# International Migration, Household Decision-Making, and Gender Discrimination in the Allocation of Household Resources *

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## Abstract

This paper considers the relationship between international migration and gender discrimination through the lens of household decision-making power and spousal control over resources. I address the endogeneity of migration with a difference-in-difference style identification strategy and a model with household fixed effects. The results show that while a migrant household head is in the U.S., a greater share of resources is spent on girls relative to boys and his spouse commands greater decision-making power. Once the head returns home, however, a greater share of resources goes to boys and the evidence points to greater authority for the head of household.

*JEL classification:* O15, F22, D13, J16.

*Keywords:* education; migration, intrahousehold allocation, gender discrimination.

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# 1 Introduction

It is now widely acknowledged that parental migration can have important consequences for children that are often left behind.[1] In theory, these effects are not unambiguously positive, due in part to the potentially offsetting influences of migrant remittances and parental absence from the home. But while there is now a large empirical literature evaluating the net impact of parental migration on children's outcomes (Hanson and Woodruff, 2003; McKenzie and Rapoport, 2011; Antman, 2012, 2011b; Yang, 2008), much less is known about the mechanisms that underlie these effects. Identifying the overriding mechanism involved may also help explain why the overall impact of parental migration on outcomes such as schooling and work often differ based on child gender. This paper adds to that literature by examining how migration affects the specific gender mix of expenditures on education and clothing. In doing so, it also offers evidence that suggests a potentially important channel through which parental migration may affect children: spousal control over the allocation of resources. In countries like Mexico, where men are more likely to migrate and thus be absent from the home, migration necessarily implies an important shift in household structure that would suggest an increase in the influence of women left behind. Is there a coinciding shift in expenditures toward girls or boys? Is there a commensurate increase in women's decision-making power?

Linking the impact of migration with changes in the gendered pattern of expenditures and decision-making power also connects this paper with the literature on the allocation of resources within families and households. Studies in this area have largely focused on shifting the balance of bargaining power

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[1] See Antman (forthcoming) for a review of the literature on this topic.

between men and women by increasing the resources one spouse brings to the household, for instance through targeted cash transfers or other government programs (Attanasio and Lechene 2002, Bobonis 2009, Duflo 2003). This research lies at the heart of the literature on the economics of the family and is most closely associated with testing the unitary or common preference model of the household, the proposition that household decisions can be treated as though they were made by a single decision-maker (Lundberg and Pollak, 1996; Thomas, 1990). Several studies have found that increasing a woman's bargaining power results in an improvement for girls' health outcomes and not boys (Duflo 2003, Thomas 1994). Antman (2012) presents evidence consistent with this story in which a father's migration to the U.S. results in statistically significant increases in educational attainment for his daughters, but not his sons. This paper examines expenditures on boys and girls explicitly, thereby establishing a mechanism whereby paternal migration affects gender discrimination directly.[2] At the same time, it provides evidence as to an important way in which women can increase their bargaining power without necessarily changing their resources, but which has largely been overlooked.[3] Migration and the family separation that it often entails can thus provide a window into household decision-making and serve as a potential exercise that can suggest how men and women might spend resources differently within the household were they the sole decision-makers.

To explore these questions, I use data from the Mexican Family Life Sur-

[2]In the absence of data on expenditures by gender of children, an alternative approach might infer discrimination in child expenditures by linking expenditures on adult goods with household gender composition, as in Deaton (1989).

[3]Chen (2006, forthcoming) provides notable exceptions by suggesting that one spouse's migration can lead to imperfect monitoring of time allocations in sending households and thus proposes a mechanism to identify non-cooperative behavior among spouses in China.

vey (MXFLS), a two-wave panel survey which began interviewing respondents in 2002 and again in 2005. Quite significantly, the MXFLS asks questions about permanent and temporary migration and follows Mexican migrants into the United States with a surprisingly high re-contact rate around 90 percent (Rubalcava and Teruel, 2007). Importantly, the MXFLS also collects detailed information on household spending, including expenditure data on education and children's clothing by gender. Couples are also individually asked to identify who is responsible for making decisions regarding these expenses.

Estimation is not entirely straightforward, however, because migrants self-select and thus parental migration may be correlated with the same factors that determine intrahousehold allocations. As in Antman (2011a), I first adopt an identification strategy inspired by differences-in-differences, where I attempt to net out migrant selection by looking at the set of household heads that have had recent U.S. migration experience and compare those who have already returned to Mexico with those that are still in the U.S. Consistent with the spousal control hypothesis, I find that the fraction of resources devoted to boys drops when the migrant is in the U.S. However, some may be concerned that return migration to Mexico is endogenous as well, thus contaminating these estimates with an additional selection problem. I argue that these sources of endogeneity are likely to be time-invariant, such as the case where a family that values boys above girls spends more on boys and is also more likely to send migrants on recurrent trips to the U.S. To address these concerns, I use a household fixed effects strategy that allows me to net out any time-invariant sources of endogeneity that may have resulted in a non-causal correlation between parental migration and children's outcomes.

As with all longitudinal identification strategies, some may be concerned that time-varying sources of endogeneity affect both migration and the allo-

cation of resources within the household. For instance, families may hit a negative shock between survey waves that induce the father to migrate and also force children out of school. If boys are more likely to drop out first and enter the work force, as opposed to their sisters dropping out and working in the labor force or at home, this would result in a bias toward the finding that educational expenditures are shifted toward girls while fathers are away. Nevertheless, this type of explanation cannot account for the finding that children's clothing expenditures, which explicitly exclude school uniforms, are also shifted toward daughters while fathers are away. In any case, the question remains why boys in particular would receive a lower fraction of resources while their fathers are away versus when they are present.

To investigate the mechanism behind these results, I examine data on who is reportedly responsible for making decisions regarding children's education and clothing. Again consistent with the spousal control hypothesis, the evidence suggests that while a head is migrating, he is less likely to be responsible for these decisions and his spouse is more likely to be involved in making these choices. Interestingly, this pattern is reversed when a head has had recent migration experience but is not currently away, i.e. he is more likely to be involved in decisions and his spouse is less likely to be. Together, this evidence is consistent with a story in which the head's decision-making power wanes while he is away, resulting in a shift in resources toward girls, but then resurges upon his return, inducing a relative increase in resources for boys over girls.

The paper proceeds as follows: Section 2 discusses the cross-sectional and longitudinal empirical strategies; Section 3 describes the MXFLS data used in the analysis and reviews summary statistics that preview the results; Section 4 presents the results on the relationship between international migration,

household expenditures, and decision-making power; Section 5 interprets the results and Section 6 concludes.

# 2    Empirical strategy

The ideal experiment to study the effects of parental migration on gender discrimination within the household would randomly select some fraction of Mexican household heads for migration to the U.S., while the remaining household heads stayed at home.[4] In such an experiment, we could then simply take the difference between the fraction of resources spent on boys for those households with heads in the U.S. and those not in the U.S. as a measure of the effect of migration on the allocation of resources by gender. Of course, the problem in using this measure as our estimate in the real world is that Mexican migrants self-select, and migration could be correlated with unobserved factors affecting household expenditures.

Nevertheless, this hypothetical experiment provides the motivation for a potential identification strategy. By looking within the sample of families where household heads have all had recent migration experience, we can arguably control for the unobserved factors which may have induced migration and may well be correlated with household expenditures. As in Antman (2011a), the idea is to compare families where the head is still absent in the U.S. with those families in which the migrant head has already returned home. This type of differences-in-differences strategy also allows for a direct comparison of outcomes between three groups whose household bargaining structure

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[4]For a similar migration experiment, see Gibson, McKenzie, and Stillman (2008) who evaluate the effects of the New Zealand migration lottery program for families of Tongan migrants.

may have been altered by migration: those with no recent migration experience, those who have recently returned, and those who are still away. It can be implemented with a cross-sectional regression model where the fraction of expenditures spent on boys is a function of the household head's migration experience and whether he is currently in the U.S.:

$$Y_{it} = \beta_1 USMigExper_{it} + \beta_2 USMigExper_{it} * CurrUSMig_{it} + X_{it}\gamma + \epsilon_{it} . \quad (1)$$

In the main specification, the dependent variable, $Y_{it}$, denotes the fraction of children's expenditures spent on boys, either in education or clothing. $USMigExper_{it}$ is an indicator variable for whether the household head has had any U.S. migration experience in the two years prior to the survey, regardless of whether he is currently in the U.S. or Mexico,[5] and $CurrUSMig_{it}$ is an indicator variable equal to one if the household head is currently in the U.S. and zero otherwise. As noted in the data section below, all household heads who are currently in the U.S. by definition have recent migration experience and are coded accordingly. The vector of covariates $X_{it}$, includes the number of household members falling into the following gender and age-specific categories: females 0-5 years-old, females 6-12 years-old, females 13-17 years-old, females that are at least 65 years-old, and with the omitted group being females between 18 and 64. The analogous categories for males are also included, along with dummy variables indicating whether the household is in an urban area, and dummies indicating the survey year and month. Since this cross-sectional regression is implemented on a panel data set, in equation (1), I have included the time subscript over the two waves of the survey ($t = 1, 2$)

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[5] The focus on the two years prior to the survey is partly due to a limitation in the data, and will be discussed in the Data section below.

and cluster standard errors at the household level.

The spirit of the identification strategy presented above acknowledges that households may differ due to the endogeneity of out-migration, but comparing households who have all had recent migration experience reduces this problem. An additional challenge is presented by the possibility that return migration to Mexico may also be endogenous. Thus, households with migrant heads who have returned to Mexico by the time of the survey may be different in unobservable ways from households with heads still in the U.S., and it is these differences that may explain differences across households in the gendered allocation of resources. To address this concern, I exploit the panel nature of the MXFLS and run the above regression with household fixed effects:

$$Y_{it} = \theta_1 USMigExper_{it} + \theta_2 USMigExper_{it} * CurrUSMig_{it} + X_{it}\phi + \eta_i + \varepsilon_{it} \ ,$$

$$(2)$$

where $\eta_i$ is a household-specific error term constant across both waves of the survey. Thus, controlling for time-invariant factors at the household level allows us to net out factors which affect both out- and return migration and which may be correlated with household outcomes.

As mentioned above, household fixed effects will not address time-varying sources of endogeneity and some may be concerned that a time-varying shock determines both the head's migration patterns and the allocation of resources within his household. For instance, one might expect expenditures in education to shift toward girls if a negative shock determined both that a household head migrated and that his sons dropped out of school to enter the labor market. For this reason, I also consider the expenditure ratios on children's

clothing, an outcome that explicitly excludes school uniforms, and thus would be expected to move in the opposite direction of education expenditures if such a time-varying shock were behind the results.

Finally, an investigation of how gender discrimination changes with migration of the head of household would not be complete without some evidence of a mechanism. While we cannot examine the household head's responses to decision-making questions while he is on a migration trip, we can substitute his spouse's reports in cases where the head is absent. The analysis below focuses on two classes of decision-making outcomes in place of $Y_{it}$ in equations (1) and (2): the degree to which the household head is involved in making decisions regarding education and children's clothing and the extent to which his spouse is involved in making the same decisions. In this way, household decision-making can be tied to the estimates of the effect of international migration on children's expenditures. Comparing decision-making outcomes based on recent and current migration experience can thus be viewed as an exercise in varying degrees of spousal control over the intrahousehold allocation of resources.

# 3   Data

## 3.1   Description

The data come from the Mexican Family Life Survey (MXFLS), a collaborative project managed by researchers in Mexico and the United States.[6] The

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[6]The MXFLS is publicly available at http://www.ennvih-mxfls.org/. Arenas, Conroy, and Nobles (2009) provide an overview of the migration data available, noting current projects and further research possibilities using the data.

MXFLS was designed to be a nationally representative panel data set of Mexicans that would follow households regardless of their decisions to reside in Mexico or the U.S. As a result, attrition is remarkably low in the sample, with around 90 percent of the baseline households surveyed in 2002 re-interviewed in the follow-up surveys, taking place mostly in 2005 (Rubalcava and Teruel, 2007).

The MXFLS asks respondents detailed questions about income, expenditures, labor supply, schooling choices, and both short- and long-term migration histories. Unfortunately, temporary migration spells lasting less than one year are only documented for the two years immediately prior to the survey. For this reason, the measure of recent migration experience used in this paper is limited to any migration experience in the U.S. taking place within the last two years, regardless of duration.

In addition to migration histories, for all household members in Mexico at the time of the baseline survey, the follow-up survey indicates whether they are in the U.S. in the second wave. These migrants make up those observations defined as currently in the U.S. Since these migrants would have had to undertake migration in the interim period between waves, they are also defined as having had recent migration experience, but are distinguished by the fact that they have not returned to Mexico. Since the analysis attempts to link the gendered pattern of expenditures with the gender and decision-making power of the spouse left behind, I limit attention to households headed by men.[7]

The main outcome variables of interest relate to the fraction of educational and children's clothing expenditures spent on boys.[8] With regard to educa-

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[7]Antman (2011a) shows that the cross-sectional expenditure ratio results for all households are similar, reflecting the predominance of male headship in Mexico.

[8]For clothing, the survey contains categories specifically for children's clothing separately

tional expenses, the survey reports the amount of money spent during the current school period on (1) enrollment, fees, and exams, (2) school utensils and uniforms, and (3) transportation, separately for male and female members in the household. I add (1)-(3) for each gender separately, and then add these sums together to construct total educational expenditures. I then take the ratio of male educational expenditures over total educational expenditures to construct the boys' educational expenditure ratio.[9] I follow a similar procedure to construct the boys' clothing expenditure ratio based on survey data regarding the amount of money spent on children's clothes and shoes, as well as the value of home production for these goods, for boys and girls over the past three months. Expenditures on school uniforms are explicitly excluded from the clothing measure and included as educational expenses.

As for the household decision-making data, the MXFLS asks couples individually to report who makes decisions regarding household expenses and time allocation for a variety of outcomes ranging from the food that is eaten in the home to the money that is given to parents and relatives. Respondents are asked to specify who in the household is responsible for making the decision regarding each outcome, and this can include the respondent himself, his

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from adult's clothing. While the survey does not distinguish between educational expenditures on adults and children, given that average educational attainment is still fairly low in Mexico (just below 9 years of schooling, OECD, 2010), this arguably stems largely from expenditure on children's education. While the survey contains a separate section indicating educational expenditures on each child, I prefer the measure used here because it is collected in the same aggregated manner as the data on clothing expenditures by gender.

[9]All expenditure and income data are deflated using the Mexican CPI and are reported in 2002 Mexican pesos. The CPI data are available from the Banco de Mexico at http://dgcnesyp.inegi.org.mx/cgi-win/bdieintsi.exe/CPreIQY#.

spouse, children, mother, father, brother, sister, in-laws, and grandparents. For purposes of this study, I focus on the decisions regarding children's clothes and the education of children. I focus on the household head's responses, which for the most part, identify either him, his spouse, their children, or all of them together as the decision-makers in these categories. Using these data, I generate a binary variable equal to one if the household head reports making the decision alone regarding his children's clothes and zero otherwise. I generate an analogous dummy variable indicating the household head alone makes decisions regarding his children's education. For each expenditure category, I also generate analogous variables indicating that (a) the household head is involved in the decision along with anyone else, (b) the spouse alone makes the decision, and (c) the spouse is involved in the decision along with anyone else.

These variables serve as measures of the strength of the household head's decision-making power as well as that of his spouse. The main limitation is that these data are only collected if the individual is present at the time of the survey, so in cases where an individual is not present to respond to the decision-making questions, I substitute the response of his or her spouse. Note that this means that when the household head is currently on a migration trip, the responses of his spouse will be used in the analysis. While I primarily focus on the responses of the head of household, I subsequently report the results using the spouse's responses to the decision-making questions, and thus avoid the problem of necessarily shifting respondent at the same time we observe migration spells.

## 3.2 Summary statistics

Using expenditure ratios as the main outcome variable of interest is useful because they are relatively easy to interpret: an increase in the ratio implies an increase in the fraction of expenditures spent on boys and conversely, a decrease in the ratio implies an increase in the fraction spent on girls. Of course, they also present some challenges. First, the ratios will equal zero if nothing is spent on boys, which would be the case if there were no boys in the household on which to spend. To address this concern, in the regressions below I control for the age composition of all household members. Second, the outcome variables will be undefined whenever the household reports no expenditures on either girls or boys. I leave these as missing values, and as can be seen in Table 1, many families have missing values for either clothing or educational expenses.

To be more precise, 7395 household-period observations have non-missing values for either clothing or educational expenditure ratios. Of these, 6267 have non-missing observations for educational expenditures, and 4595 have non-missing values for clothing expenditures. Since cutting the sample size to households with non-missing values for both educational and clothing expenditures results in such a substantial reduction in observations, I perform the analysis below on both samples. Later I also report results on the 3467 observations with non-missing values for both educational and clothing expenditure ratios.

Aside from noting sample sizes, Table 1 presents descriptive statistics for the main samples used in the analysis. Panel A shows that household size is around 5 people on average, with close to one male household member and one female household member in school. The head is about 42 years-old on

average, and on average has seven years of education. Close to 40 percent of the sample live in urban areas, with populations of 100,000 or more. Finally, just under 50 percent of household observations are observed in the second wave of the survey, attesting to the low attrition rate in the MXFLS.

Panel B shows the mean and median values on outcomes variables of interest. In both clothing and educational expenditures, roughly half of expenditures in each category are spent on boys and girls. Total expenditures in education are much more than total expenditures in clothing, with the former being around three to five times the latter, based on a comparison of means or medians. The likelihood that the head makes unilateral decisions about children's education and clothing is fairly low in both samples, with only around 5 percent of heads reporting they make unilateral decisions on those margins. The likelihood that the spouse alone makes decisions in these areas appears to be higher, with about 10 percent of households reporting that spouses make unilateral decisions on education and close to 30 percent reporting she is responsible for the clothing decision. About 80 percent of households report that the head is involved in educational decisions and about 50 percent report his involvement in the clothing decisions. The likelihood that the spouse is involved in the decision is again higher with 87 percent of households reporting she is involved in the education decision and 78 percent reporting that she is involved in the clothing decision.

Table 2 compares the mean values of these variables of interest distinguished by the migration experience and current migration status of the head of household. Columns (1) and (4) include the largest group of households with heads that have not recently migrated to the U.S. Columns (2) and (5) includes heads who have recently migrated, but have already returned to Mexico, and columns (3) and (6) includes heads who are currently in the U.S.,

and by definition have had recent migration experience. The table also gives a window into the relatively small number of recent migrants in these small samples. In the sample with non-missing educational expenditure ratios, 84 households have a head who has had recent migration experience and returned, and an additional 41 heads are in the U.S. The sample of migrants is somewhat smaller in the group with non-missing clothing expenditure ratios, with 71 households in which the head has recently returned from a trip to the U.S. and 28 households in which the head is still absent. Due to these relatively small sample sizes, in what follows, I continue reporting the results on both samples, and later also report on the sample with non-missing clothing and educational expenditure ratios.

Looking across the first category of children's clothing, we see an important pattern emerge: households can be thought to start with expenditures divided somewhat equally among male and female children. If a household head is currently in the U.S., however, the expenditure ratio falls to .45 indicating a shift toward girls. Once the head returns, however, expenditures for boys rise again, leading to an expenditure ratio about 0.60. While these differences are statistically significant in the cross-section for the children's clothing category, educational expenditures appear to be flat for households when heads are away and rise when they return, but are not statistically significant. Interestingly, total expenditures in children's clothing appear very similar across all migration categories, but appear to fall for both migration groups in the educational category. While these differences are not statistically significant and may in part reflect the higher variance in educational expenditures, I further explore the impact of migration on total expenditures in the regression analysis below.

Table 2 also previews the results surrounding the effects of migration on

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household decision-making. Consistent with the spousal control hypothesis, there is a statistically significant drop in the probability that the head makes decisions alone in both education and clothing categories while he is on a migration trip. In fact, no respondents claim that the head is solely responsible for these decisions. There is also a statistically significant drop in the likelihood that he is involved in the education decisions. Because this may reflect the fact that spouses are reporting results while he is away, below I also report results when the spouse is taken to be the primary respondent when the head is at home and while he is away.

Also in the education category, households are more likely to report that spouses make decisions alone regarding children's education and that spouses are more likely to be involved in that decision when the head is in the U.S. Another interesting result from the table is the drop in the likelihood that the spouse is responsible for making decisions once the head has returned to Mexico and the corresponding increase in the head's reported involvement in decision-making once he has returned from a migration trip. This may be surprising if we expect households to maintain the decision-making roles that were altered during the head's absence. Instead, these statistics raise the possibility that recent migration confers additional bargaining power on men who are able to exercise it only after they return. It might also reflect a desire on the part of recently absent male heads to compensate for the way in which resources were allocated in their absence, and thus explain why heads who have recently migrated appear to be more involved in decisions about children than heads who have not recently left home.

Of course, these differences do not control for other demographic factors that may be changing over time, for instance household size and composition, that should surely affect household expenditures on children. For this reason

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it will be important to control for these variables in the analysis below. At the same time, return migration may itself be endogenous to household expenditures, and for this reason, it will also be useful to examine the panel results where household fixed effects are included to net out time-invariant factors that may influence both migration and household outcomes.

# 4 Results

## 4.1 Expenditures

Table 3, Panel A presents the cross-sectional and fixed-effects regression results from estimating equations (1) and (2) with both the educational and clothing expenditure ratios as dependent variables. In the cross-section, the results shows the same pattern exhibited in the summary statistics: a head's recent U.S. migration is associated with an increase in the share of expenditures on boys, but if the head migrated and is still away, there is a decrease in boys' expenditure share. These results are statistically significant for the children's clothing category, showing an increase in the expenditure ratio of 8 percentage points if the head has recently returned and a decrease in the expenditure ratio of about 4 percentage points (-.12+.08) if the head migrated and is still away. When household fixed-effects are added to the model, the pattern of results remains the same, but the only statistically significant effect is the one showing an increase in the educational expenditure ratio if the head has any recent migration experience (point estimate 0.10).

As some may wonder whether the difference in the sample between non-missing education and clothing expenditure ratios partially explains the results, Table 3 panel B provides the estimates for the sample in which both

expenditure categories are non-missing. The same pattern again emerges, and is statistically significant in the fixed-effects results for all coefficients of interest. A head's recent migration is associated with an increase in the expenditure ratios favoring boys for both education (point estimate 0.11) and clothing (0.23). If the head migrated and is still away, however, expenditure ratios drop by 18 percentage points (0.11-0.29) in the education category and 16 percentage points (0.23-0.39) in the clothing category. Given that the baseline expenditure ratios are around 0.5, these appear to be sizable effects. This evidence suggests that the allocation of household resources favors girls while fathers are migrating, and reverses itself to favor boys once fathers have returned from the U.S.

Tables 4 and 5 attempt to explain what drives these results. Table 4 begins by analyzing expenditure totals by gender, again using the same cross-sectional and fixed-effect strategy laid out in equations (1) and (2). For children's clothing, a head's recent migration experience is associated with a statistically significant rise in boys' and girls' clothing expenditure totals in the fixed-effects specification, and the magnitude appears to be larger for boys than for girls (point estimates of 102 versus 85). While educational expenditures for both girls and boys fall with any migration experience, they are not statistically significant, in part reflecting the high variance in educational expenditures. Table 5 looks at associated educational outcomes to see whether there are substantive effects associated with the change in expenditure ratios. The fixed effects results point to a drop in the number of females in school (point estimate -0.21) when the household head has had recent migration experience, with no statistically significant change in the analogous regression for males in school. Additionally, the table examines the expenditure ratios for components of schooling expenditures: school fees, school supplies, and school transportation.

Both the school fees and school supplies ratios show statistically significant changes favoring boys in both school fees and school supplies (point estimates of 0.12 and 0.89, respectively) when a head has recently migrated to the U.S. This suggests the possibility that there may be a drop in enrollment for girls in particular when a head has had recent migration experience.

## 4.2 Decision-making

The question remains as to what explains this shift in household resources favoring girls while fathers are migrating and favoring boys once fathers have returned home. One hypothesis is that father absence allows for an increase in women's decision-making power and subsequently, women shift resources toward their daughters. Once fathers return, however, they have increased bargaining power owing to the increase in resources from the money they have earned abroad. A related possibility is that fathers feel the need to compensate for the reduced share of resources spent on boys during their absence. While data limitations prohibit an investigation into the father's view of household decision-making while he is absent, we can utilize the spouse's responses to complete the picture of decision-making while he is away.

Tables 6 and 7 present the results on the effects of migration on decision-making authority primarily using the household head's responses to decision-making questions. The samples with either non-missing education or clothing expenditure ratios are used for the analysis in Table 6 and the sample with both non-missing education and clothing expenditures is used in Table 7. In Table 6, the overall pattern of coefficient estimates suggests that household heads with recent migration experience are more likely to claim decision-making authority for themselves, evidenced by an increased likelihood that they are

either fully responsibly for decisions regarding the children's expenditure items, or they are one of the decision-makers involved in making choices in that area. At the same time, household heads with recent migration experience are generally less likely to claim decision-making authority for their wives, saying that their spouses are either less likely to be solely in charge of those decisions or less likely to be involved. Households in which heads are still in the U.S., however, are less likely to claim that the head is either the sole decision-maker or involved in decision-making and more likely to claim that spouses are fully responsible or involved in making decisions. While most of these results are statistically significant under the cross-sectional regression strategy, there are fewer statistically significant coefficients in the fixed effects regression results (Table 6, Panel B), particularly for the decision regarding children's clothing.

To address the possibility that differences in the sample are partially explaining the results, I again restrict the sample to those observations with non-missing clothing and educational expenditure ratios. Again the overall pattern of results suggests an increase in decision-making power if the head has had recent migration experience and a decrease in decision-making power if the head is still away, a pattern that is especially clear in the cross-sectional results (panel A). For example, recent migration experience is associated with an increase in 8.5 percentage points that the head is involved in decisions regarding children's clothing relative to the mean of 0.84 in the dependent variable. If a head is still in the U.S., however, migration is associated with a drop in the likelihood that the head is involved in this decision of 43 percentage points (0.085-0.513). Under this smaller sample, the fixed effects results also yield statistically significant estimates in both education and clothing categories. For instance, if the head migrated and is still away there is a

decrease in the probability that the head is involved in the decision regarding children's education (point estimate -0.61) and an increase in the likelihood that the spouse alone makes the decision (0.63). The fact that the means of the latter dependent variables are 0.84 and 0.10, respectively, might suggest that one estimate is relatively large and the other small. However, it makes intuitive sense that these estimates should be around the same magnitude if in fact men and women were making decisions together until migration required that women make this decision alone. One important caveat is that in cases where both migration-related coefficients are statistically significant, they are close in magnitude (around 0.13) suggesting an inability to identify a change decision-making authority while the head is away in some of the fixed-effects results.

Another concern mentioned in the Data section is that since heads are not able to respond to decision-making questions while they are migrating, switching the identity of the respondent at the time of migration may introduce an inherent bias toward the results presented above if spouses are more likely to report that they are decision-makers and less likely to report that their husbands are involved in making decisions. To address this, Table 8 uses the spouse as the primary respondent, so that the spouse's responses will generally be used throughout.[10] For simplicity, I restrict attention to the smaller sample with non-missing clothing and educational expenditure data used in Table 7.While there are fewer statistically significant coefficient estimates when spouses' responses are used to construct the primary measures of decision-making authority, the statistically significant coefficient estimates

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[10]To preserve sample size, if the spouse's responses are missing I substitute with the head's responses. Note that this should not confound the migration coefficient estimate in particular because the head's responses are not collected if he is migrating.

fit the same pattern discussed above. Most notably, in both cross-sectional (panel A) and fixed effects (panel B) results, the coefficient estimate indicating that the head is currently in the U.S. suggests a drop in the head's decision-making power over children's education (point estimate -0.40 in cross-section and -0.55 in fixed effects specification) and an increase in the probability that the spouse makes decisions alone (0.43 in cross-section and 0.60 in fixed effects specification) on that margin. As for the children's clothing category, a head's recent migration experience is associated with a drop in the likelihood the spouse is involved in decisions over children's clothing of 23 percentage points relative to a mean of 0.77 in the dependent variable.

Overall, these results are consistent with the view that recent migration experience strengthens the head's decision-making power at the same time that current migration restricts it. For spouses, the pattern is reversed, suggesting an increase in decision-making power while the head is away and a waning of that influence once he has returned.

# 5    Discussion

Taken together, the evidence above suggests a gendered impact of U.S. migration on families in Mexico. First, households with heads that are currently in the U.S. reduce the share of expenditures on boys relative to girls in both clothing and educational expenditures. One might expect to see this pattern in education if boys were dropping out of school due to some income shock associated with the head's migration, but it is hard to explain why this should be true for clothing expenditures, particularly if boys are working outside of the home instead of going to school. Another possibility is that there are some expenditure items that are not observed, which are actually rising for

boys, but unobserved to the researcher[11] so that if all expenditure categories on boys and girls were taken into account, the distribution would remain unchanged. Still, the fact that households with no recent migration experience seem to start out at parity for girls and boys in both education and clothing expenditures suggests that such a story is unlikely. A more likely explanation is that migrant fathers face challenges in monitoring the allocation of resources at home, as in Chen's (2006) model of Chinese migration. If the head's utility from children is also dependent on his proximity to them, as in Weiss and Willis' (1985) model of divorce settlements, the head's migration may also affect his desire to be involved in household matters to begin with.

The results on decision-making also support the spousal control hypothesis, offering suggestive evidence that current migration to the U.S. reduces decision-making power of household heads and increases it for their wives while the opposite is true for households in which the head has recently returned to Mexico. In this case, a household head's return migration to Mexico actually raises the share of expenditures on boys relative to girls while it raises the head's decision-making power and reduces the decision-making power of his spouse. While the evidence on clothing expenditures suggests that a head's recent migration is associated with higher expenditures for both boys and girls in clothing, the fixed effects results point to a statistically significant decline in female enrollment when the head has had recent migration experience. Nevertheless, it is important to recognize that since the analysis here limits attention to migration in the past two years and the fixed effects results look at migration in the relatively short window between survey waves, it may still be possible for girls to benefit in the long-run from paternal migration.

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[11]Thanks to David McKenzie for suggesting this possibility.

If migrants are able to stay in the U.S. for a longer period of time than is observed here, girls may be able to maximize the benefit from their mother's control over resources and ultimately raise their educational attainment, as in Antman (2012).

# 6    Conclusion

This paper has assessed the relationship between international migration and the gendered distribution of resources through the lens of household decision-making power. The summary statistics, cross-sectional, and longitudinal regressions point to a pattern of a greater share of resources for girls while the head is migrating and his spouse yields greater authority in determining the allocation of household resources. After he has returned to Mexico, however, the evidence suggests greater decision-making power for the head and a shift in the share of resources allocated toward boys.

Linking the decision-making data with the results on expenditure ratios suggests that the identity of the household member responsible for decision-making may play an important role in the underlying mechanism explaining the impact of migration on the left behind. However, it also poses more questions about why allocations should differ based on the identity of the decision-maker. One possibility is that gender-based preferences are influencing decisions over children; the simplest story being that men prefer boys and women prefer girls. Another possibility is that investments in girls versus boys and their associated returns are viewed differently by the head and his spouse. Further research should attempt to disentangle these competing hypotheses and determine whether policies may be structured to ensure equitable allocations for girls and boys regardless of who is in charge of the allocation of

resources.

Ironically, the potential policy implications may run counter to those from other studies such as Ashraf, et al. (2009) who show that allowing migrants more control over resource allocation boosts savings for Salvadorean migrants. Instead, the results presented here suggest that implementing a program that increases migrant control over resources at home may have mixed consequences for girls if they effectively benefit from a migrant's lack of control while he is away. If so, it would not be enough to suggest that there are winners and losers from migration, but more accurate to say that the distributions of gains and losses may even be unbalanced within the sending household itself.

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**Table 1: Descriptive Statistics**

Panel A: Full Sample based on non-missing expenditures in either education or clothing

|  | Mean | SD | Median |
|---|---|---|---|
| Household Size | 5.15 | 1.81 | 5.00 |
| Head's years of education | 7.15 | 4.17 | 6.00 |
| Head's age | 42.12 | 11.72 | 41.00 |
| Number of Male Household Members in School | 0.91 | 0.90 | 1.00 |
| Number of Female Household Members in School | 0.93 | 0.91 | 1.00 |
| Urban | 0.38 | 0.49 | 0.00 |
| Second Wave of Survey | 0.48 | 0.50 | 0.00 |
|  |  |  |  |
| Observations (non-missing clothing or educational exp.) | 7395 |  |  |

Panel B: Split Samples based on non-missing expenditures in this category

|  | Education | | | Children's Clothing | | |
|---|---|---|---|---|---|---|
|  | Mean | SD | Median | Mean | SD | Median |
| Male Expenditure /Total expenditure in this category | 0.52 | 0.40 | 0.50 | 0.51 | 0.41 | 0.50 |
| Total expenditure in this category | 2978 | 19924 | 1022 | 548 | 695 | 351 |
| Head alone makes decision about children in this category | 0.05 | 0.21 | 0.00 | 0.04 | 0.19 | 0.00 |
| Head involved in decision about children in this category | 0.81 | 0.39 | 0.00 | 0.49 | 0.50 | 0.00 |
| Spouse alone makes decision about children in this category | 0.10 | 0.30 | 0.00 | 0.29 | 0.45 | 0.00 |
| Spouse involved in decision about children in this category | 0.87 | 0.34 | 1.00 | 0.78 | 0.41 | 1.00 |
|  |  |  |  |  |  |  |
| Observations | 6267 |  |  | 4595 |  |  |

**Table 2: Expenditures & Decision-Making by Head's US Migration Experience**

| Sample (based on non-missing expenditures in this category) | Education | | | Children's Clothing | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | No Recent Experience | Recent Experience | Recent Experience | No Recent Experience | Recent Experience Not | Recent Experience |
| | Not Currently in US | Not Currently in US | Currently in US | Not Currently in US | Currently in US | Currently in US |
| Male Expenditure /Total expenditure in category | 0.52 | 0.56 | 0.52 | 0.51 | $0.60^c$ | $0.45^f$ |
| | 0.40 | 0.41 | 0.38 | 0.41 | 0.40 | 0.37 |
| Total expenditure in category | 3002 | 2056 | 1213 | 548 | 536 | 597 |
| | 20117 | 4740 | 1394 | 698 | 487 | 607 |
| Head alone makes decision about children in this category | 0.05 | 0.08 | $0^d$ | 0.04 | $0.10^c$ | $0^d$ |
| | 0.21 | 0.28 | 0.00 | 0.19 | 0.30 | 0.00 |
| Head involved in decision about children in this category | 0.81 | $0.89^b$ | $0.59^d$ | 0.49 | 0.49 | 0.32 |
| | 0.39 | 0.31 | 0.50 | 0.50 | 0.50 | 0.48 |
| Spouse alone makes decision about children in this category | 0.10 | $0.05^b$ | $0.41^d$ | 0.29 | 0.39 | 0.46 |
| | 0.30 | 0.21 | 0.50 | 0.45 | 0.49 | 0.51 |
| Spouse involved in decision about children in this category | 0.87 | 0.87 | $1^d$ | 0.78 | 0.41 | 0.82 |
| | 0.34 | 0.34 | 0.00 | 0.80 | 0.40 | 0.39 |
| Number of observations | 6142 | 84 | 41 | 4496 | 71 | 28 |

Standard deviation below mean

[a] (1)-(2) $p < 0.01$; [b] (1)-(2) $p < 0.05$; [c] (1)-(2) $p < 0.10$

[d] (2)-(3) $p < 0.01$; [e] (2)-(3) $p < 0.05$; [f] (2)-(3) $p < 0.10$

**Table 3: Migration and Gender Expenditure Ratios**

Panel A: Non-missing in either expenditure ratio category

| | Male Edu Exp Ratio | Male Edu Exp Ratio | Boys' Clothing Exp Ratio | Boys' Clothing Exp Ratio |
|---|---|---|---|---|
| Head: Any Recent US | 0.022 | 0.096 | 0.079 | 0.033 |
| Migration Experience | (0.039) | (0.046)** | (0.034)** | (0.069) |
| Head: Currently in US | -0.033 | -0.109 | -0.116 | -0.161 |
| | (0.058) | (0.094) | (0.063)* | (0.121) |
| Mean of Dep. Var. | 0.521 | 0.521 | 0.513 | 0.513 |
| Household Fixed Effects | NO | 4,183 | NO | 4,183 |
| Number of Observations | 6,267 | 6,267 | 4,595 | 4,595 |

Panel B: Non-missing in both expenditure ratio categories

| | Male Edu Exp Ratio | Male Edu Exp Ratio | Boys' Clothing Exp Ratio | Boys' Clothing Exp Ratio |
|---|---|---|---|---|
| Head: Any Recent US | 0.045 | 0.111 | 0.123 | 0.23 |
| Migration Experience | (0.045) | (0.066)* | (0.035)*** | (0.096)** |
| Head: Currently in US | -0.046 | -0.292 | -0.189 | -0.393 |
| | (0.078) | (0.137)** | (0.068)*** | (0.129)*** |
| Mean of Dep. Var. | 0.521 | 0.521 | 0.512 | 0.512 |
| Household Fixed Effects | NO | 2,689 | NO | 2,689 |
| Number of Observations | 3,467 | 3,467 | 3,467 | 3,467 |

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups,
dummies for survey year, dummies for survey month, urban dummy

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

**Table 4: Migration and Expenditure Totals by Gender**

Panel A: Cross-sectional Regressions, Education Sample

| | Education Exp Total | Male Edu Exp | Female Edu Exp | Kids' Clothing Exp Total | Boys' Clothing Total | Girls' Clothing Total |
|---|---|---|---|---|---|---|
| Head: Any Recent US | -476.702 | -39.06 | -437.642 | 3.88 | 61.036 | -57.157 |
| Migration Experience | (516.337) | (328.043) | (382.252) | (67.900) | (55.503) | (34.041)* |
| Head: Currently in US | -470.747 | -348.215 | -122.531 | 97.017 | 1.059 | 95.958 |
| | (682.726) | (402.135) | (462.802) | (132.254) | (85.105) | (73.892) |
| Mean of Dep. Var. | 2977.876 | 1479.512 | 1498.364 | 548.216 | 276.287 | 271.929 |
| Number of Observations | 6,267 | 6,267 | 6,267 | 4,595 | 4,595 | 4,595 |

Panel B: Household Fixed Effects Regressions, Education Sample

| | Education Exp Total | Male Edu Exp | Female Edu Exp | Kids' Clothing Exp Total | Boys' Clothing Total | Girls' Clothing Total |
|---|---|---|---|---|---|---|
| Head: Any Recent US | -678.973 | -427.667 | -251.306 | 187.162 | 101.782 | 85.38 |
| Migration Experience | (644.587) | (708.216) | (340.806) | (70.520)*** | (45.640)** | (43.271)** |
| Head: Currently in US | -211.06 | -176.948 | -34.112 | -164.021 | -114.96 | -49.06 |
| | (814.857) | (838.188) | (384.956) | (173.662) | (89.023) | (107.367) |
| Mean of Dep. Var. | 2977.876 | 1479.512 | 1498.364 | 548.216 | 276.287 | 271.929 |
| Household Fixed Effects | 4,183 | 4,183 | 4,183 | 3,481 | 3,481 | 3,481 |
| Number of Observations | 6,267 | 6,267 | 6,267 | 4,595 | 4,595 | 4,595 |

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups, dummies for survey year, dummies for survey month, urban dummy

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

**Table 5: Head's Migration and Gender Discrimination in Education**

Panel A: Cross-sectional Regressions, Education Sample

| | Males in School | Females in School | Male School Fees Ratio | Male School Supplies Ratio | Male School Transport Ratio |
|---|---|---|---|---|---|
| Head: Any Recent US Migration Experience | -0.141 | -0.198 | 0.023 | 0.025 | 0.116 |
| | (0.046)*** | (0.057)*** | (0.042) | (0.038) | (0.081) |
| Head: Currently in US | 0.083 | 0.126 | -0.013 | -0.06 | -0.181 |
| | (0.096) | (0.100) | (0.068) | (0.063) | (0.107)* |
| Mean of Dep. Var. | 1.009 | 1.034 | 0.526 | 0.520 | 0.493 |
| Number of Observations | 6,267 | 6,267 | 5,648 | 5,974 | 2,139 |

Panel B: Household Fixed Effects Regressions, Education Sample

| | Males in School | Females in School | Male School Fees Ratio | Male School Supplies Ratio | Male School Transport Ratio |
|---|---|---|---|---|---|
| Head: Any Recent US Migration Experience | 0.025 | -0.214 | 0.121 | 0.089 | -0.001 |
| | (0.076) | (0.076)*** | (0.050)** | (0.052)* | (0.114) |
| Head: Currently in US | -0.067 | -0.007 | -0.141 | -0.157 | 0.095 |
| | (0.148) | (0.126) | (0.121) | (0.098) | (0.249) |
| Mean of Dep. Var. | 1.009 | 1.034 | 0.526 | 0.520 | 0.493 |
| Household Fixed Effects | 4,183 | 4,183 | 3,898 | 4,052 | 1,724 |
| Number of Observations | 6,267 | 6,267 | 5,648 | 5,974 | 2,139 |

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups, dummies for survey year, dummies for survey month, urban dummy

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

**Table 6: Head's Household Decision-Making Responses[1] and Recent Migration Experience**

Panel A: Cross-sectional Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US Migration Experience | 0.033 | 0.061 | -0.053 | -0.018 | 0.059 | -0.013 | 0.098 | 0.003 |
| | (0.030) | (0.032)* | (0.023)** | (0.036) | (0.036)* | (0.059) | (0.059)* | (0.047) |
| Head: Currently in US | -0.082 | -0.322 | 0.386 | 0.137 | -0.102 | -0.233 | 0.127 | 0.01 |
| | (0.030)*** | (0.085)*** | (0.080)*** | (0.038)*** | (0.037)*** | (0.107)** | (0.110) | (0.086) |
| Mean of Dep. Variable | 0.048 | 0.811 | 0.099 | 0.867 | 0.039 | 0.492 | 0.291 | 0.782 |
| Observations | 6,267 | 6,267 | 6,267 | 6,267 | 4,595 | 4,595 | 4,595 | 4,595 |

Panel B: Household Fixed Effects Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US Migration Experience | 0.082 | 0.088 | -0.093 | -0.068 | -0.008 | -0.08 | 0.172 | 0.029 |
| | (0.047)* | (0.074) | (0.062) | (0.059) | (0.056) | (0.105) | (0.105) | (0.092) |
| Head: Currently in US | -0.058 | -0.333 | 0.368 | 0.078 | 0.015 | -0.318 | 0.183 | -0.114 |
| | (0.046) | (0.125)*** | (0.116)*** | (0.058) | (0.055) | (0.165)* | (0.160) | (0.147) |
| Mean of Dep. Variable | 0.048 | 0.811 | 0.099 | 0.867 | 0.039 | 0.492 | 0.291 | 0.782 |
| Household Fixed Effects | 4,183 | 4,183 | 4,183 | 4,183 | 3,481 | 3,481 | 3,481 | 3,481 |
| Observations | 6,267 | 6,267 | 6,267 | 6,267 | 4,595 | 4,595 | 4,595 | 4,595 |

[1] Reported by head, except when missing, in which case responses of spouse are substituted

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups, dummies for survey year, dummies for survey month, urban dummy

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

**Table 7: Robustness--Head's Household Decision-Making Responses[1] in Smaller Sample**

Panel A: Cross-sectional Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US Migration Experience | 0.047 | 0.085 | -0.043 | -0.009 | 0.075 | 0.075 | -0.001 | -0.023 |
| | (0.041) | (0.030)*** | (0.032) | (0.042) | (0.044)* | (0.067) | (0.062) | (0.057) |
| Head: Currently in US | -0.094 | -0.513 | 0.516 | 0.097 | -0.121 | -0.288 | 0.164 | 0.019 |
| | (0.042)** | (0.116)*** | (0.115)*** | (0.044)** | (0.045)*** | (0.126)** | (0.123) | (0.106) |
| Mean of Dep. Variable | 0.047 | 0.842 | 0.102 | 0.901 | 0.039 | 0.488 | 0.286 | 0.778 |
| Observations | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 |

Panel B: Household Fixed Effects Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US Migration Experience | 0.124 | 0.09 | -0.098 | -0.134 | 0.13 | 0.018 | 0.119 | -0.054 |
| | (0.076) | (0.064) | (0.063) | (0.077)* | (0.076)* | (0.145) | (0.139) | (0.131) |
| Head: Currently in US | -0.112 | -0.609 | 0.63 | 0.133 | -0.124 | -0.45 | 0.169 | -0.116 |
| | (0.073) | (0.152)*** | (0.151)*** | (0.075)* | (0.074)* | (0.216)** | (0.197) | (0.172) |
| Mean of Dep. Variable | 0.047 | 0.842 | 0.102 | 0.901 | 0.039 | 0.488 | 0.286 | 0.778 |
| Household Fixed Effects | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 |
| Observations | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 |

[1] Reported by head, except when missing, in which case responses of spouse are substituted

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups, dummies for survey year, dummies for survey month, urban dummy

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

**Table 8: Robustness--Spouse's Household Decision-Making Responses[1] and Head's Recent Migration**

Panel A: Cross-sectional Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US | -0.018 | 0.024 | 0.002 | 0.04 | -0.012 | 0.046 | -0.057 | -0.019 |
| Migration Experience | (0.019) | (0.049) | (0.048) | (0.028) | (0.020) | (0.067) | (0.064) | (0.058) |
| Head: Currently in US | -0.012 | -0.399 | 0.429 | 0.042 | -0.017 | -0.187 | 0.165 | 0.016 |
| | (0.020) | (0.123)*** | (0.122)*** | (0.030) | (0.020) | (0.125) | (0.124) | (0.099) |
| Mean of Dep. Variable | 0.034 | 0.807 | 0.132 | 0.909 | 0.028 | 0.424 | 0.320 | 0.771 |
| Observations | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 |

Panel B: Household Fixed Effects Regressions

| | Children's Education Decision | | | | Children's Clothing Decision | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision | Head Alone Makes Decision | Head Involved in Decision | Spouse Alone Makes Decision | Spouse Involved in Decision |
| Head: Any Recent US | -0.007 | 0.029 | -0.046 | -0.008 | 0.056 | -0.186 | 0.015 | -0.232 |
| Migration Experience | (0.014) | (0.101) | (0.096) | (0.020) | (0.058) | (0.182) | (0.160) | (0.128)* |
| Head: Currently in US | -0.074 | -0.554 | 0.598 | 0.113 | -0.128 | -0.182 | 0.267 | 0.226 |
| | (0.078) | (0.173)*** | (0.169)*** | (0.083) | (0.092) | (0.242) | (0.213) | (0.177) |
| Mean of Dep. Variable | 0.034 | 0.807 | 0.132 | 0.909 | 0.028 | 0.424 | 0.320 | 0.771 |
| Household Fixed Effects | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 | 2,689 |
| Observations | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 | 3,467 |

[1] Reported by spouse, except when missing, in which case responses of head are substituted

Robust standard errors reported

Standard errors clustered at household level in cross-sectional regressions

Clothing expenditures include value of home production, if any

Other covariates: Number of household members in gender and age-specific groups, dummies for survey year, dummies for survey month, urban dummy

* $p<0.1$; ** $p<0.05$; *** $p<0.01$