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The Interplay between Women's Earnings and the Income Distribution: A Cross-National Analysis of Latin American and Anglophone Countries

Janet C. GORNICK [1]

Berglind HOLM RAGNARSDOTTIR[2]

Leslie MCCALL[3]

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Contact at AFD: Anda DAVID (davida@afd.fr) and Barbara OLIVEIRA (oliveirab@afd.fr)

[1] Graduate Center, City University of New York

[2] Ibid.

[3] Ibid.

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The Interplay between Women's Earnings and the Income Distribution: A Cross-National Analysis of Latin American and Anglophone Countries

Janet C. Gornick, Graduate Center, City University of New York
Berglind Hólm Ragnarsdóttir, Graduate Center, City University of New York
Leslie McCall, Graduate Center, City University of New York

Abstract

Since the 1980s, an inter-disciplinary literature drawing heavily from economics and sociology has addressed the interplay between women's earnings and household income. We use data from the Luxembourg Income Study (LIS) Database to address this relationship in five middle-income and five high-income countries.

We tackle three questions: (1) What share of household income is contributed by women household members? (2) Do women's earnings increase or mitigate inter-household income inequality? (3) To what extent do women's earnings enable their households to escape income poverty and/or to attain middle-class income levels? In recent years, as men's earnings have stagnated or fallen in many countries, and as poverty reduction has become the leading goal of international organizations such as the United Nations, this question has attracted increasing attention.

In this paper, we extend current scholarship by turning our attention to this set of questions in five countries in Latin America for which we have access to detailed, high-quality microdata on the relevant demographic characteristics and income components: Brazil, Chile, Colombia, Mexico, and Peru. To help identify what uniquely characterizes this group of middle-income countries, and to benchmark their outcomes against those in other countries, we undertake a comparative analysis with five high-income Anglophone countries that have been the subject of past research: Australia, Canada, Ireland, the United Kingdom, and the United States.

Using the LIS data, the only source of comparable microdata -- that includes person-level earnings and household-level income -- in both middle-income and high-income countries, we focus on couple-headed households in which both the head and the partner of the head are aged 25-59. We find differences between the two groups of countries, as well as across three measures of the income distribution: the dispersion of household income (captured by the Gini coefficient), the share of partnered adults that lives in poverty, and the share whose household income places them in the middle class. We find that the contribution of women's earnings (and transfers) to the shape of the income distribution, and thus their potentially equalizing impact, depends on the country grouping, as well as on which measure and part of the distribution is considered.

Keywords: Gender; Earnings; Income; Inequality; Poverty; Middle Class; Comparative

JEL Classification: D1; J16; R2

Original version: English

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Introduction

Since at least the 1980s, an inter-disciplinary literature drawing heavily from economics and sociology has addressed the interplay between women's earnings and household income. Three questions have been at the core of this literature:

1) What share of household income is contributed by women household members? This question is sometimes framed more narrowly: Among households headed by heterosexual couples, what share of household earnings (or income) is contributed by female partners?

2) Do women's earnings increase or mitigate inter-household income inequality? This line of research often involves a comparative analysis of the components of inter-household income inequality, such as levels of earnings inequality among women versus among men, the correlation between partners' earnings, and women's share of total family income.

3) To what extent do women's earnings enable households to escape income poverty and/or to attain middle-class status? In recent years, as men's earnings have stagnated or fallen in many countries, and as poverty reduction has become the leading goal of international organizations such as the United Nations, this question has attracted increasing attention.

The literatures examining these questions typically do so in parallel fashion. Scholars examining the first question, for example, are primarily interested in the micro-level dynamics of intra-household inequality between male and female partners within couples (Sorensen and McLanahan 1987; Bertrand et al. 2015). By contrast, those examining the second question are mainly interested in the macro-level dynamics of income inequality, both among couples and in the broader population (Cancian et al. 1992; Larrimore 2014). An intersection of interests in the joint occurrence of gender and class inequality has characterized research on the third question, but this has often involved a more limited focus on the risks of poverty among single-mother households (e.g., Garfinkel and McLanahan 1986; Brady et al. 2017). While the dynamics involved in each of these processes is complex enough to warrant separate literatures, researchers throughout this broad field of study are motivated in a more fundamental sense by the long-term, historic shifts in both women's employment and in the aggregate income distribution that have taken place throughout the world over the past several decades.

A region where these two shifts have coincided most acutely, perhaps, is Latin America, the focus of our analysis. It is well known that (1) female labor force participation rates rose in recent decades more dramatically in Latin America than in any other region of the world (UN Report 2015), and (2) levels of income inequality are high by world standards but declined over this same period, bucking the worldwide tendency toward rising within-nation disparities (Tornarolli et al. 2018). Because past research on high-income countries has demonstrated that women's employment tends to mitigate the degree of income inequality found among households (e.g., Cancian and Reed 1999; Harkness 2013), some have suspected that the first shift (i.e., women's

rising employment) is a major driver of the second (i.e., declining income inequality) (Filgueira and Martinez Franzoni 2017). Indeed, a 2012 World Bank report found that, between 2000 and 2010, "female labor income was a critical factor behind the sharp decline in inequality experienced in Latin America and the Caribbean, accounting for 28 percent of the reduction," though men's labor income also contributed 36 percent (World Bank 2012:16). However, Latin America is still a region in which comparatively little detailed attention has been paid to the dynamics associated with the broader set of three questions raised above.

In this paper, we extend current scholarship by turning our attention to this set of questions in five countries in Latin America for which we have access to detailed, high-quality microdata on the relevant demographic characteristics and income components: Brazil, Chile, Colombia, Mexico, and Peru. To help identify what uniquely characterizes this group of middle-income countries, and to benchmark their outcomes against those in other countries, we undertake a comparative analysis with five high-income Anglophone countries that have been the subject of past research (though to varying degrees, with the most research on the United States): Australia, Canada, Ireland, the United Kingdom, and the United States. We also provide an updated assessment of these latter countries by using the most recent year of data available (at the time of analysis), and by assessing both labor and non-labor sources of income, such as transfers. This is useful in and of itself given changes in the shape of and contributors to income inequality over the past several decades, as discussed below, as well as a more general gap in the literature, in nearly all countries, on the relationship between women's own income and the position of their family in the middle class (Gornick and Jäntti 2013).

Using the Luxembourg Income Study (LIS) Database, the only source of comparable microdata on both high- and middle-income countries, and analyzing only working-age heterosexual couples, to be consistent with most prior research on the first two questions, our analysis attempts to provide an integrated framework for understanding all three of the dynamics outlined in the above questions. We examine how women's employment and transfer income contribute to the overall shape of the income distribution, including analyses of both the bottom and the middle of the distribution. This we hope will further discussion across the often-separate fields of study on gender and class inequality in both the Latin American and Anglophone clusters , although research on Latin America tends to be more integrative in this regard than research on high-income countries (Blofield and Martinez Franzoni 2015).

The paper is organized as follows. In Section II, we review the scholarly literature and present our motivations for this research in greater detail. In Section III, we describe our data source – the LIS Database – and summarize our core variables, measures, and methods. Our results are presented in Section IV, organized around the main components of our analysis: the level and structure of women's earnings and transfers as a share of household income and their effects on overall income inequality, household poverty, and the likelihood of middle-class attainment. In Section V, we synthesize our findings and main conclusions.

I. Literature

Existing scholarship on inequality in Latin America explores trends in income inequality, changes in the gender composition of the labor force, and reforms of governmental programs that redistribute income (Fernandez and Messina 2017; Lustig et al. 2013a; Lustig et al. 2013b). While the mechanisms vary across countries, there is no contesting the fact that the region as a whole has experienced a dramatic decline in income inequality. The Gini coefficient in the majority of Latin American countries fell (with statistically significant declines) during the first decade of the twenty-first century, from an average of 0.548 in the late 1990s to 0.488 in the late 2000s (Lustig et al. 2013b). Poverty levels also fell substantially during this period, with nearly 50 percent of this observed poverty-mitigation being attributed to the decline in income inequality (Lustig et al. 2013a, 2013b). Income gaps have narrowed in other parts of the distribution as well; for instance, the 50/10 ratio saw substantial declines in Brazil, both the 50/10 and 90/50 ratios decreased in equal measure in Chile, and Argentina's inequality reduction has been driven mostly by diminishing inequality in the upper two quartiles (Fernandez and Messina 2017).

At the same time, it is widely known that women's employment increased throughout Latin America (Fernandez and Messina 2017; Filgueira and Martinez Franzoni 2017; Novta and Wong 2017; Sotomayor 2009, UN Report 2015). Increases in women's earnings and labor force engagement cut across most demographic groups, including women of all ages and women in urban and rural areas alike (Filgueira and Martinez Franzoni 2017). Importantly for our purposes, Campos-Vazquez et al (2012) offer evidence from Mexico that women's growing employment was a mechanism of inequality-mitigation among families. Female labor force participation increased 11 percent between 1996 and 2010, with the largest contributions made by low-skilled, married women and married women from poor families. Indeed, married women's share of family income was much larger in the lowest quartile (0.41) than in the highest (0.13).[4] Similarly, in Sotomayor's (2009) study of Brazil, increases in female earnings between 1977 and 2007 were most instrumental in reducing inequality in low-income households, and thus were strongly poverty-mitigating. More generally, a 2012 World Bank Report found that changes in female labor earnings were nearly twice as influential as changes in male labor earnings in diminishing poverty across Latin America and the Caribbean. However, the rise in female labor force participation rates in Latin America is slowing, despite the region still having among the lowest rates in the world (Gasparini and Mariana 2017).

Building on these studies, we explore the role of women's earnings in keeping families out of poverty and reducing overall income inequality, as measured by the Gini coefficient. Yet we also widen the lens to include the role of women's earnings in keeping families in the middle class, and examine in greater detail women's employment and earnings, and their contribution to couples' income, to better understand how these factors shape the income distribution in multiple ways. More formally, the factors that have been examined in prior research on the relationship between women's earnings and income inequality include factors such as the degree

[4] On average, the researchers found that in 2010 married females' income share was 0.23, while married males' income share was 0.64.

of earnings inequality among women and the extent to which spousal earnings are correlated (in addition to female labor force participation rates and wives' share of household income). And, analytically, the question that researchers pose is not whether women's rising employment and earnings contributed to a decline in income inequality, as in Latin America, but whether and exactly how women's earnings augmented or mitigated the rise in inequality that occurred in most high-income countries.[5] Much of this work has examined high-income countries only, and in particular the United States (e.g., Cancian and Reed 1999; Western et al. 2008; Larrimore 2014), although more recent research has branched out to include other rich countries (Harkness 2013; Kollmeyer 2013; Grotti and Sherer 2016).

This body of literature has generally reached a consensus, irrespective of region, that women's increasing employment has mitigated the rise in income inequality, though such changes (in women's employment) have not been powerful enough to curb inequality's rise entirely. Analogous conclusions have been drawn based on variation in *levels* of female employment and income inequality across countries. For instance, drawing on LIS data for Denmark, Germany, Italy, the United Kingdom, and the United States from the mid-1980s to the mid-2000s, Grotti and Scherer (2016) demonstrate that high rates of female employment attenuate levels of economic inequality across households. Similarly, Gonzalez et al (2015) find that, in the OECD countries, a higher proportion of households with women in the workforce (including full and part-time work) is associated with lower income inequality.

The relationship between income inequality on the one hand, and spousal earnings correlations and earnings inequality among women on the other hand, is more contested. While there has been widespread concern that assortative mating could increase inequalities, Grotti and Scherer (2016) find that spousal earnings correlations were of limited consequence from the 1990s onward (in the five countries they examine, noted above). Larrimore (2014) adds nuance to this discussion by identifying variation in trends in the United States across decades. During the 1980s, his analysis found that rising spousal earnings correlations contributed to an increase in income inequality (confirming prior research), whereas falling correlations in the 2000s actually reduced inequality.

Consistent with the earlier period in the United States, Nieuwenhuis et al (2016a) found that, in 18 OECD countries between 1973 and 2013, women's rising earnings contributed to reducing inequality in household earnings (in couple-headed households). During that period, the overall pattern was that women's share of household earnings grew, spouses' earnings became more strongly and positively correlated, and earnings inequality among women declined. Inequality in household earnings increased due to the rising correlation between spouses' earnings, but that increase was more than offset by the decline of inequality within women's earnings. These authors conclude that, had women's earnings remained unchanged since the 1970s and 1980s,

[5] The United States has had particularly high levels of inequality growth in the past decades, whereas the increase was more modest and uneven in some countries, such as Switzerland, the Netherlands, and France (Kollmeyer 2013).

inequality in household-level earnings would have been higher in 2010 than it was in all of their study countries.

Given an emerging body of empirical research on income inequality that plays down the role of spousal earnings associations, our analyses instead highlight the impact of earnings inequality among women on a country's level of overall household income inequality. Less attention has been devoted to this dynamic, yet scholars have long been aware of the potential for women's earnings growth to eventually pivot from being equalizing to disequalizing, on net (Reed and Cancian 2001; McCall 2008). The equalizing phase occurs as zero-earning women enter the labor force, particularly at the bottom and middle of the distribution. By contrast, the disequalizing phase is assumed to occur as employment levels reach a plateau and disparities continue to widen among employed women. Indeed, recent research on the United States indicates that changes in earnings inequality among women had a major disequalizing impact on changes in the income distribution during the 2000s, while at the same time female employment ceased having an equalizing impact (Larrimore 2014: Table 1). Although we do not expect this pattern to be generalized across all countries in our study, we nevertheless think it will be useful to establish a benchmark portrait of how earnings inequality among women contributes to overall levels of income inequality throughout the clusters we examine.

Finally, this brings us to the theoretical motivation for our selection of countries, as well as our expectations regarding comparisons across these countries. We emphasize two main points. First, the Anglophone countries are a useful high-income comparison group for the Latin American countries because of the Anglophone cluster's (a) higher levels of inequality, (b) weaker welfare state protections, and (c) lower women's labor force participation, relative to many other high-income countries. These characteristics make the Anglophone countries *more similar* to the Latin American countries than are several other high-income countries (and clusters of high-income countries).[6] Second, we nevertheless expect to find substantial differences between our two clusters of countries on each of these factors, due to the well-known institutional and historical differences between them, and between high-income and middle-income countries more generally (even though transfers have increased significantly in the Latin American region over the past few decades). In short, we expect higher levels of income inequality in Latin America than in the Anglophone countries, and lower female labor force participation (and employment) rates. Consequently, our focus is not on underscoring *those* differences so much as identifying the

[6] With respect to gendered labor force participation ratios (i.e., women's divided by men's), the Anglophone countries are ranked low (indicating less gender equality) relative to other high-income countries. Gender equality in labor force participation in the Anglophone countries is similar to that of Southern European countries, but below levels reported in Continental European countries, and especially lower than in Eastern European and Nordic countries. Still, Latin American countries' gendered participation ratios are substantially lower than those seen in all high-income countries, including the Anglophone countries. As for total social spending, similarly, the Anglophone countries spend less, on average, than do these other four clusters of high-income countries. Latin American levels of social spending are, however, considerably lower (source: OECD online data, labor force participation rates and social spending; accessed April 2019).

exact roles each of these factors play in shaping the distribution of income in Latin America, and benchmarking these patterns against the better-known and more widely-studied Anglophone countries.

II. Data and Methods

Data

Our data source for this study is the Luxembourg Income Study (LIS) Database, a cross-national database containing repeated cross-sections of microdata – available at 3-5 year intervals – from approximately 50 high- and middle-income countries. The LIS microdata are organized into country-specific datasets, mainly based on data from household surveys, with some components included (by the data providers) from administrative data. The LIS data team, located in Luxembourg, harmonizes the LIS datasets ex post, i.e., recoding each variable into a common template in order to maximize over-time and cross-country comparability. The harmonized microdata are made available to registered researchers via a remote-execution system.

This study utilizes ten datasets from LIS' Wave 8, centered on the year 2010 – Brazil, Chile, Colombia, Mexico, Peru, Australia, Canada, Ireland, the United Kingdom and the United States. The income reference year is 2010, with two exceptions: the Chilean data refer to 2009 and the Brazilian data to 2011. The names of the original surveys are reported in Table 1:

Table 1 – Original Data Sources

Country	Year	Survey
Brazil	2011	National Household Sample Survey (PNAD)
Chile	2009	National Socio-Economic Characterization Survey (CASEN)
Colombia	2010	Great Integrated Household Survey (GEIH)
Mexico	2010	Household Income and Expenditure Survey (ENIGH)
Peru	2010	National Household Survey (ENAHO)
Australia	2010	Survey of Income and Housing (SIH) and Household Expenditure Survey (HES)
Canada	2010	Survey of Labour and Income Dynamics (SLID)
Ireland	2010	Survey on Income and Living Conditions (SILC)
UK	2010	Family Resources Survey (FRS)
US	2010	Current Population Survey (CPS) - Annual Social and Economic Supplement (ASEC)

Source: Luxembourg Income Study (LIS) Database

Selected Households

Our within-country samples are limited to households headed by a heterosexual married or cohabiting couple; throughout this paper, we refer to these persons as "coupled". We selected only households in which both the head and the partner of the head are aged 25-59 (inclusive);[7] for ease of narration, we refer to both of these persons as a household's "heads". (Note that, within each country, we constructed this subgroup so that, in the unweighted data, the number of male and female heads are always equal). These households may also contain other persons of any age. On average, across our study countries, about three-quarters of all adults in this age range reside in the households that we select for analysis (from 69 percent in Colombia to 82 percent in Peru and Mexico).

Throughout the study, following common practice, we drop the small share of households reporting exactly zero disposable household income, based on the assumption that these zeros are likely to be non-valid values. In households with negative disposable household income in the reference year, we convert those negative income values to zero, and retain those households. Negative incomes might result, in a given year, from business income losses or from one-off tax burdens that exceed total household pre-tax income. We apply that bottom-coding (converting negative values to zeros) to individual income sources as well.

Variables

Throughout our analysis, we focus on four components of household income: the male head's earnings, the male head's transfers, the female head's earnings, and the female head's transfers. These earnings are from both waged employment and self-employment, and these transfers refer to those that can be allocated to individuals.

When we refer to the income package of the entire household, we include multiple sources of income. First, we include the four components described above – the two household heads' individual-level earnings and transfers. We then fill out household income by adding earnings contributed by all other household members – plus, for the household as a whole, all capital income, and all transfers (private and public) that cannot be assigned to the two heads. Finally, we net out direct taxes paid by households (including income taxes and social contributions) to arrive at the widely-used income aggregate – disposable household income (DHI), often referred to as post-tax-and-post-transfer income.[8] This is the definition of household income that is the

[7] International organizations (including the OECD, ILO, and the UN) define "working age" using a variety of cut-off points – most often 25-54 or 25-59. We chose the latter to reflect the rising effective retirement age that has been reported across many high- and middle-income countries in recent years.

[8] Although LIS provides DHI as a household-level aggregate variable, we create our own DHI (for each household) by summing our income components and subtracting reported taxes; we do this so that our components will add to *exactly* DHI. "Our" DHI and LIS' DHI are nearly identical; our constructed DHI has a mean value that equals or exceed 99 percent of mean LIS' DHI in all ten cases.

basis of our analyses of the effect of women's earnings on income, poverty, and middle-class attainment.

In eight of our included countries, earnings and transfer income are pre-tax; in two of our countries, Chile and Mexico, these income components are reported post-tax. This discrepancy introduces some noise into our study. When we calculate individual components' contributions to household income, our numerators vary – capturing pre-tax income in eight countries but post-tax income in these two cases. Despite this, we decided to include these two countries due to their prominence and size. External data (from OECD) indicate that households in these two countries pay, on average, 7-8 percent of their household income in direct taxes, so the distortion (compared to the other eight study countries) is minimal. In addition, taxation levels are even lower for lower-income households, so, in some of our analyses – e.g., those focused on poverty – differences between pre- and post-tax income are likely to be very small.

When we assess labor market outcomes, in addition to assessing the frequency of positive earnings during the earnings reference period (typically a year, sometimes a period of months), we also report categorical employment rates (usually the week before the interview). In all ten datasets, employment rates are based on a LIS variable called "current labor force status (CLFS)". Employment is coded as "yes" for those persons who "carried out any employment (any type or any extent), even if just one occasional hour of paid work or irregular unpaid family work, and even if absent from work (LIS documentation online)." This definition follows as closely as possible the ILO definition of "currently employed". (Note that unpaid family work does not refer to domestic labor; it refers to uncompensated work – e.g., in a family business or in farming – that supports production for the market).

Adjusting for Household Size and Weighting

All income values – regardless of the source – are adjusted for household size, using the standard "square root equivalence" scale. Adjusted income is calculated as unadjusted income divided by the square root of household size. This method – raising the household size to .5 – represents the mid-point between assuming no economies of scale (parameter set at one) and perfect economies of scale (parameter set at zero).

LIS allows researchers to select a weighting scheme suitable for specific analyses. Throughout our analyses, all values are weighted at the person level. So all results refer to persons. For example, in our analyses of poverty and middle-class status, our results refer to the percentage of persons who live in households at these various levels of economic wellbeing; they do not refer to the percentage of households that are poor or middle class.

Measures. In the section on inequality, we use the standard Gini coefficient, which runs from zero (no inequality) to one (total inequality).

In our analyses of poverty, we define households as poor if their disposable household income (DHI) falls below a percentage – 40, 50 or 60 percent – of median equivalized DHI in their own country.[9]

In the section on middle-class attainment, we define the middle-class as those households with disposable household income falling in the middle of the income distribution, using three definitions – 75-125 percent, 50-150 percent, and 50-200 percent of each country's median equivalized DHI.[10]

III. Results

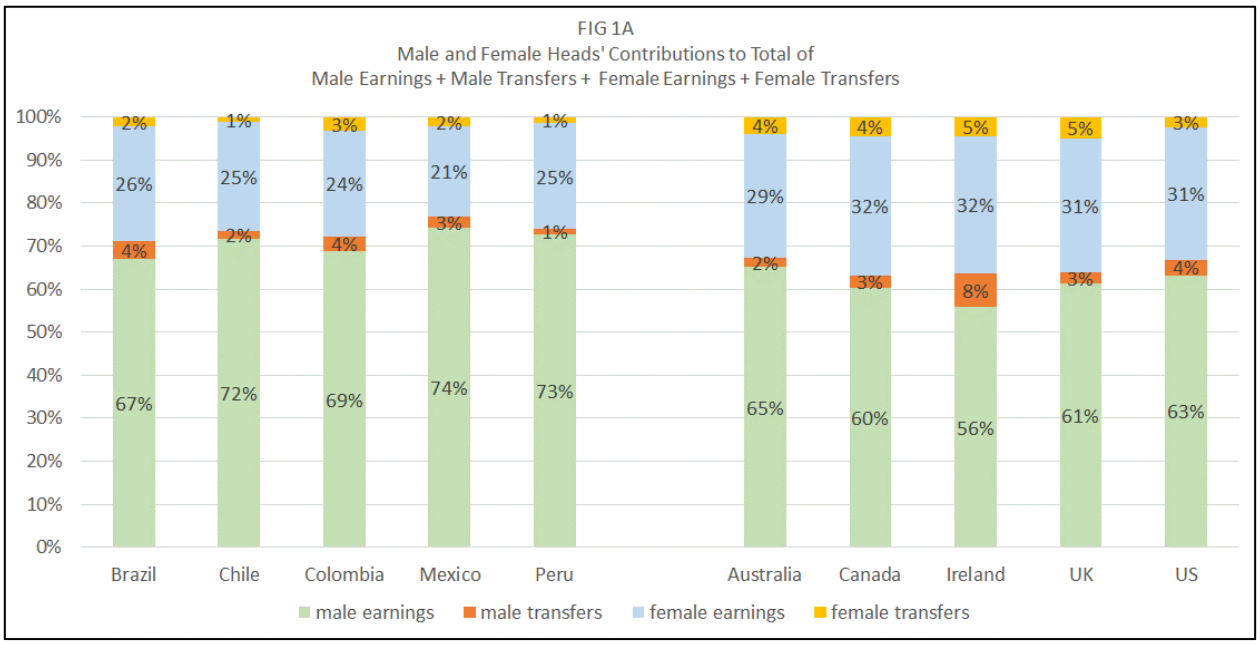
Women's and Men's Share of Household Income

We begin by assessing the contributions of women's and men's earnings and transfers to household income packages, with household income defined as the sum of only these four components (Figure 1A). In short, our main concern in this section and the next is to understand how much women's own resources contribute to household incomes in Latin American countries and how this compares to their contributions in Anglophone countries. (We also carried out this analysis using a broader definition of household income, one that includes labor, capital, and transfer income contributed by all household members, as well as income allocated to the household as a whole. Those results are provided in Appendix Table 1A.)

[9] In this paper, we report results for only the 50 percent threshold. Results based on the other thresholds are available in Appendix Table 4.

[10] In this paper, we report results for only the 50-150 percent band. Results based on the other thresholds are available in Appendix Table 5.

Figure 1A



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 1A.

On average, male heads' cash contributions exceed those of their female partners, and we see somewhat larger gender differentials in the Latin American countries. Men's contributions in the Anglophone countries (for earnings, 56-65 percent) are lower than those of their male counterparts in Latin America (67-74 percent). Conversely, women's contributions in the Latin American countries (for earnings, 21-26 percent) are lower than their Anglophone counterparts (29-32 percent). The ranges in Latin America versus the Anglophone countries are not overlapping, although we have not constructed confidence intervals around these point estimates.[11]

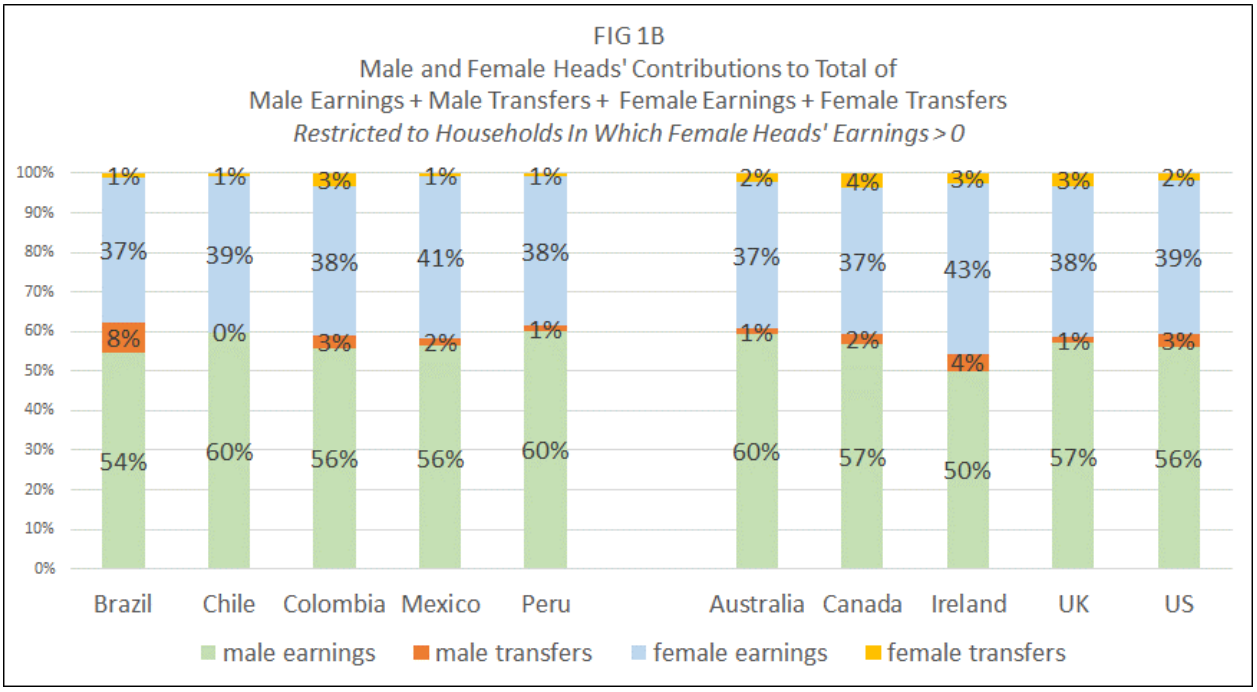
Although the results regarding transfers (allocated to male and female heads, individually) are more mixed, we do see some differences between the two clusters. Contributions from these individualized transfers are lower, overall, in Latin America (1-4 percent for men, and 1-3 percent for women) than in the Anglophone cases (2-8 percent for men, and 3-5 percent for women),

[11] Here we note – as we did with gendered labor force outcomes and social spending – that although the Latin American and Anglophone countries' ranges (vis-à-vis women's income shares) do not overlap, it is also the case that the Anglophone countries' shares fall well below those in some other high-income clusters. Nieuwenhuis et al (2018: 15-16) calculate women's income shares as a percentage of couples' income. They find, e.g., that the entire range of women's shares in Latin American countries falls below the range reported in Anglophone countries; at the same time, the range seen in the Anglophone countries does not overlap the (higher) range reported in the Nordic countries. The Nieuwenhuis et al study uses the same data as our does – the LIS data – but the age group, the study years, and the income definitions differ. Their Anglophone cases are the same as ours; the Latin American cases referenced here are the same as ours, minus Chile.

with overlapping ranges. In addition, the general pattern in Latin America is that male heads' transfers exceed female heads', whereas the picture is more varied among the Anglophone cases.

What drives the gender gaps in earnings contributions to household income reported in Figure 1A? Clearly, two different factors contribute: gender gaps in the likelihood of having any earnings, and gender gaps in the level of earnings among those with positive earnings. To separate these, we construct Figure 1A again, this time limited to households in which women have positive (non-zero) earnings (see Figure 1B).

Figure 1B



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 1B.

A cursory comparison of Figures 1A and 1B reveals that, when we restrict our sample to households in which women have positive earnings, netting out variation in employment rates, women's economic contributions in the two sets of countries largely converge. In the Latin American cases, women's earnings constitute 37-41 percent of household income, compared with 37-42 in the Anglophone countries. The implication, then, is that the finding of female heads' contributions being lower in Latin America than in the Anglophone countries, as reported in Figure 1A, is driven more by differences between the clusters in the prevalence of women's earnings than by differences in earnings levels among those working for pay. We assess this possibility more directly in the next section.

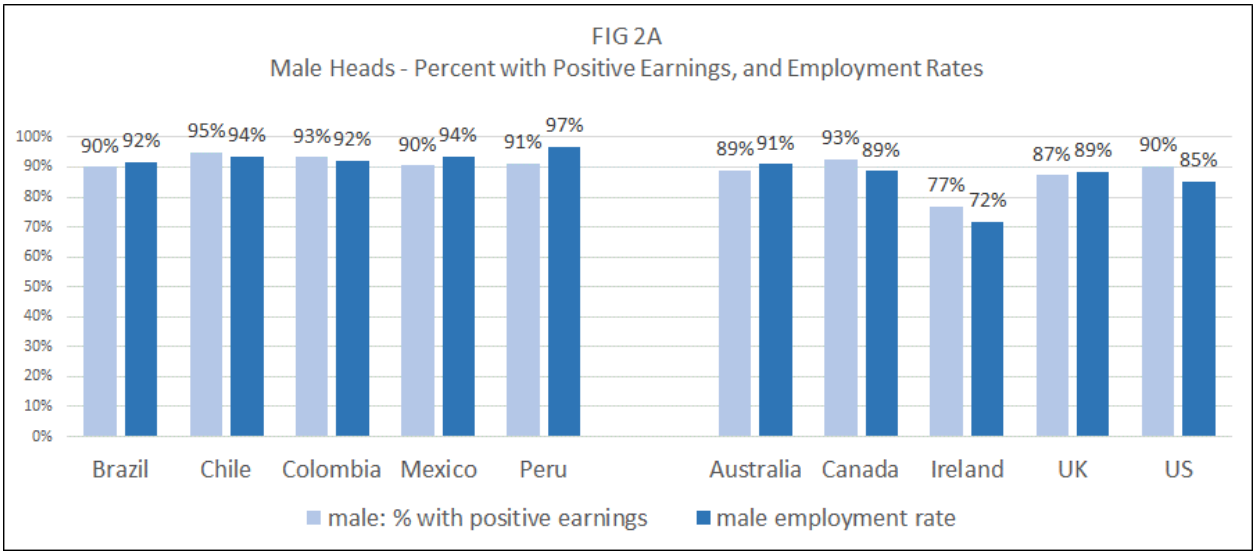
Women's and Men's Employment and Paid Labor

We assess levels of employment – for men and women separately – using two different indicators of labor force engagement: (1) the percentage of persons who report positive earnings during the earnings reference period, and (2) categorical employment rates ("at present").

Our expectation is that these two indicators would rank similarly, across countries. That said, the two indicators could differ for multiple reasons. On the one hand, we would expect the percentage of persons with positive earnings to be *higher* than the employment rate (yes/no), because the former has a longer reference period than the latter. On the other hand, we would expect the percentage of persons with positive earnings to be *lower* than the employment rate, in cases where the employed category includes a substantial share of "unpaid family workers". Finally, the two might diverge, in either direction, due to a shift in labor market conditions between the two reference periods.

Our results reveal several patterns. First, among men, in both clusters, the percentage who report positive earnings is high and fairly uniform; in addition, the ten countries are evenly divided in terms of which indicator is larger (see Figure 2A). Across nine countries, 87-95 percent of men report positive earnings; in Ireland – which was hit especially hard during the Great Recession – the figure is 77 percent. Men's employment rates are fairly similar, ranging from 85 to 97 percent – again with the exception of Ireland, with a substantially lower rate of 72 percent. (In six countries, the two levels are within 3 percentage points of one another; in the other four, they diverge by 4-6 percentage points.)

Figure 2A



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 2.

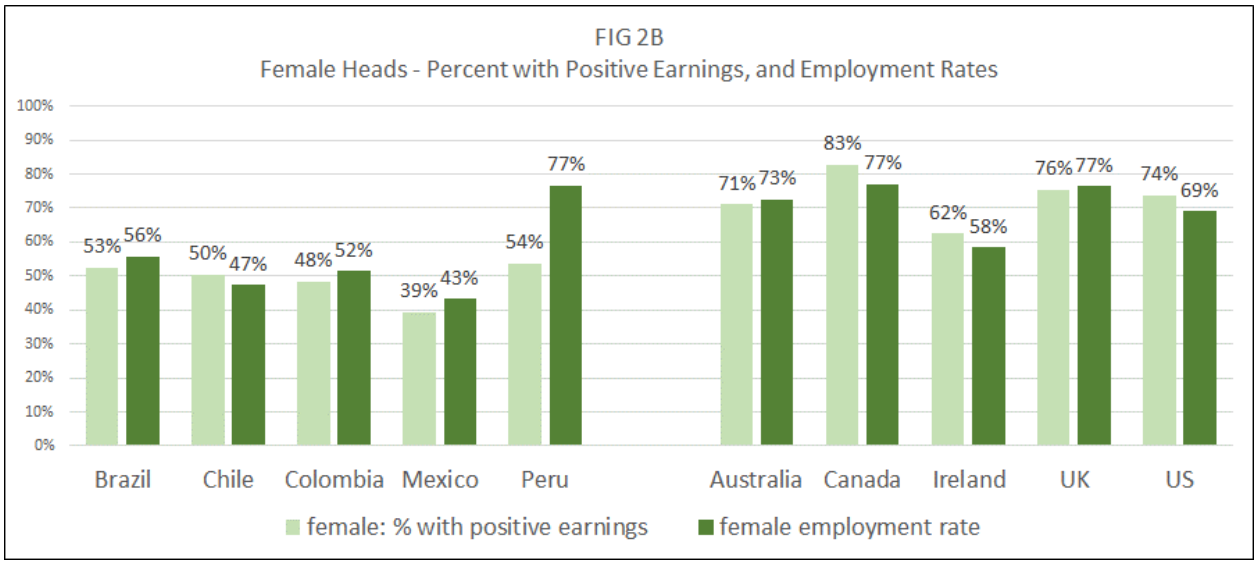
Second, the results for women are substantially different (see Figure 2B). Most notably, there is more cross-national variation, including within each cluster, and the two clusters as a whole differ more than would have been anticipated from the results found in the prior section. For instance, recall that, in Figure 1A, the point estimates of women's earnings as a share of total household

earnings and transfers were relatively similar within clusters, and not far apart from one another between clusters (21-26 percent in Latin American and 29-32 percent in Anglophone countries, among all women with and without earners).

In contrast, among the Latin American countries, the percentage of women with positive earnings varies from a low of 39 percent in Mexico to a high of 54 percent in Peru. Among Anglophone countries, the range is from a low of 62 percent in Ireland to a high of 83 percent in Canada. Employment rates show a similar pattern: 43-56 percent in the Latin American countries (with the exception of Peru) and 58-77 in the Anglophone cases. (Similar to the men, within five countries, the two measures are within 3 percentage points of one another; in four countries, they diverge by 4-6 percentage points. Again, Peru is an outlier, with a 23 percentage point differential between the two indicators.)

This discrepancy between women's economic contributions (see Figures 1A and 1B) and their rates of engagement in paid work (see Figure 2B) – that is, less variation in earnings shares than in our employment indicators – suggests that, in the Latin American countries with lower employment (e.g., Mexico), the percentage of women earning high hourly wages may be greater and/or women may work longer annual hours. In the Anglophone cluster, Ireland may exhibit this pattern as well. That is, the distribution of women's earnings appears to be a factor that ought to be considered alongside, or in interaction with, the female employment rate, which together may vary importantly within as well as between clusters.

Figure 2B

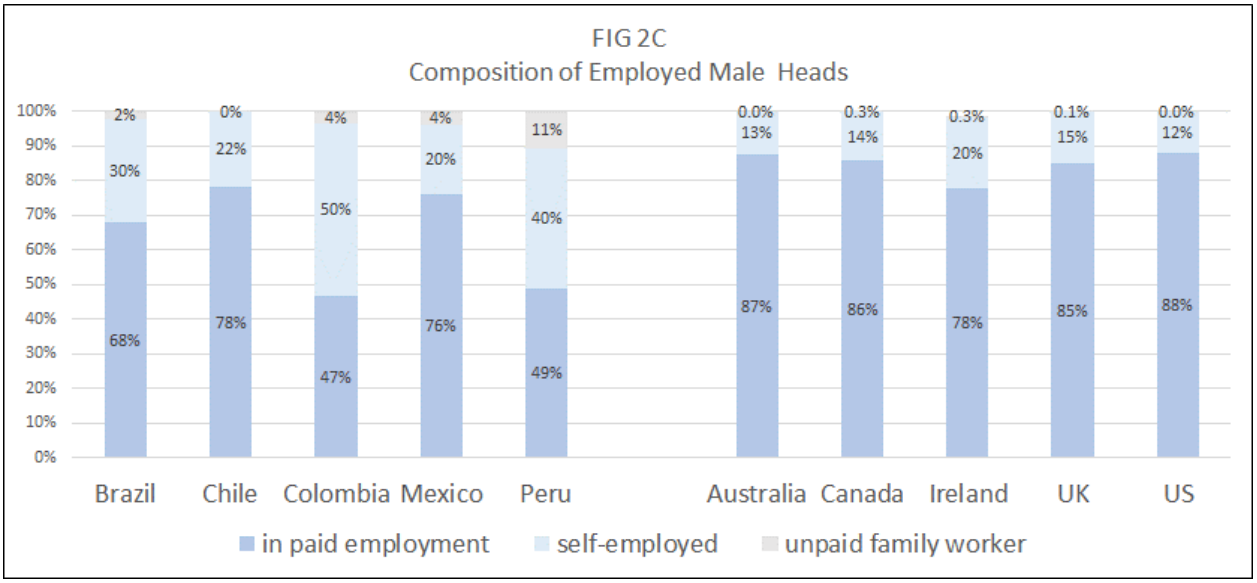


Source: Luxembourg Income Study (LIS) Database. See Appendix Table 2.

Third, the Peruvian case brings into relief an important and well known element of the cross-national story of men's and women's contributions to household earnings/income: informal employment relations. We noted the substantial differentials between the rates of positive earnings and employment in Peru – 6 percentage points for men, and a remarkable 23 percentage

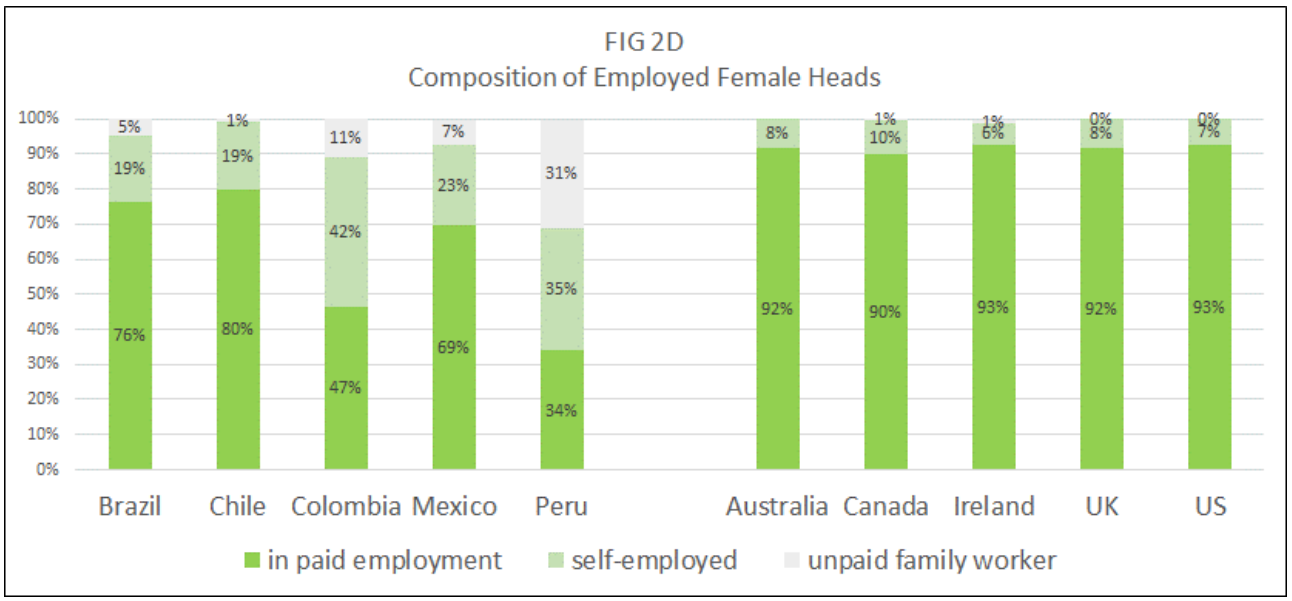
points for women. We looked further, using a LIS variable that disaggregates employment status into finer categories, which revealed one major explanation. As noted in the methods section, following ILO practice, employment is coded as "yes" for persons working as unpaid family workers, and, in Peru, the share of employed persons in that category (employed but with no earnings) is high among men and women – the highest among the ten countries. In Peru, fully 11 percent of men, and 31 percent of women are unpaid family workers (see Figures 2C and 2D).

Figure 2C



Source: Luxembourg Income Study (LIS) Database.

Figure 2D



Source: Luxembourg Income Study (LIS) Database.

Fourth, and related, the composition of employed persons varies by gender, varies among Latin American countries, and varies between these countries and their Anglophone counterparts. In all countries, women are more likely than men to be unpaid family workers, but rates of unpaid employment, for men and women, are higher in the Latin American cases. In the Anglophone countries, unpaid family workers account for fewer than 1 percent of employed men and women.[12] Also evident, of course, is that self-employment, as another indicator of informality[13], is substantially more common in these Latin American countries, compared to the Anglophone cases.

Altogether, then, these more detailed analyses reveal a considerable degree of heterogeneity among Latin American countries in the (absolute) level and especially the structure of women's employment and earnings. For instance, among coupled women, there is far more paid employment in Brazil, Chile, and Mexico than in Colombia and Peru. However, this cross-national pattern is replicated among men, which may explain why female shares of household earnings and transfers across the Latin American countries as a group are fairly comparable at roughly one-fifth to one-quarter of the total (as shown in Figure 1A). As noted above, it may be that the percentage of women earning high hourly wages may be greater and/or women may work longer annual hours in some countries in Latin America. Thus, alhough their activity rates are substantially lower, their shares of household income are less so (compared to the Anglophone countries). We now turn to whether and how these aspects of women's employment, and their variation within and between clusters, relate to the distribution of income.

Inequality

In this section, we examine levels of inequality in both disposable household income and heads' earnings, though our ultimate concern is with how the latter affects the former. We begin by assessing inequality among male and female heads, including individuals both with and without earnings during the earnings reference period (see Figure 3A). Our results reveal four key findings.

First, consistent with past studies of income inequality across clusters, earnings inequality among coupled men is higher in the Latin American cases (.50-.58) than in the Anglophone countries (.42-.48), with the sole exception of Ireland (.55), which falls within the Latin American range. Second, earnings inequality among coupled women is also substantially higher in the Latin American countries (.76-.84) than among their Anglophone counterparts (.51-.67). Third, in all ten cases, earnings inequality among women is substantially higher than among men: .18-.27 Gini points higher in the Latin American cases and .09-.14 higher in these Anglophone countries. This latter finding in both clusters is likely to be the consequence of including a non-trivial portion of

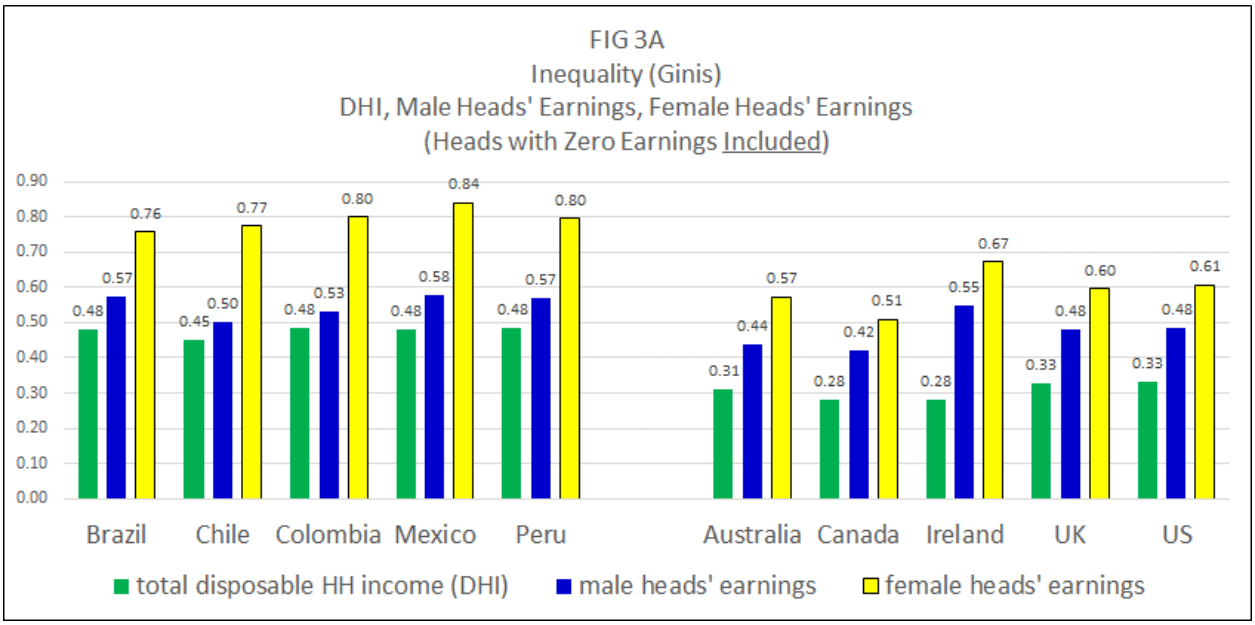
[12] The category "unpaid family workers" is not available in the Australian data.

[13] Informality is defined in a variety of ways, across countries and supranational organizations. Both unpaid family work and self-employment often contains features of informality; i.e., they frequently operate outside public systems of regulation and social protection. However, these two forms of paid work are not universally classified as informal.

zero-earning women at the bottom of the distribution, which mechanically increases measures of dispersion.

Fourth, in all ten countries, earnings inequality among male heads – who provide, on average, two-thirds (Anglophone countries) and three-quarters (Latin American countries) of couples' combined earnings and transfers (Figure 1A) – is greater than income inequality across households. This result is widely interpreted in the literature as indicating that female heads' earnings exert an equalizing effect on inter-household income distributions, despite the significant degree of earnings inequality among them in all countries. (Note that this conclusion, that women's earnings are equalizing, is based on a counter-factual scenario in which all women have zero earnings.) A likely explanation of this result (i.e., that women's earnings are equalizing overall despite a high degree of within-group dispersion) is a pattern in which non-earning or low-earning female heads are relatively likely to be partnered with high-earning men (Cancian and Reed 1999).[14] Also, women's earnings simply add less weight to the overall income distribution than do men's earnings, and therefore inequality among women has less weight. However, no analysis of this sort – teasing out the relative weight of these components – has been conducted on middle-income countries or on Latin America specifically (to the best of our knowledge).

Figure 3A



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 3A.

[14] This results in low or even negative correlations between "his" and "her" earnings, within households, which we find, consistent with prior literature, within these Anglophone countries; correlations range from .11 to .15 (results not shown). Interestingly, spousal earnings correlations are considerably higher in Latin America, ranging from .17 to .41. In subsequent work, we will examine these differences in greater detail. We will also add a fourth indicator to Figures 3A and 3B: inequality in the sum of male and female heads' earnings. That will allow a more direct look at the relation among three key indicators: "his" earnings, "her" earnings, and "their" earnings.

However, before we present our preliminary analysis in this regard, we first repeat the above figure but include only male heads with positive earnings, and female heads with positive earnings, in the calculations of men's and women's earnings inequality (see Figure 3B, where DHI inequality is the same as in Figure 3A). With the zeros removed, the levels of earnings inequality change markedly. Not surprisingly, earnings inequality among men, and especially among women, declines in all countries – by .04-.13 and .08-.26 points, respectively. Despite the larger declines among women, earnings inequality among female heads remains higher than among male heads' everywhere, except in Brazil. In the other four Latin American countries, women's earnings are more unequal than men's (by .05-.09 points); in the five Anglophone countries, women's earnings remain more unequal than men's, but the gender differences are now much smaller (.02-.04. points).

Finally, with respect to Figure 3B, in all ten countries, earnings inequality among male heads remains greater than income inequality across households – again, a result widely interpreted as indicating that female heads' earnings have, on net, an equalizing effect on income distributions across households. Given that only non-zero earners are included in this empirical analysis, the result that female heads' earnings are equalizing suggests a general pattern in which women's earnings are pulling up the bottom of the household income distribution more than they are raising the top, even among households in which all women are contributing earnings.

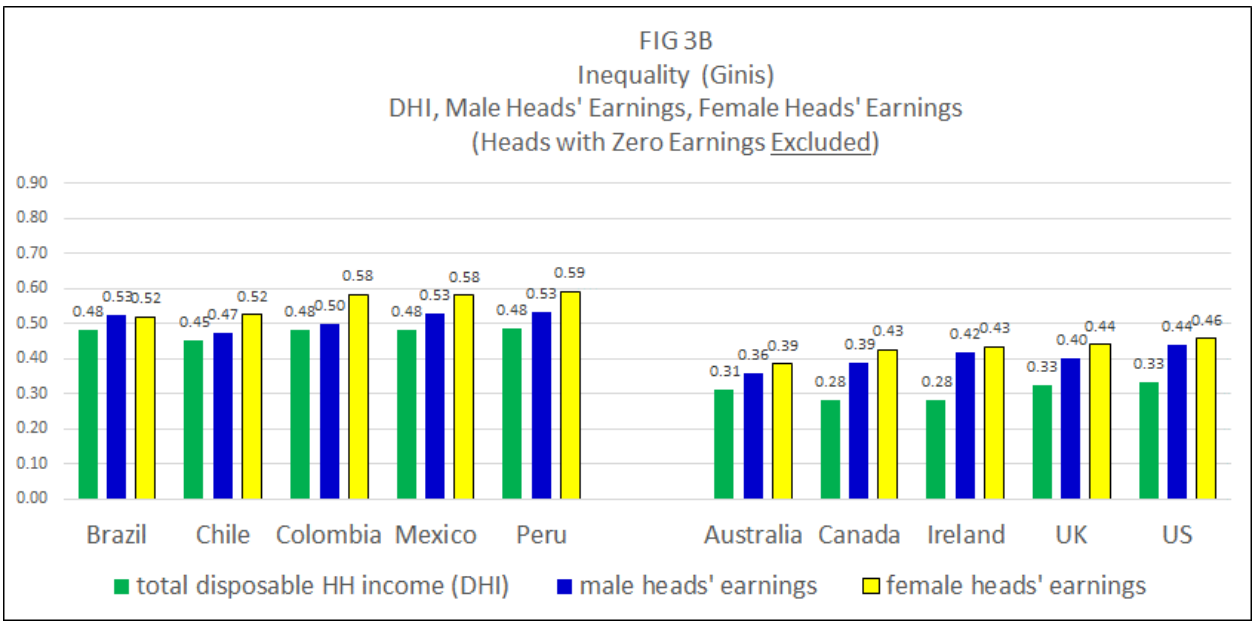
In our last figure of this section, we assess this possibility by examining the counterfactual of what would happen if all women became zero-earners (see Figure 3C). To do this, we calculate inequality levels based on total household income; we then recalculate those levels removing female heads' earnings, and again removing female heads' earnings and transfers. It is important to emphasize that this exercise – analogous to the widespread practice of comparing inequality (or poverty) pre- versus post- taxes and transfers – is an accounting exercise. It does not incorporate the behavioral and/or demographic responses that might occur if female heads' income sources were really terminated.

Surprisingly, in all Latin American countries, we find very little change in levels of inequality in disposable household income when removing either women's earnings or their transfers from total post-tax-post-transfer disposable household income. The pattern found in the literature discussed above, in which women's earnings are clearly equalizing (because household income inequality is higher when women's earnings are zeroed out), is found in the Anglophone countries in Figure 3C, but not in these Latin American countries (except for in Peru, where the difference is a small .01 Gini point)[15]. This may further lend further support to our hypothesis that women's hourly wages in Latin American countries fall on the high end (and/or their annual

[15] We conducted one sensitivity analysis to determine whether the Gini coefficient might be missing the equalizing impact of women's earnings or transfers at the bottom of the distributions in Latin America. We calculated the generalized entropy index GE(0) – the mean log deviation – which is especially sensitive to the bottom of the distribution, and we used that as a base to assess the effects of women's contributions to household income. We did find a somewhat larger equalizing effect of women's earnings and transfers in Peru, Chile, and Mexico, than what we found using the Gini, especially as a result of women's transfers; however, the effects were still smaller than in the Anglophone countries.

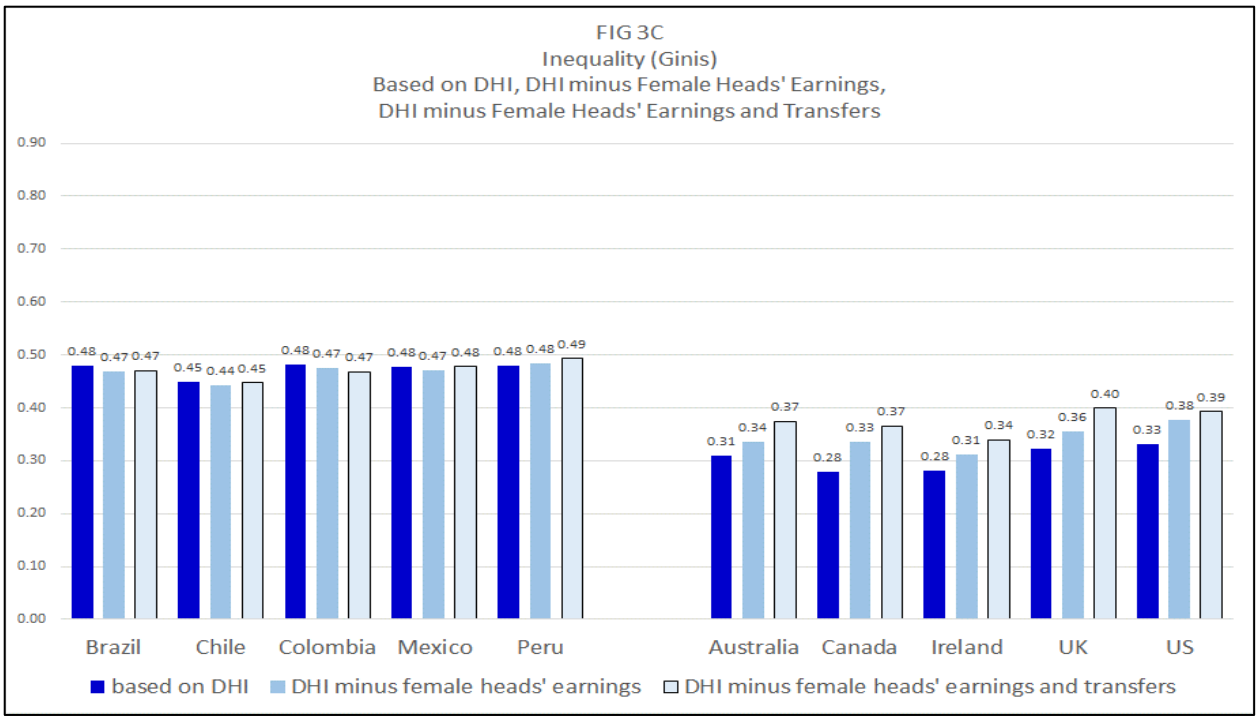
work hours are longer) than in the Anglophone countries. We return to this potentially anomalous finding in the next section when we assess the contribution of women's own income to other measures of the shape of the income distribution, specifically, the rate of poverty and the probability of middle-class attainment.

Figure 3B



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 3B.

Figure 3C



Source: Luxembourg Income Study (LIS) Database.

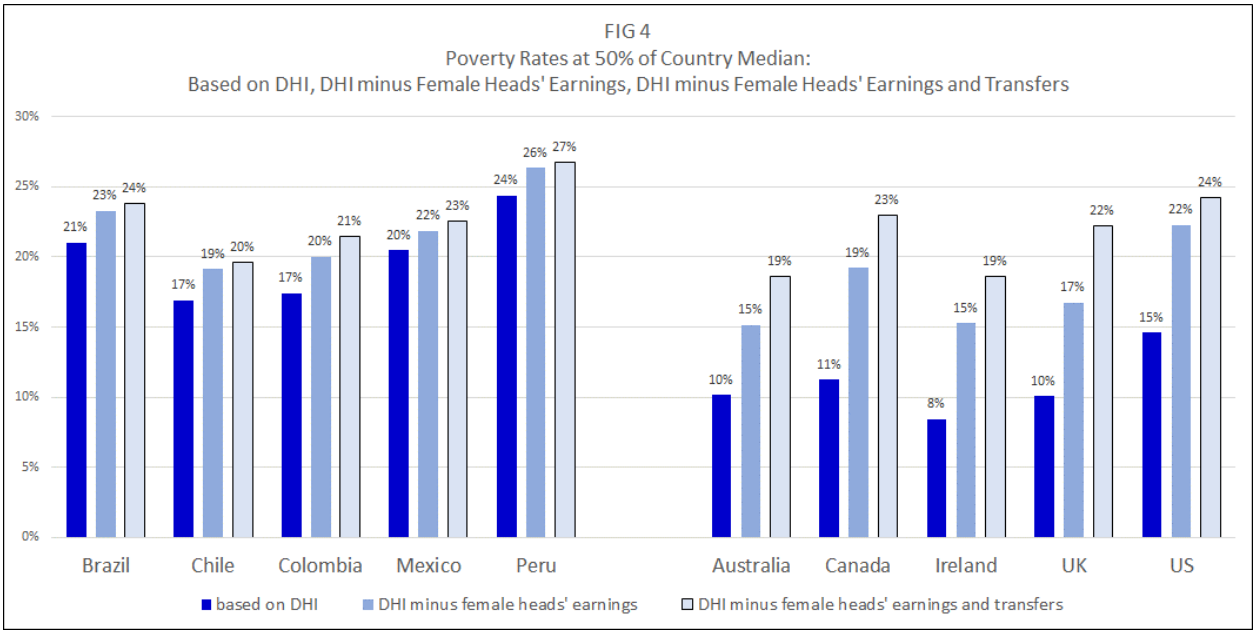
Poverty

In our final two empirical sections, we assess the extent to which female heads' earnings and their individualized transfers are protecting their households from income poverty (this section) and enabling them to be situated into the "middle class" (the next section). In both analyses, we calculate the percentage of persons in poverty (or in the "middle class") based on total household income; we then recalculate those rates removing female heads' earnings, and again removing female heads' earnings and transfers (parallel to our approach in Figure 3C).

We first report relative income poverty rates across these ten countries, based on the commonly-used poverty threshold of 50 percent of each country's median disposable household income (see Figure 4); all incomes are adjusted for household size. Our first finding, well-known to cross-national poverty researchers, is that relative poverty rates are substantially higher in the more unequal Latin American countries (17-24 percent) than in the Anglophone countries (8-15 percent) (whose poverty levels are, of course, higher than in other high-income countries).[16]

Second, the construction of this exercise (in which the poverty threshold does not vary) means that, in all countries, female heads' earnings are poverty-mitigating; still, the extent to which they mitigate poverty varies. In these Latin American cases, female heads' earnings reduce poverty by only 1-3 percentage points, whereas in the Anglophone countries their earnings reduce household poverty rates by 5-8 percentage points, and do so on a lower base.

Figure 4



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 4.

[16] It should be noted, however, that poverty has declined substantially in Latin America in recent decades.

Third, women's transfers also matter – again, especially in the Anglophone countries. In the Latin American cases, female heads' transfers reduce poverty rates by one percentage point or less; in the Anglophone cases, female heads' transfers remove 3-5 percent of persons from income poverty.

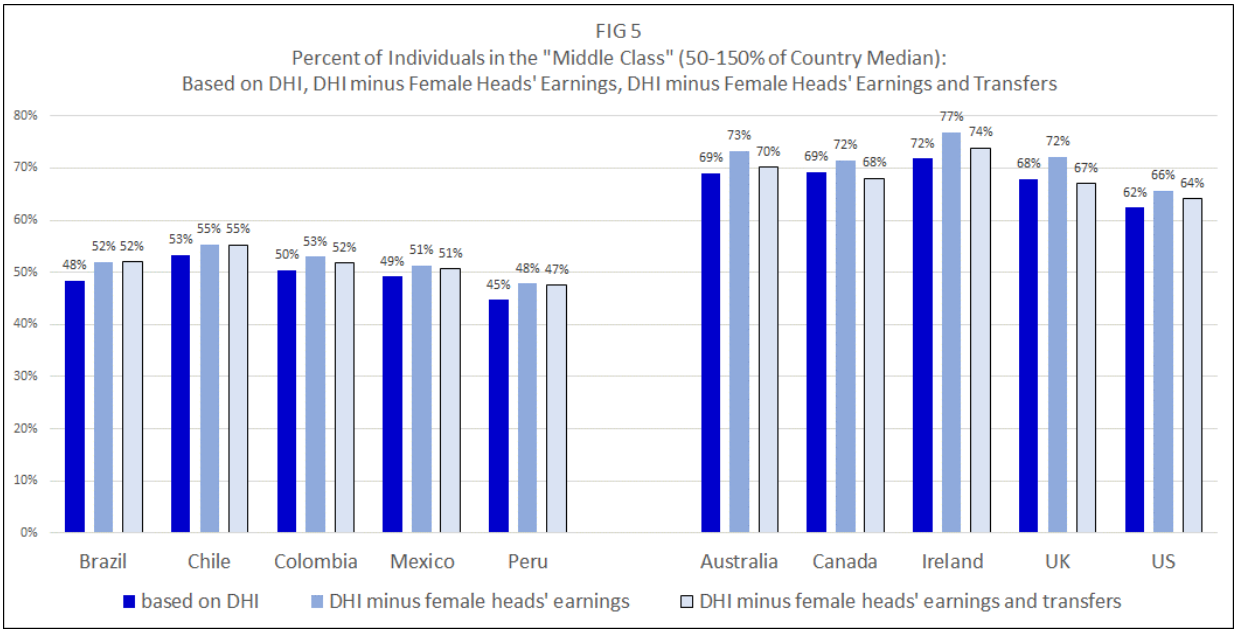
The "Middle Class"

The economic and sociological literatures on the middle class employ a multitude of definitions (see Gornick and Jäntti 2013, for a review). Here, we adopt one common definition, in which households are defined as middle class if their disposable household income falls between 50 and 150 percent of their country's median (see Figure 5); again, incomes are adjusted for household size.

Our first finding is that, using this definition, the middle class is substantially smaller in the Latin American countries (45-53 percent) than in the Anglophone countries (62-72 percent), consistent with the higher levels of income inequality in the former compared to the latter.

Our second finding is that removing female heads' earnings from the household income package *increases* the size of the middle class in all ten countries. This result, at first counter-intuitive, is due to two countervailing effects of removing female heads' contributions: some middle-class households fall downward (they are pushed out of the middle class), while some affluent households also fall downward (they are pulled into the middle class). The net result, empirically, is an increase, which means that "removing" women's earnings pulls in more households (from above) than it pushes out (moving downward). Women's earnings, clearly, enable many households to reach affluence (i.e., income above 150 percent of median household income).

Figure 5



Source: Luxembourg Income Study (LIS) Database. See Appendix Table 5.

Third, in contrast to removing female heads' earnings, removing their transfers decreases the size of the middle class everywhere – especially in the Anglophone countries where transfers are more extensive. In these Anglophone countries, removing women's individualized transfers decreases the size of the middle class by 2-5 percentage points. Removing women's transfers also reduces the size of the middle class in the Latin American cases but by only one percentage point or less. Transfers have a different effect than earnings because they are more prevalent among the middle class than among affluent households. Thus, removing them is more likely to push households out of the middle class (downward) than to pull households into the middle class (from above). In sum, female heads' transfers *increase* the size of the middle class in all ten countries, although only very marginally in the low-transfer Latin American cases.

IV. Conclusion

The most notable conclusion that we draw from our analyses stems from the counterfactual exercise that we carried out, in which women's earnings are removed from the household income package in order to reveal whether, and how much, inequality and poverty increase. As we have noted, much prior literature indicates that women's contributions to household income are, in general, equalizing. However, we did not find the expected equalizing impacts in the Latin American cases that we found in these Anglophone countries. Middle-class attainment was also comparatively unaffected by women's contributions in the Latin American countries. In short, the widely-reported results found in many high-income countries – that women's economic contributions are substantially equalizing – do not seem to be universal. At the very least, we can conclude that they appear not to extend to these five Latin American cases, at least not when studied at a single point in time (in this case, 2010).

Although we cannot be sure, we suspect that the lack of equalizing effects of women's earnings on household income distributions in Latin America is not due entirely to the lower rates of female employment and earnings in Latin America (relative to the Anglophone countries, where we do observe substantial equalization). We have not, yet, carried out a full analysis of the distribution of women's earnings and transfers across these countries – neither the women's distributions *per se* nor the correlations between women's earnings (and transfers) and their household income. Nevertheless, we suspect that the distributions of women's annual earnings (both alone and in relation to household income) are different in Latin America, overall, from those in the Anglophone countries. As noted earlier, annual earnings are the product of hourly wages and annual work hours. In Latin America, the distribution of any or all of these components might result in the lack of overall equalizing effects.

Other factors might also explain the "null" effects that we find in the Latin American countries. Earnings inequality among women and spousal earnings correlations are both higher in these Latin American countries than in the Anglophone countries; both of those would have disequalizing effects (when we consider the impact of women's contributions on the distribution of household income). That said, we also caution against generalizing across the Latin American countries, because there is substantial variation among the five countries we study. Brazil, Chile,

and Colombia report especially high spousal earnings correlations (.32 to .41, compared to a range of .11 to .15 in these Anglophone countries, whereas the correlations are .17 and .18 in Peru and Mexico, respectively).[17] Compare Brazil, for instance, with Ireland. Brazil stands at the upper end, and Ireland at the lower end of their respective country clusters in terms of the percentage of women with positive earnings (.53 for Brazil and .62 for Ireland), yet Brazil has a much higher degree of spousal earnings similarity (a correlation of .41 versus .15 in Ireland) and of earnings inequality among women (.76 in Brazil versus .67 in Ireland; see Figure 3A).

All in all, it seems likely that, in Latin America, there are equalizing effects that are being cancelled out by different, disequalizing, effects – more so than in these Anglophone countries.

Future Research

We plan to extend this work, first by tackling a line of questioning that we have touched upon in this paper but have not addressed directly. The overarching question is: When assessing the effects of women's economic contributions to household income, how do results based on change over time, within countries, correspond to results based on variation across countries at a single point in time?

As is evident in our literature review, the lion's share of this growing body of research utilizes over-time research designs, while other studies – such as this one – draw on variation within a cross-section. These two strands of literature have produced findings that, on the surface, often seem discrepant. In upcoming work, we will revisit results in the literature based on the two analytic approaches to explore whether (and why) these approaches lead to the same versus different conclusions.

In our next round of *empirical* work, we will look more closely, and simultaneously, at multiple factors. We will assess – across these countries, for both women and men – the distribution of annual earnings (and of their components: hourly wages and annual hours); the distribution of transfers; the association between individuals' income and that of their households (shaped in part by assortative mating); and rates of employment and/or non-zero earnings.

We will also look more closely at the other income sources in these working-age households. Many households, of course, contain other earners – that is, in addition to the two heads – and the prevalence (and earnings levels) of these other earners varies across countries, between clusters, and over time. We will also extend our work to include women, and men, who are not coupled. These inter-related future analyses will enable us to better understand the interplay of women's earnings and household income distributions in Latin America, both in the absolute, and relative to patterns observed in other countries, especially in the Anglophone countries.

[17] These results were calculated by us, applying the variables and methods described in this paper, but the results are not shown.

In the longer run, we plan to extend this study to include a wider swath of both high- and middle-income countries. In addition to these Latin American and Anglophone countries, our microdata source, the Luxembourg Income Study (LIS) Database, now includes high-income countries from Southern Europe, Continental Europe, Eastern Europe, as well as Nordic countries. Furthermore, the LIS data have recently been extended to include other middle-income countries, including India, Egypt, South Africa, China, and (soon) Vietnam. Studying a larger and more diverse selection of countries will allow us to analyze, in much more detail, variation both between and among high- and middle-income countries.

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APPENDIX

TABLES 1A

Table 1A: Income Packages - means, including zero values (within each column)

		A	B	C	D	E	F	G	H	I	J	K
		total disposable HH income (DHI) from LIS	aggregated DHI	**male** head - earnings (from wages and self-employment)	**male** head - transfers allocated to him	**female** head - earnings (from wages and self-employment)	**female** head - transfers allocated to her	all other labor income in the HH	all capital income in the HH	all other transfers - private	all other transfers- public	all taxes in the household
Brazil	2011	15801	15800	9883	636	3908	334	1889	371	4	482	1706.089
Chile	2009	4582641	4580018	2710909	66383	960782	43291	662281	51448	15912	69013	
Colombia	2010	7569284	7562059	4980138	254352	1767584	237915	984699	276001	67637	63879	1070146
Mexico	2010	60587	60310	34337	1253	9652	1020	8474	714	2900	1960	
Peru	2010	11476	11480	6645	116	2253	134	2156	261	96	418	598.6894
Australia	2010	55414	55927	37627	1212	16674	2258	5472	3786	118	615	11836.03
Canada	2010	45939	45295	31142	1439	16706	2303	2990	1832	2	723	11842.24
Ireland	2010	27773	27763	17864	2554	10139	1461	1501	347	93	1862	8056.95
UK	2010	23391	23385	16510	695	8353	1376	1462	565	44	386	6005.334
US	2010	40445	40403	29693	1744	14410	1178	2102	1279	126	681	10811.19

TABLE 1B

Table 1B: Income Packages - means, excluding households where female head's earnings are 0

		A	B	C	D	E	F	G	H	I	J	K
		total disposable HH income (DHI) from LIS	aggregated DHI	**male** head - earnings (from wages and self-employment)	**male** head - transfers allocated to him	**female** head - earnings (from wages and self-employment)	**female** head - transfers allocated to her	all other labor income in the HH	all capital income in the HH	all other transfers - private	all other transfers- public	all taxes in the household
Brazil	2011	20367	21439	11473	1650	7706	227	1990	372	6	399	2383
Chile	2009	5810715	5758299	2975887	578	1962502	33700	640611	63019	18209	63793	
Colombia	2010	9946329	9936531	5486132	286196	3730199	309189	1179910	263560	87575	98797	1505027
Mexico	2010	76684	76540	35071	1202	25410	529	8422	877	3382	1647	
Peru	2010	13747	13749	6809	139	4273	86	2366	249	100	453	725
Australia	2010	61463	62063	38608	751	24191	1319	5803	3854	97	530	13090
Canada	2010	48481	47844	31228	1355	20419	2024	3123	1636	2	760	12703
Ireland	2010	32246	34042	19786	1696	17005	999	3123	422	90	1542	10620
UK	2010	25645	25646	17193	427	11478	1016	1539	587	46	169	6809
US	2010	44112	44068	29267	1650	20154	957	2199	1332	140	595	12227

TABLE 2

Table 2: Labor Market Outcomes

		A	B	C	D	E	F	G	H
		male heads (in same group of households)				**female** heads (in same group of households)			
		PILE percentage with positive earnings (wages only)	PILS percentage with positive earnings (self-employment income onlyl)	PIL percentage with positive earnings (based on sum of wages and self-employment income)	employment rate based on LIS employment variable(s)	percentage with positive earnings (wages only)	percentage with positive earnings (self-employment income onlyl)	percentage with positive earnings (based on sum of wages and self-employment income)	employment rate based on LIS employment variable(s)
Brazil	2011	0.60	0.31	0.90	0.92	0.41	0.12	0.53	0.56
Chile	2009	0.73	0.25	0.95	0.94	0.37	0.13	0.50	0.47
Colombia	2010	0.41	0.52	0.93	0.92	0.22	0.24	0.48	0.52
Mexico	2010	0.70	0.23	0.90	0.94	0.28	0.12	0.39	0.43
Peru	2010	0.51	0.53	0.91	0.97	0.23	0.35	0.54	0.77
Australia	2010	0.79	0.11	0.89	0.91	0.67	0.07	0.71	0.73
Canada	2010	0.83	0.14	0.93	0.89	0.76	0.12	0.83	0.77
Ireland	2010	0.62	0.16	0.77	0.72	0.59	0.03	0.62	0.58
UK	2010	0.75	0.14	0.87	0.89	0.70	0.06	0.76	0.77
US	2010	0.84	0.08	0.90	0.85	0.71	0.05	0.74	0.69

TABLE 3A

Table 3A: Inequality - Ginis - including zero values

		A	B	C	D	E	F	G	H	I
		total disposable HH income (DHI)	**male** head - earnings (from wages and self-employment)	**male** head - transfers allocated to him	**female** head - earnings (from wages and self-employment)	**female** head - transfers allocated to her	all other labor income in the HH	all capital income in the HH	all other transfers - private	all other transfers- public
Brazil	2011	0.48	0.57	0.94	0.76	0.95	0.85	0.92	1.00	0.81
Chile	2009	0.45	0.50	0.93	0.77	0.90	0.82	0.98	0.98	0.87
Colombia	2010	0.48	0.53	0.93	0.80	0.92	0.84	0.97	0.95	0.96
Mexico	2010	0.48	0.58	0.97	0.84	0.87	0.85	0.99	0.79	0.84
Peru	2010	0.48	0.57	0.99	0.80	0.88	0.83	0.96	0.96	0.66
Australia	2010	0.31	0.44	0.88	0.57	0.74	0.90	0.94	0.99	0.95
Canada	2010	0.28	0.42	0.85	0.51	0.69	0.86	0.95	1.00	0.92
Ireland	2010	0.28	0.55	0.76	0.67	0.79	0.93	0.96	0.98	0.43
UK	2010	0.33	0.48	0.90	0.60	0.61	0.93	0.95	0.99	0.91
US	2010	0.33	0.48	0.76	0.61	0.78	0.91	0.91	0.98	0.86

TABLE 3B

Table 3B: Inequality - Ginis - excluding zero values

		A	B	C	D	E	F	G	H	I
		total disposable HH income (DHI)	**male** head - earnings (from wages and self-employment)	**male** head - transfers allocated to him	**female** head - earnings (from wages and self-employment)	**female** head - transfers allocated to her	all other labor income in the HH	all capital income in the HH	all other transfers - private	all other transfers- public
Brazil	2011	0.48	0.53	0.76	0.52	0.71	0.47	0.68	0.58	0.52
Chile	2009	0.45	0.47	0.76	0.52	0.66	0.43	0.58	0.42	0.58
Colombia	2010	0.48	0.50	0.70	0.58	0.76	0.48	0.60	0.55	0.60
Mexico	2010	0.48	0.53	0.74	0.58	0.57	0.54	0.65	0.57	0.61
Peru	2010	0.48	0.53	0.81	0.59	0.49	0.52	0.71	0.59	0.62
Australia	2010	0.31	0.36	0.45	0.39	0.42	0.56	0.88	0.68	0.44
Canada	2010	0.28	0.39	0.70	0.43	0.56	0.50	0.87	0.46	0.71
Ireland	2010	0.28	0.42	0.41	0.43	0.47	0.53	0.76	0.36	0.34
UK	2010	0.32	0.40	0.54	0.44	0.45	0.47	0.86	0.57	0.46
US	2010	0.33	0.44	0.62	0.46	0.55	0.57	0.84	0.56	0.76

TABLE 4

Table 4: Percentage of Individuals who are Poor - three poverty lines

		A	B	C	D	E	F	G	H	I
		poverty line set at **40%** of median equivalized DHI			poverty line set at **50%** of median equivalized DHI			poverty line set at **60%** of median equivalized DHI		
		income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income	income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income	income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income
Brazil	2011	14.1%	15.6%	16.0%	21.0%	23.27%	23.78%	27.1%	31.1%	31.9%
Chile	2009	8.8%	10.8%	11.2%	16.9%	19.12%	19.61%	24.4%	28.3%	28.9%
Colombia	2010	12.3%	14.3%	15.2%	17.4%	20.03%	21.46%	24.6%	28.0%	28.6%
Mexico	2010	14.6%	15.9%	16.5%	20.5%	21.85%	22.58%	26.5%	28.4%	29.0%
Peru	2010	18.9%	20.3%	20.7%	24.4%	26.35%	26.73%	28.9%	29.9%	32.5%
Australia	2010	5.6%	9.2%	12.1%	10.1%	15.12%	18.61%	16.5%	23.6%	27.4%
Canada	2010	5.5%	10.5%	14.0%	11.2%	19.20%	22.99%	17.9%	29.4%	32.8%
Ireland	2010	4.0%	7.3%	9.6%	8.4%	15.27%	18.57%	14.0%	23.9%	28.8%
UK	2010	5.3%	9.7%	13.2%	10.1%	16.72%	22.20%	17.1%	28.1%	33.4%
US	2010	8.5%	13.2%	15.0%	14.6%	22.25%	24.24%	21.9%	32.4%	34.1%

TABLE 5

Table 5: Percentage of Individuals in the "Middle Class" - three middle-class definitions

		A	B	C	D	E	F	G	H	I
		HH DHI between **75-125%** of equivalized median DHI			HH DHI between **50-150%** of equivalized median DHI			HH DHI between **50-200%** of equivalized median DHI		
		income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income	income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income	income definition: total DHI	income definition: DHI minus female head's total labor income	income definition: DHI minus female head's total labor AND transfer income
Brazil	2011	24.6%	25.5%	25.3%	48.4%	52.1%	52.0%	59.4%	61.4%	61.2%
Chile	2009	27.3%	27.0%	26.7%	53.3%	55.4%	55.3%	63.5%	64.5%	64.0%
Colombia	2010	25.0%	26.6%	26.7%	50.4%	52.9%	51.9%	60.6%	62.2%	61.3%
Mexico	2010	25.8%	26.9%	26.4%	49.2%	51.3%	50.7%	59.6%	61.1%	60.5%
Peru	2010	23.0%	24.5%	24.5%	44.7%	47.8%	47.5%	56.2%	57.3%	57.0%
Australia	2010	37.6%	37.8%	35.5%	69.0%	73.3%	70.1%	81.2%	80.0%	76.5%
Canada	2010	38.6%	37.4%	35.6%	69.2%	71.5%	68.1%	81.1%	77.0%	73.2%
Ireland	2010	38.6%	41.5%	39.2%	71.8%	76.9%	73.9%	84.3%	82.6%	79.4%
UK	2010	37.2%	36.2%	33.2%	67.9%	72.1%	67.0%	80.0%	78.4%	73.1%
US	2010	32.1%	33.4%	32.6%	62.4%	65.6%	64.1%	75.0%	72.6%	70.8%