Hence, overall we find that different factors contribute to the gender wealth gap across the distribution, implying that policies that aim to reduce the gap need to be appropriately tailored. Low wealth female household heads need policies that affect their opportunities to access markets and accumulate wealth. Middle and upper wealth women may gain most from policies that enhance their performance in labor markets or reduce discrimination in those. It will be important for future studies with individual level wealth data for other developing countries to confirm the extent to which these results for Ecuador – which point to a much larger gender wealth gap among sole as opposed to partnered household heads, and particularly among the wealth poor —suggest different patterns among developed and less developed countries.

Tables and Figures

Table 1. Raw gender wealth gap, sole male heads (SMH) and sole female heads (SFH) (in $US)

	Mean	Percentiles								
		10	20	30	40	50	60	70	80	90
SMH	30,403	266	672	1,741	4,692	7,900	13,345	21,601	39,125	82,376
SFH	16,785	100	319	868	2,387	5,141	9,191	15,648	27,752	45,671
Gap	13,547	166	353	874	2,305	2,759	4,154	5,953	11,374	36,705
P-value	0.00	0.00	0.01	0.02	0.02	0.06	0.07	0.09	0.02	0.00
Men-to-women ratio	1.81	2.66	2.10	2.01	1.97	1.54	1.45	1.38	1.41	1.80

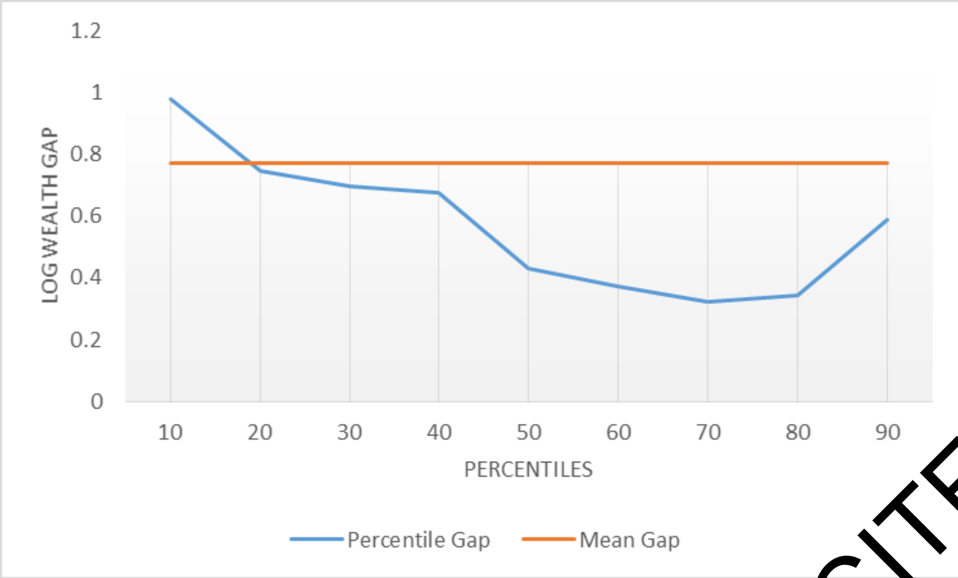
Source: Authors' calculation based on EAFF 2010 data.

Table 2. Raw gender wealth gap, partnered male heads (PMH) and partnered female heads (PFH) in ($US)

	Mean	Percentiles								
		10	20	30	40	50	60	70	80	90
PMH	12,257	47	224	695	1,657	3,282	6,132	10,470	17,598	33,184
PFH	9,794	92	247	554	1,161	2,303	4,582	8,268	15,093	28,264
Gap	2,536	-45	-23	141	497	979	1,550	2,202	2,505	4,920
P-value	0.00	0.00	0.5	0.1	0.00	0.00	0.00	0.00	0.02	0.01
Men-to-women ratio	1.25	0.51	0.91	1.25	1.43	1.43	1.34	1.27	1.17	1.17

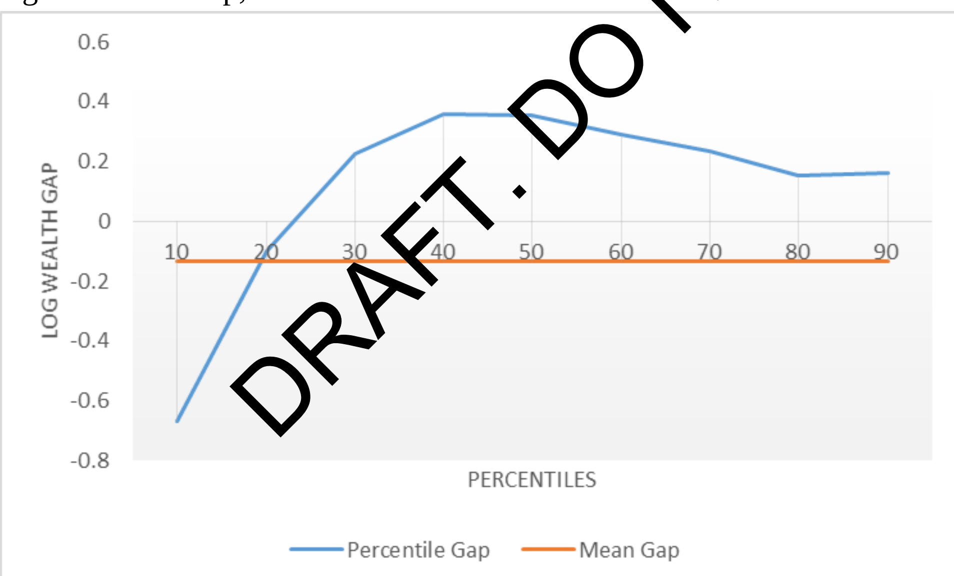
Source: Authors' calculation based on EAFF 2010 data.

Figure 1. Raw Gap, Sole Heads



Source: Authors' calculation based on EAFF 2010 data.
Note. Net wealth is log transformed using the inverse hyperbolic sine function (see Grabka et al., 2013).

Figure 2. Raw Gap, Partnered Heads



Source: Authors' calculation based on EAFF 2010 data.
Note. Net wealth is log transformed using the inverse hyperbolic sine function (see Grabka et al., 2013).

Table 3. Descriptive Statistics, Sole Heads and Partnered Heads

	Sole Heads				Partnered Heads		
	Men	Women	P-value		Men	Women	P-value
Inherited real estate	0.24	0.20	0.2		0.19	0.17	0.1
Has a formal savings account	0.45	0.34	0.0		0.39	0.26	0.0
Non-income earner	0.21	0.22	0.7		0.09	0.47	0.0
Employer/Self-Employed	0.44	0.47	0.4		0.34	0.32	0.2
Government/Private worker	0.26	0.19	0.0		0.35	0.14	0.0
Day laborer/Domestic employee	0.09	0.11	0.4		0.22	0.07	0.0
Single/ Never married	0.26	0.15	0.0				
Married	-	-	-		0.65	0.65	0.9
Consensual union	-	-	-		0.35	0.35	0.9
Widowed	0.26	0.29	0.5		-	-	-
Divorced	0.06	0.11	0.1		-	-	-
Separated	0.41	0.45	0.3		-	-	-
Years of schooling	8.31	7.73	0.1		8.60	8.20	0.0
Father/Mother not literate	0.29	0.29	0.9		0.22	0.20	0.1
Father only is literate	0.09	0.13	0.2		0.12	0.14	0.1
Mother only is literate	0.07	0.07	0.9		0.06	0.06	0.9
Both parents literate	0.55	0.51	0.3		0.61	0.61	0.9
Num. of children (<11)	0.28	0.77	0.0		1.14	1.14	0.9
Rural	0.26	0.29	0.3		0.34	0.34	0.9
Urban	0.74	0.71	0.3		0.66	0.66	0.9
Coast region	0.55	0.45	0.0		0.50	0.50	0.9
Highlands region	0.45	0.55	0.0		0.50	0.50	0.9
Other ethnicity	0.15	0.12	0.3		0.12	0.12	0.7
Mestizo/White	0.85	0.88	0.3		0.88	0.88	0.7
Age (in years)	54.24	50.27	0.0		45.38	41.25	0.0
Observations	193	718	-		1,981	1,981	-

Source: EAFF 2010

Table 4. RIF Regressions, Sole Heads

	10th Quantile		50th Quantile		90th Quantile	
	SMH	SFH	SMH	SFH	SMH	SFH
Inherited real estate	1.91***	2.16***	1.73***	2.59***	0.89	0.50**
Has a formal savings account	0.83	1.05***	0.89*	1.05***	0.52	0.64***
Non-income earner	0.80	0.76	0.31	0.96**	0.06	0.59**
Employer/Self-Employed	1.85	0.54	0.67	0.46	-0.17	0.23
Government/Private worker	0.46	-1.07	-0.36	-0.52	-0.55	-0.31
Day laborer/Domestic employee	-	-	-	-	-	-
Single/ Never married	-	-	-	-	-	-
Widowed	-2.31**	0.25	0.87	0.27	0.39	-0.03
Divorced	-0.97	2.22***	0.75	-0.37	0.98	-0.33
Separated	-0.16	0.72	0.41	0.02	-0.14	-0.24
Years of schooling	0.16**	0.01	0.18***	0.08**	0.16***	0.07***
Father/Mother not literate	0.60	-1.04**	-0.25	-0.42	-0.06	-0.38**
Father only is literate	-0.50	-0.77	0.32	-0.64*	-0.81*	-0.36*
Mother only is literate	-2.26	-0.62	-0.58	-0.48	-0.32	-0.13
Both parents literate	-	-	-	-	-	-
Num. of children (<11)	0.49◆	-0.03	0.32	0.20	0.12	0.01
Rural	-	-	-	-	-	-
Urban	0.08	-0.14	0.48	0.29	0.64	0.38**
Coast region	-	-	-	-	-	-
Highlands region	0.57	-0.75*	0.50	0.38	0.28	0.47***
Other ethnicity	-	-	-	-	-	-
Mestizo/White	-1.25*	-0.49	0.34	-0.46	-0.27	0.19
Age centered (in years)	0.00	0.03	0.08*	0.16***	0.03	0.05**
Age centered Sq./100	0.03	-0.03	-0.09	-0.14***	-0.00	-0.03
Constant	3.90**	4.27***	4.15***	4.15***	8.97***	8.71***
Observations	193	718	193	718	193	718
R-squared	0.21	0.09	0.31	0.25	0.20	0.15

*** p<0.01, ** p<0.05, * p<0.1 - P-values are based on bootstrapped standard errors (500 replications)

Table 5. RIF Regressions, Partnered Heads

	10th Quantile		50th Quantile		90th Quantile	
	PMH	PFH	PMH	PFH	PMH	PFH
Inherited real estate	2.51***	1.54***	1.75***	2.05***	0.30**	0.57***
Has a formal savings account	0.48	-0.07	0.86***	0.76***	0.72***	0.63***
Non-income earner	0.81	0.30	0.72**	0.14	0.32	0.13
Employer/Self-Employed	1.27**	0.87**	1.16***	0.81***	0.35***	0.20
Government/Private worker	-0.05	0.60	0.33*	0.29	-0.19*	-0.01
Day laborer/Domestic employee	-	-	-	-	-	-
Married	-	-	-	-	-	-
Consensual union	-1.32***	-0.28	-1.09***	-0.83***	-0.15*	-0.14
Years of schooling	0.17***	0.11***	0.08***	0.09***	0.09***	0.08***
Father/Mother not literate	0.01	-0.55**	-0.17	-0.39*	-0.11	-0.19
Father only is literate	0.32	-0.26	0.06	-0.24	0.11	-0.08
Mother only is literate	0.41	-0.13	-0.43	-0.18	-0.12	-0.18
Both parents literate	-	-	-	-	-	-
Num. of children (<11)	-0.49***	-0.15*	-0.04	-0.12*	-0.03	-0.03
Rural	-	-	-	-	-	-
Urban	-0.32	0.05	0.14	-0.04	0.12	0.28**
Coast region	-	-	-	-	-	-
Highlands region	-0.33	-0.23	-0.01	-0.00	0.37***	0.39***
Other ethnicity	-	-	-	-	-	-
Mestizo/White	-0.15	-0.35	0.13	0.23	0.16	0.24**
Age centered (in years)	0.09**	0.04*	0.13***	0.15***	0.04***	0.05***
Age centered Sq./100	-0.11*	-0.02	-0.11***	-0.17***	-0.01	-0.02
Constant	1.96*	3.56***	4.81***	4.81***	8.70***	8.42***
Observations	1,981	1,981	1,981	1,981	1,981	1,981
R-squared	0.06	0.06	0.26	0.24	0.15	0.13

*** p<0.01, ** p<0.05, * p<0.1 - P-values are based on bootstrapped standard errors (500 replications)

Table 6. Decomposition Results, Sole Heads

	10th Quantile		50th Quantile		90th Quantile	
Predicted Male	6.31***		9.68***		12.04***	
Predicted Female	5.40***		9.26***		11.43***	
Predicted Gap	0.91**		0.42*		0.61***	
	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.
Inherited real estate	-0.21	0.09*	-0.18	0.10*	0.11	0.02
Has a formal savings account	-0.20	0.11**	0.10	0.11***	0.08	0.07**
Non-income earner	-0.11	-0.01	-0.23	-0.01	-0.18	-0.01
Employer/Self-Employed	0.56	-0.02	-0.03	-0.01	-0.19	-0.01
Government/Private worker	0.59	-0.07	-0.07	-0.03	-0.00	-0.02
Day laborer/Domestic employee	-	-	-	-	-	-
Single/ Never married	-	-	-	-	-	-
Widowed	-0.68*	-0.01	0.30	-0.01	-0.07	0.00
Divorced	-0.23**	-0.11**	0.08	0.02	0.04	0.02
Separated	-0.62	-0.03	0.22	-0.00	-0.14	0.01
Years of schooling	1.17	0.00	1.11**	0.05*	0.63	0.04*
Father/Mother not literate	0.93***	0.00	0.10	0.00	0.09	0.00
Father only is literate	0.13◆	0.03	0.15*	0.02	-0.05	0.01
Mother only is literate	-0.06	0.00	-0.03	0.00	-0.01	0.00
Both parents literate	-	-	-	-	-	-
Num. of children (<11)	0.34**	0.02	0.06	-0.10	0.02	-0.00
Rural	-	-	-	-	-	-
Urban	0.21	-0.00	-0.33	0.01	0.24	0.01
Coast region	-	-	-	-	-	-
Highlands region	0.75*	0.08*	-0.05	-0.04	-0.13	-0.05**
Other ethnicity	-	-	-	-	-	-
Mestizo/White	-0.65	0.01	0.75	0.01	-0.52	-0.00
Age	2.30	0.05	-2.01**	0.13*	0.24	0.11**

Table 6. Continued

	10th Quantile		50th Quantile		90th Quantile	
	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.
Constant	-3.39		0.33		0.40	
Total Pure effect	0.84**	0.15	0.25	0.26**	0.57***	0.20***
Reweighting error	-0.01		-0.01		-0.01	
Misspecification error	0.00		-0.05		-0.15	
*** p<0.01, ** p<0.05, * p<0.1 - P-values are based on bootstrapped standard errors (500 replications)						

Table 7. Decomposition Results, Partnered Heads

	10th Quantile		50th Quantile		90th Quantile	
Predicted Male	4.71***		8.80***		11.11***	
Predicted Female	5.27***		8.45***		10.94***	
Predicted Gap	-0.55***		0.35***		0.17***	
	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.	Coef. eff.	Char. Eff.
Inherited real estate	0.11	0.03*	0.02	0.05*	-0.05	0.01
Has a formal savings account	0.09	-0.01	-0.08	0.11***	0.04	0.09***
Non-income earner	0.03	-0.12	0.03	-0.06	0.05	-0.05
Employer/Self-Employed	-0.05	0.02	0.12	0.02	0.15*	0.01
Government/Private worker	-0.45	0.13	-0.03	0.06	0.04	-0.00
Day laborer/Domestic employee	-	-	-	-	-	-
Married	-	-	-	-	-	-
Consensual union	-0.44**	0.00	-0.09	0.01	-0.02	0.00
Years of schooling	0.51	0.05**	-0.05	0.04**	-0.31	0.03**
Father/Mother not literate	0.15	-0.01	0.05	-0.01	-0.07	-0.00
Father only is literate	0.06	0.00	0.01	0.00	0.02	0.00
Mother only is literate	0.04	0.00	-0.01	0.00	0.01	0.00
Both parents literate	-	-	-	-	-	-
Num. of children (<11)	-0.41	0.00	-0.22	0.00	-0.08	0.00
Rural	-	-	-	-	-	-
Urban	0.05	0.00	-0.15	-0.00	0.00	0.00
Coast region	-	-	-	-	-	-
Highlands region	0.30	-0.00	0.09	-0.00	-0.04	0.00
Other ethnicity	-	-	-	-	-	-
Mestizo/White	0.97	0.00	-0.38	-0.00	-0.11	-0.00
Age	-0.34	0.13***	-0.59	0.24***	-0.22	0.17***

Table 7. Continued

	10th Quantile		50th Quantile		90th Quantile	
	Coef. eff.	Char. Eff.	Coef. eff.	Coef. eff.	Char. Eff.	Coef. eff.
Constant	-1.60		1.18*		0.50	
Total Pure effect	-0.98***	0.23**	-0.10	0.46***	-0.10	0.26***
Reweighting error	-0.01		-0.03		-0.02	
Misspecification error	0.09		0.01		0.02	
*** p<0.01, ** p<0.05, * p<0.1 - P-values are based on bootstrapped standard errors (500 replications)						

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