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**Inside the Black Box:
Intra-household Inequality and a Gendered Pandemic**

Deepak Malghan, Hema Swaminathan

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# Intra-household Inequality and a Gendered Pandemic

*Deepak Malghan*
Centre for Public Policy
Indian Institute of Management Bangalore
Bannerghatta Road
Bangalore 560076
INDIA
+91 80 26993355
dmalghan@iimb.ac.in


*Hema Swaminathan* (corresponding author)[1]
Centre for Public Policy
Indian Institute of Management Bangalore
Bannerghatta Road
Bangalore 560076
INDIA
+91 80 26993393
hema.swaminathan@iimb.ac.in

## Abstract

Emerging evidence suggests that COVID-19 has amplified existing gender divisions that disadvantage women. What is the appropriate unit of analysis to study the gendered impact of a pandemic? The study of gendered inequality – especially labor market opportunities and outcomes – has for the large part relied on population wide differences between men and women. Using over four decades of global data (n =2.85 million couple units, from 45 countries in the LIS repository) we show that intra-household earnings inequality *within* a household is systemic, prevalent across disparate societies, and across the entire earnings distribution. Our analysis shows why accounting for intra-household gender inequality is crucial to ameliorating the pandemic's gendered impact.

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**Introduction**

It is now clear that far from being a "great leveler" (Scheidel, 2018), the COVID-19 pandemic will likely accentuate existing societal cleavages. While the overall distributional impact of the disruption caused by COVID-19 is as yet uncertain, early evidence suggests that the pandemic has differentially impacted men and women (Andrew et al., 2020; Bahn et al., 2020). A gendered response to the pandemic and the consequent economic meltdown is therefore an imperative (United Nations, 2020).

Men and women differ in their labor market experience along several dimensions. On average, women are less likely to be in full-time employment, have reduced hours of work, and face greater career breaks (OECD, 2015). The gender wage gap has declined but continues to exist across developed and developing countries (OECD, 2015). Further, the gendered division of labor in society ensures that women spend more time in social reproduction activities that are unpaid and undervalued, but underpin the smooth functioning of a household (Pepin et al., 2018).

The study of gendered patterns of economic inequality – especially labor market outcomes – has largely relied on population-wide differences between men and women and neglected inequalities *within* the household. We contribute to the emerging literature on the gendered economic impact of COVID-19 using a large global repository of nationally representative earnings data for over forty countries across four decades maintained by the Luxembourg Income Study (LIS) database. We show why any characterization of pandemic's gendered impact must necessarily account for inequality between men and women *within* the household. We make the case for a dialectical understanding of the relationship between intra-household inequality and labor market outcomes. We accomplish this by analytically

distinguishing between population-scale gender differences and intra-household gender dynamics. This distinction is crucial for crafting effective, gender-sensitive pandemic responses.

A pandemic's locus does not lie on *terra nullius*. Like pandemics past, the economic fallout of COVID-19 is mediated by extant unevenness of the social terrain. Our analysis uses global data on individual earnings to uncover key stylized facts about the structure and extent of intra-household gender inequality that hold across disparate societies. Most significantly, we find that intra-household gender inequality is systematic and largely independent of the overall position of the household in the earnings distribution.

We focus on wage earnings as it is a direct outcome of labor market engagement. In addition to paid work, earnings capture employment activity status, intensity of work, as well as wages. It is increasingly evident that the unfolding pandemic induced economic crisis disproportionately affects women with respect to both, paid work and unpaid care work. At least in the immediate term, women's employment is more adversely impacted than men's employment (Andrew et al., 2020; Gaddis & Beegle, 2020). Industries that are female dominated are under greater stress, including retail, garment, hospitality, and leisure (Bureau of Labor Statistics, 2020; OECD, 2020). The unemployment rate in the US for April 2020 rose steeply by 10.3 percentage points with a higher rate for adult women (15.5 percent) as opposed to 13 percent for adult men (Bureau of Labor Statistics, 2020).

Preliminary evidence suggests that during lockdowns, mothers continue to shoulder a higher burden of care, especially in the presence of young children (Carlson et al., 2020). Fathers are stepping up more, but are not matching mothers' time allocations to the care

economy (Andrew et al., 2020). Employers believe women, particularly mothers, are less committed to their work due to care responsibilities, less productive than men and thus, more dispensable (Anderson et al., 2003; Correll et al., 2007). When choices are made about which parent steps off the labor market, it usually falls to the mother as she is typically the secondary income earner and the primary caregiver.

The pandemic can potentially push back gains made by women over the last couple of decades in terms of secure employment, independent earnings and reduced economic dependence on men. Accumulated evidence has established that contrary to the assumptions of the unitary model (Doss, 1996), there may be incomplete income pooling in the household and that the identity of the income earner is critical in decoding within-household power relations (Browning et al., 2013). Indeed, "even if household income were shared completely, it is problematic to assume that it does not matter in a well-being assessment whether a person has earned this money herself or obtained it from her partner" (Robeyns, 2003, p. 65).

Loss of employment or reduced earnings has both direct and indirect effects. It can lead to reduced income in old age when pension policies are indexed to labor earnings (Brown et al., 2016), and to reduced life-time wealth accumulation (Ruel & Hauser, 2013). Loss of earnings also increases the risk of individual poverty even if the household is not experiencing poverty (Vijaya et al., 2014). Paid and gainful employment is an important contributor to women's economic empowerment (see Laszlo et al., 2020 for a review). Employment and a sense of empowerment also reinforce each other to impact several wellbeing outcomes. Independent resources (property, income, wealth) and employment largely reduce the risk of intimate partner violence (Bhattacharyya et al., 2011; Oduro et al., 2015; Panda & Agarwal, 2005). This risk is heightened by the fact that natural disasters and economic insecurities create

fertile conditions for intimate partner violence (Gearhart et al., 2018). The pandemic induced lockdown has seen a rise in domestic violence reporting (UNDP, 2020). Women are more vulnerable due to reduced exit options and lack of institutional support during the pandemic. Greater resource control has also benefitted women's empowerment as measured by involvement in household decision-making or mobility (Anderson, S., & Eswaran, 2009; Majlesi, 2016; Swaminathan et al., 2012). Finally, when women have independent control of household resources, it has positive impacts on children's human capital (Allendorf, 2007; Bobonis, 2009; Lundberg et al., 1997; Park, 2007).

**Data and Methods**

We use data from the Luxembourg Income Study (LIS) global database that provides harmonized individual-level micro data over four decades across a range of countries (Appendix Table 1). Earnings in LIS data are classified as "gross" or "net" depending on how taxes and social security contributions are captured. Gross income is netted down using household-level or person-level tax information (Nieuwenhuis et al., 2016). Further, datasets classified as "mixed" (data is a mixture of gross and net earnings) are dropped from our analysis. We use 302 datasets, 1973-2016, that allow computation of net individual earnings. Negative earnings are set to zero, while the top one percentile are top-coded to the 99th percentile (Harkness, 2013; Nieuwenhuis et al., 2016).

Our analytical sample comprises of heterosexual couple households ($n$ = 2,847,697) where the head is living with a partner in a marriage, co-habiting, or in a consensual union. Further, both partners in our analytical sample are working age (18 to 65 years), and not currently enrolled in a full-time educational program. Sampling weights are applied in all

calculations. This analytical subset allows us to most effectively address questions surrounding gendered intra-household dynamics, our primary interest, even at the cost of understating the true extent of gender inequality in earnings (arising mainly from the fact that we do not include households with woman as the only adult member).

Figure-1 illustrates why accounting for inequality *within* the household is analytically important in characterizing overall inequality in a society. Panel-A shows the distribution of Gini coefficients computed for the couple units from 302 LIS datasets. We compute inequality for the individual-distribution ($2n$ individuals) as well as the couple-distribution ($n$ couples). The panel shows that over the last four decades, across a diverse set of countries, the difference between inequality measured at the individual level versus household (aggregate couple earnings) is substantial. This difference between individual and couple Gini coefficients reflects intra-household (or more accurately, intra-couple) earnings inequality.

Panel-B presents the evolution of this intra-couple inequality, measured as the difference between individual and couple scale Gini coefficients between 1973 and 2016. Inequality within couples has declined monotonically in the last forty years, consistent with increased assortative mating (Harkness, 2013). Despite a 20% decline in intra-couple inequality, current levels continue to be significant. As our primary focus is on the potential impacts of COVID-19 on intra-household gender inequality, we further analyse 39 most recent LIS datasets (from 2010 onwards); these datasets are marked in blue in Panel-B, Figure-1.

Our analysis builds on a well-established analytical tradition that has studied intra-household inequalities in health and nutrition (Haddad & Kanbur, 1990; Rodriguez, 2016; Sahn & Younger, 2009). We use women's share of aggregate couple earnings to track within-

household gender inequality. Earnings share capture a woman's economic standing relative to her partner, as well as the intensity of her labor market engagement. Our measure of earnings is broad and is defined as monetary returns to paid employment and includes returns to self-employment activity. Earnings are set to zero if an individual does not undertake any paid work.
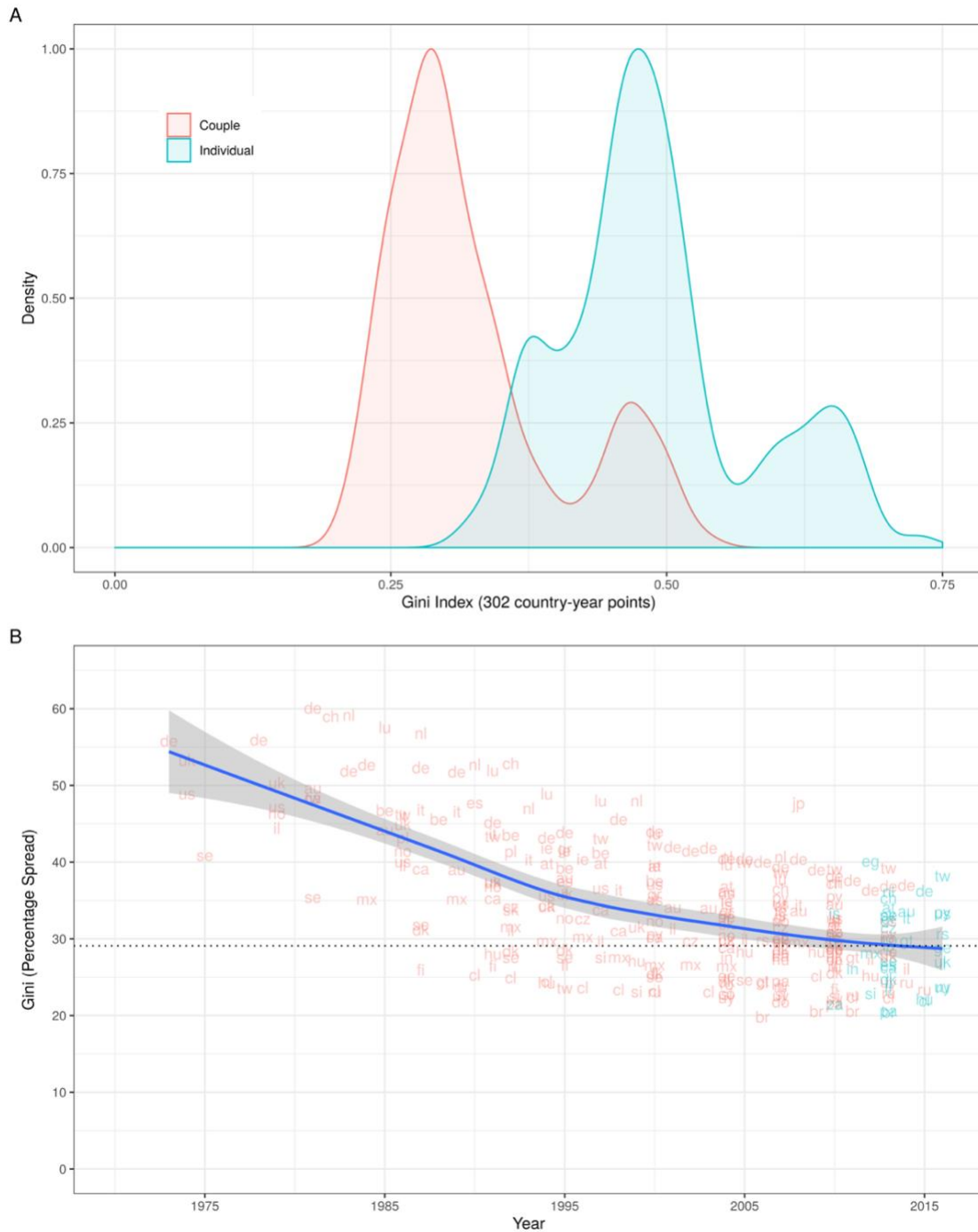


***Figure 1***: ***What is Intra-household Gender Inequality?*** *Panel-A shows distribution of Gini coefficients computed at individual and couple-unit scales (*n *= 302 LIS data sets). Panel-B shows the time-trend for difference between*

## Results and Discussion

For the 39 countries with post-2010 data, we use the latest available data for these countries in our analysis. This subsample contains 466,475 couple units as opposed to our full analytic sample of 2,847,697 couple units from 45 countries (Appendix Table-2).



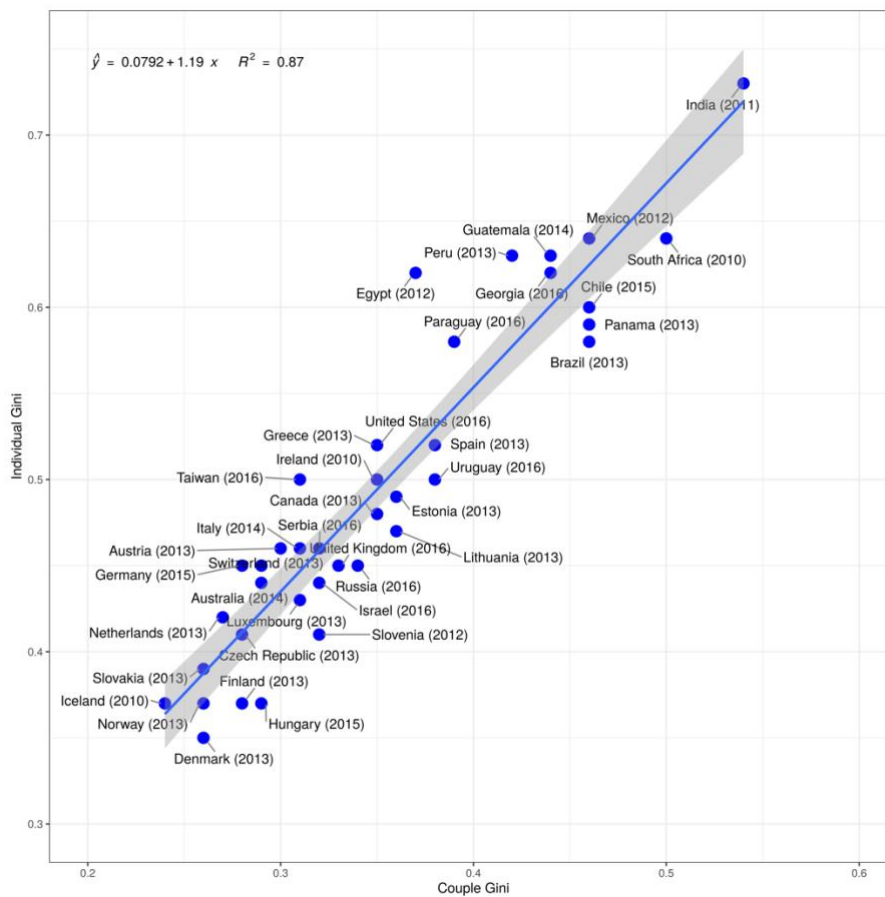**Figure 2:** *Couple and Individual Gini Coefficient (39 datasets from the LIS repository). Couple sample (n = 466,475 couple units, 932,950 individuals).*

For our analytical subsample, Figure-2 maps the relationship between Gini coefficients computed at individual and couple scales. The Gini coefficient for individual earnings distribution is almost perfectly correlated (0.94) with the Gini for couple earnings distribution.

Thus, any macro-level analysis of the impact of inequality is unaltered by the use of household, rather than the individual as the unit of analysis. However, neglecting intra-household inequality amounts to an implicit income pooling assumption that has shown to be both theoretically and empirically untenable. Using aggregate couple earnings, rather than individual earnings assumes that the pandemic's impact is gender-identity agnostic.

In Figure-3, we show why the neglect of intra-household inequality is a costly error for any pandemic policy response. For the same set of 39 countries in Figure-2, we investigate variations in women's share of couple earnings across the distribution. Women's share is shown for the full sample (where one member of the couple may have zero earnings) and for the sub sample with strictly positive earnings for each member of the couple. The trend-lines are LOESS fitted curves (Cleveland, 1979) that trace the trajectory of women's share across the distribution of households by couple earnings quantile. The horizontal lines represent the median share of women's earnings for the two samples.

The difference between these median shares is indicative of women's low labor force participation. For the full sample, there are five countries where the median earning share is effectively zero. At the other end of the spectrum, Nordic countries show little difference in the median shares between the two samples. Moving from the full sample to the sub sample of only positive earnings couple households (~ 300,000 couple unites across 39 countries), we find that women's share of couple earnings is increasing in overall position of the household in the couple earnings distribution. This is as expected, but what is revealing is that not in in a single country do women earn as much as men (with same earnings, the share would be 50%). However, shares are higher than 40% in 28 countries . In Figure-4, we show the distribution of median women's earning share for the two samples in Figure-3 (the full couple sample, and

the positive earnings subsample). While across countries, women's share is increasing as households become more prosperous, in the top percentiles, their share either plateaus or even shows a slight decline (also seen in the multi-modal distribution of Figure-4). Taken together, Figures 3 & 4 highlight the importance of women's paid work for reducing intra-couple earnings inequality. However, when women do participate in the labor market, there continue to be differences in earnings between men and women that could reflect differences in intensity of work (hours), concentration of women in low wage and low skill jobs, and labor market discrimination against women (Harkness, 2013; OECD, 2015).

Evidence suggests that intra-household earnings inequality is driven by several interacting social, cultural, and economic channels that are all potentially amplified by the pandemic. Social norms that reinforce men as breadwinners and women as homemakers and caregivers could push women out of the workforce as households make choices about labor market engagement vs. household duties (Andrew et al., 2020). The responsibilities of social reproduction are a major reason why women are not able to undertake, or cut back on the hours of paid work. Family support policies (such as paid maternity and paternity leave, paid sick leave, day care facilities for young children and so on) are crucial in supporting women's paid work. Social security policies that are not conditional on employment are another source of significant support (Andringa et al., 2015). We therefore investigate how full-time employment modulates intra-household gender inequality in earnings – one of the most immediate impacts of the pandemic has been to make full-time labor market participation relatively harder for women than men (Andrew et al., 2020).
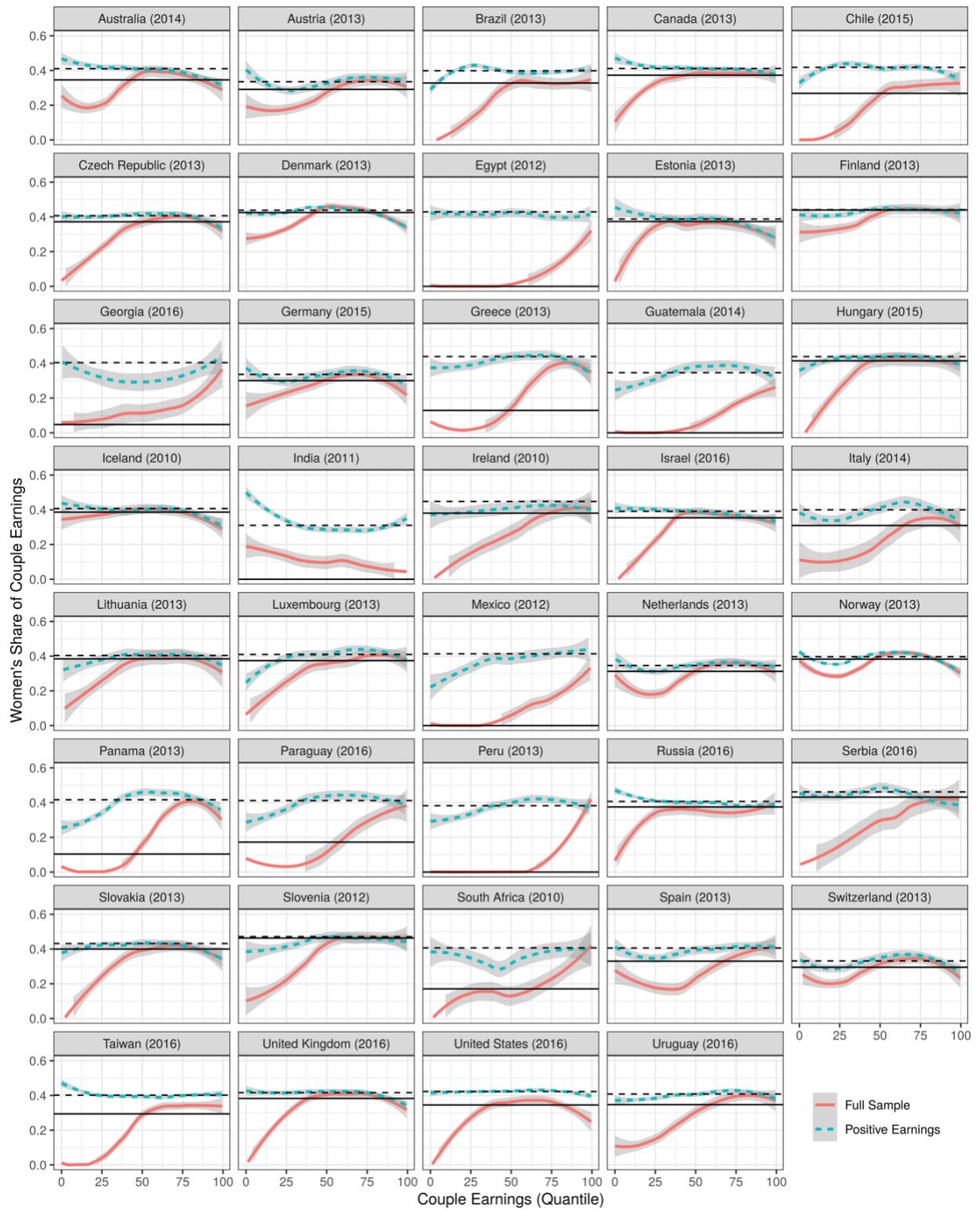
**Figure 3**: *Women's Earning Share. The red curves use the complete couple sample (*n = 932,950 individuals *across 39 datasets); and the blue curves represent only those couple units where both the man and woman have positive non-zero earnings (*n = 589,708 individuals). *The solid line represents median women's earning share of couple earnings for the full sub-sample, and the dotted line is the share for the positive earnings sub-sample. 95% confidence bands around LOESS (Cleveland, 1979) are shown for both schedules. Cf. main text for more details.*
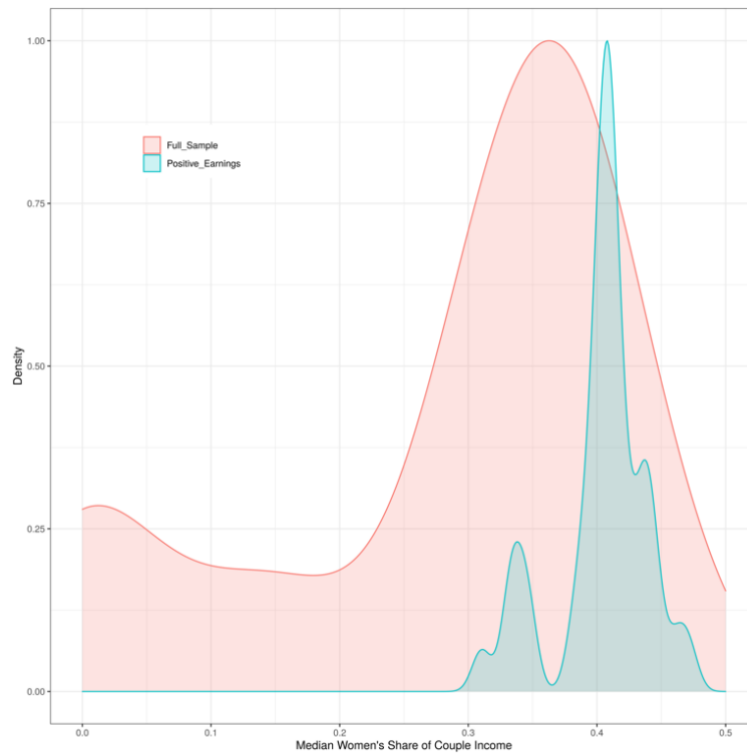
**Figure 4:** *Median Woman's Earning Share. The figure shows the distribution of medians depicted in Figure-3.*

For four countries (Finland, Germany, India and United States) we examine the association between paid full-time work and intra-household earnings inequality between men and women (Figure-5). The countries were chosen to represent variations in women's labor force participation, median women's share of couple earnings, and the level of state support for women's employment.[i] We use the positive earners sub-sample for these four countries. The *X* axis shows, as previously, the earnings quantile of the couple distribution, while the *Y* axis now represents the individual earnings distribution. The points in each of the panels and associated LOESS trend lines show how individual members of a couple-unit occupy different points on the individual earnings distribution across the aggregate couple earnings distribution.

The four panels for each country show differing combinations of labor force intensity of the couple; both partners have any sort of labor market participation (panel A), both partners have full year full-time (FYFT) jobs (panel D), and women (men) have FYFT jobs but men

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(women) have either part time jobs or have not worked the full year (panels B and C, respectively). The residual category where neither men nor women in couple units hold full time jobs is not presented here.

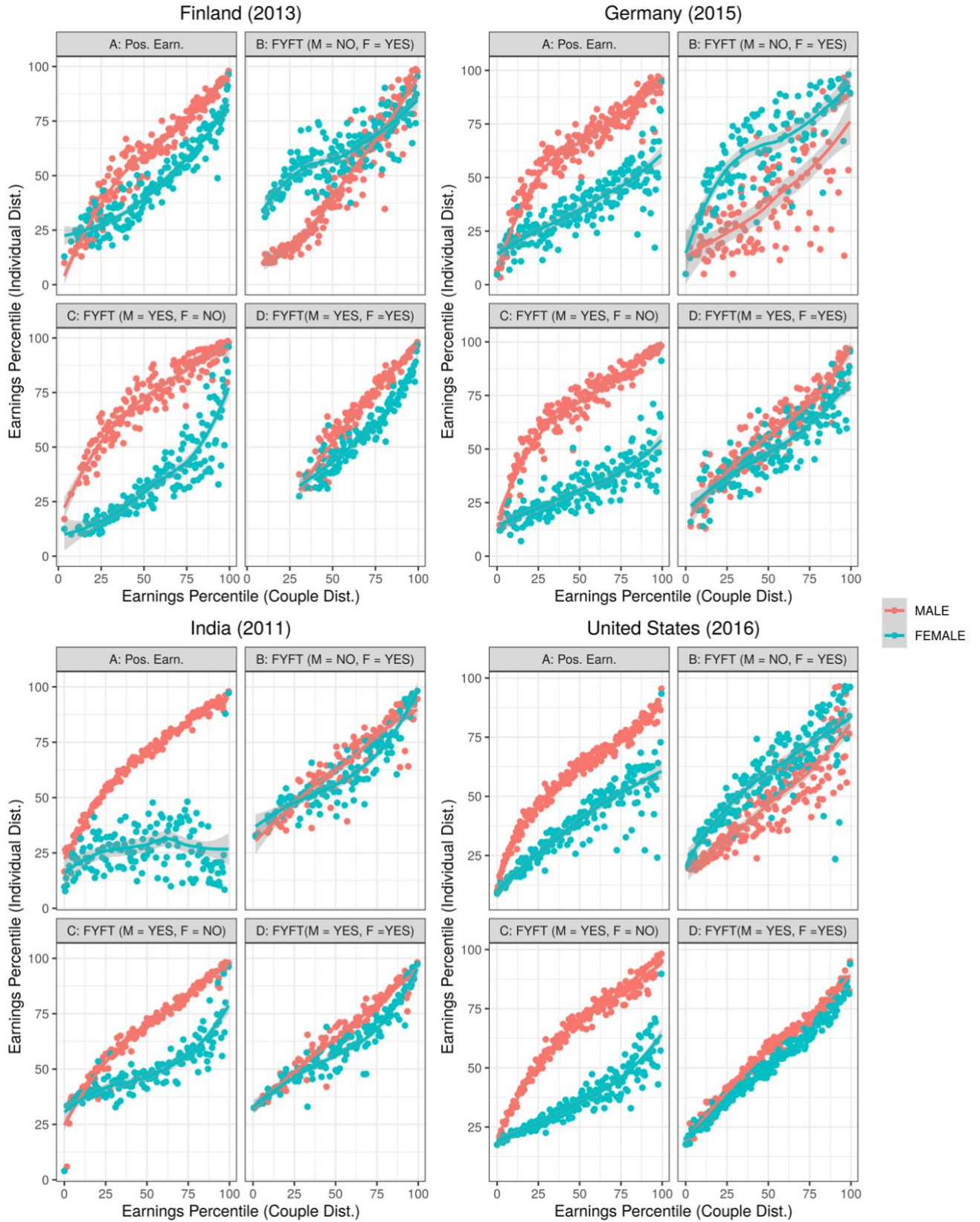**Figure 5:** *Intra-Couple Inequality and Labor Market Intensity. FYFT is Full Year Full Time employment. M is Male, and F is Female.* Cf. *main text for further details.*

As reported in Table-1, and not surprisingly, India as the only non-OECD country is an outlier with only 36% of couple units where both partners have non-zero earnings. This is largely reflective of the low labor force participation rates of women (Lahoti & Swaminathan, 2016), which is also evident from the stark difference in median share of women's earnings between the full and positive samples. Further, 66% of couples within this small sub-sample contain men and women who both do not have full-year full-time employment. In Germany, men working full-time with part-time women is by far the dominant category, while in Finland, there is greater symmetry in men and women's roles (Table-1). Among developed countries, US is an exception with 58% of couples in full-time work.

It is clear that FYFT employment is key to reducing earnings inequality within the household (Figure-5). Interestingly in Finland, dual income households with both partners working full-time are not even represented in the lowest 25th percentiles (panel D). There is almost complete convergence in earnings at the bottom percentiles for all countries, while in the higher percentiles, men's earnings on average, are higher than women's earnings. Among other factors, these trends reflect family friendly state policies or the lack thereof, tax policies that penalize a second earner in the household, and effect of gender norms surrounding motherhood (Harkness, 2013; Kleven, Landais, Posch, et al., 2019).

| Dataset | A: Positive Sub-sample (percent of full couple sample) | B: FYFT (M = NO, F = YES, percent of Pos. Sub-sample) | C: FYFT (M = YES, F = NO, percent of Pos. Sub-sample) | D: FYFT (M = YES, F = YES, percent of Pos. Sub-sample) | E: FYFT (M = NO, F = NO, percent of Pos. Sub-sample) |
|---|---|---|---|---|---|
| Germany (2015) | 77.4 | 5.2 | 58.5 | 24.1 | 12.2 |
| Finland (2013) | 81.9 | 20.8 | 19.9 | 30.0 | 29.3 |
| India (2011) | 35.9 | 5.0 | 19.1 | 9.4 | 66.6 |
| United States (2016) | 65.4 | 8.8 | 25.6 | 57.6 | 8.0 |

**Table 1:** *Sub-sample Distribution by Full-time Employment. Subsample proportions for analysis in Figure-5.*

Expectedly, when only men are in full-time employment their earnings dominate women's earnings with the gender gap in earnings peaking around the middle of the distribution. There is substantive inequality in earnings at the intrahousehold level at the top end of the distribution for Germany, US and India (panel C). In the former two countries, this reflects the fact that women with highly paid partners are choosing more flexible forms of labor market engagement (Goldin, 2014). Recent evidence from developed countries suggests a 'motherhood penalty' or a negative impact of childbirth and caring of young children on women's labor market outcomes (Kleven, Landais, Posch, et al., 2019). Interestingly, parenthood does not impose any such penalty on fathers. Essentially, mothers either exit the labor force or reduce their hours of work, both of which impacts earnings in the immediate and long term (Kleven, Landais, & Søgaard, 2019). Women may also switch to jobs that are more 'family friendly' and offer greater flexibility. Goldin (2014) shows that in certain occupations, flexibility in hours and career interruptions have disproportionate impact on earnings. The finance, legal, and corporate sectors in particular show a nonlinear relationship of earnings with respect to hours worked. In India, on the other hand, there is an income effect on women's labor supply wherein high household income causes many women to exit the labor market (Eswaran et al., 2013). However, panel B in Figure-5 suggests that the converse is not strictly true across the distribution. Men are disadvantaged in Finland, Germany and US when couple earnings are low, but catch up with women as the household economic status improves.

**Conclusion**

The initial months of the social and economic disruptions brought about by COVID-19 has laid bare the pandemic's amplification of inequities in extant gender norms. From academics (Andersen et al., 2020) to informal workers (Gaddis & Beegle, 2020), women across

the social and economic spectrum have borne a disproportional brunt of the pandemic. We have shown here that even a partial description of the pandemic's gendered pathway must necessarily engage with the primary, but vastly understudied site of gender inequality – the household. The household is the crucible where gender relations are forged *and* reproduced across generations.

Our cross-country analysis shows that earnings inequality *within* a household is systemic, prevalent across disparate societies, and crucially across the earnings distribution spectrum. Gendered intra-household dynamics impact women's labor market outcomes which in turn diminishes her agency and bargaining power within the household. These mechanisms connect the upper end of the earnings distribution in wealthy societies of northern Europe to women in developing economies like India where a large proportion formally have no labor market earnings despite direct contribution to the economic product (Deshpande & Kabeer, 2019). There is a very real potential that the pandemic-induced economic contraction can reverse the progress the world has made towards becoming a more gender just and equitable society.

Optimistically, the pandemic and the surrounding events can be viewed as an opportunity to rethink old institutions and start new conversations that will enhance wellbeing of both men and women. We identify three issues related to labor markets that have immense implications for women's economic wellbeing. First, social reproduction must be recognized for the role it plays in maintaining social and economic systems. Women who are often the custodians of social reproduction, are not valued in the current market-based economic system. While there are methodological challenges to valuing unpaid non-market work, it is not impossible (Folbre et al., 2013). Furthermore, social policies and legislations in most countries

do not recognize the opportunity cost for women due to their engagement in unpaid care work. Women's contributions via the care economy can be valued in several ways including, provision of old age security that is de-linked from labor market participation; provision of universal basic income for the poor; and ensuring at least a partial community of property that recognizes women's contribution to marital assets to compensate for their inability to accumulate wealth through labor market earnings.

Second, the pandemic, in the short-term, has dissolved the barrier between home and the workplace while at the same time increasing the demands of the care economy. Governments have an important role in regulating the labor market – providing for anti-discriminatory policies, legislating equal pay for equal work, providing for family friendly policies that allow for parental leave as well as publicly supported childcare facilities. Concurrently, there is a need to change the discourse around gender norms and responsibilities so that men can be equal partners in the care economy as well, affording women a chance to fully exploit their own potential. Finally, organizations also need to fundamentally restructure how work is organized -- stop disproportionately rewarding overwork (or penalising flexible schedules and part-time work) as well as prioritize family time and responsibilities.

# APPENDIX

| Country | Start year | End year | No. of datasets | Total no. of couple households |
|---|---|---|---|---|
| Australia | 1981 | 2014 | 10 | 49,711 |
| Austria | 1994 | 2013 | 7 | 13,137 |
| Belgium | 1985 | 2000 | 6 | 11,991 |
| Brazil | 2006 | 2013 | 4 | 2,38,868 |
| Canada | 1981 | 2013 | 11 | 1,30,807 |
| Chile | 1990 | 2015 | 12 | 3,51,287 |
| Colombia | 2004 | 2004 | 1 | 5,306 |
| Czech Republic | 1992 | 2013 | 7 | 38,612 |
| Denmark | 1987 | 2013 | 8 | 2,06,900 |
| Dominican Republic | 2007 | 2007 | 1 | 4,024 |
| Egypt | 2012 | 2012 | 1 | 6,005 |
| Estonia | 2004 | 2013 | 4 | 8,672 |
| Finland | 1987 | 2013 | 8 | 48,174 |
| Georgia | 2010 | 2016 | 3 | 3,263 |
| Germany | 1973 | 2015 | 27 | 1,96,272 |
| Greece | 1995 | 2013 | 6 | 13,629 |
| Guatemala | 2006 | 2014 | 3 | 24,948 |
| Hungary | 1991 | 2015 | 8 | 6,259 |
| Iceland | 2004 | 2010 | 3 | 5,491 |
| India | 2004 | 2011 | 2 | 42,629 |
| Ireland | 1994 | 2010 | 7 | 10,540 |
| Israel | 1979 | 2016 | 11 | 34,643 |
| Italy | 1986 | 2014 | 12 | 40,102 |
| Japan | 2008 | 2008 | 1 | 1,791 |
| Lithuania | 2010 | 2013 | 2 | 3,797 |
| Luxembourg | 1985 | 2013 | 9 | 13,599 |
| Mexico | 1984 | 2012 | 12 | 93,285 |
| Netherlands | 1983 | 2013 | 9 | 32,612 |
| Norway | 1979 | 2013 | 9 | 2,88,153 |
| Panama | 2007 | 2013 | 3 | 17,230 |
| Paraguay | 2000 | 2016 | 5 | 10,364 |
| Peru | 2004 | 2013 | 4 | 27,003 |
| Poland | 1986 | 1992 | 2 | 6,762 |
| Russia | 2000 | 2016 | 9 | 1,30,923 |
| Serbia | 2006 | 2016 | 4 | 5,999 |
| Slovakia | 1992 | 2013 | 5 | 18,443 |
| Slovenia | 1997 | 2012 | 6 | 10,868 |
| South Africa | 2010 | 2010 | 1 | 1,378 |
| Spain | 1990 | 2013 | 7 | 37,001 |
| Sweden | 1975 | 2005 | 7 | 43,762 |
| Switzerland | 1982 | 2013 | 5 | 16,039 |
| Taiwan | 1981 | 2016 | 11 | 87,485 |
| United Kingdom | 1974 | 2016 | 12 | 80,311 |
| United States | 1974 | 2016 | 12 | 3,42,464 |
| Uruguay | 2004 | 2016 | 5 | 87,158 |

*TABLE A1: Extent of LIS Data Used*

|  |  | Couple households | | | Women's share of couple earnings | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Country | Year | Total no. of households | Working-age | Working-age, positive earnings | Median, all couple households | Median, positive earners | Gini, couple dist. | Gini, individual dist. | % spread (couple, individual Gini) |
| Australia | 2014 | 14,162 | 6,252 | 4,307 | 0.35 | 0.41 | 0.29 | 0.44 | 34.09 |
| Austria | 2013 | 5,909 | 2,267 | 1,723 | 0.29 | 0.34 | 0.30 | 0.46 | 34.78 |
| Brazil | 2013 | 1,16,543 | 56,095 | 28,228 | 0.33 | 0.40 | 0.46 | 0.58 | 20.69 |
| Canada | 2013 | 23,014 | 10,655 | 8,016 | 0.37 | 0.41 | 0.35 | 0.48 | 27.08 |
| Chile | 2015 | 83,887 | 36,173 | 15,928 | 0.27 | 0.42 | 0.46 | 0.60 | 23.33 |
| Czech Republic | 2013 | 8,053 | 3,127 | 2,232 | 0.37 | 0.41 | 0.28 | 0.41 | 31.71 |
| Denmark | 2013 | 87,517 | 31,681 | 26,474 | 0.43 | 0.44 | 0.26 | 0.35 | 25.71 |
| Egypt | 2012 | 12,060 | 6,005 | 914 | 0.00 | 0.43 | 0.37 | 0.62 | 40.32 |
| Estonia | 2013 | 5,871 | 2,433 | 1,773 | 0.37 | 0.39 | 0.36 | 0.49 | 26.53 |
| Finland | 2013 | 11,030 | 5,871 | 4,812 | 0.44 | 0.44 | 0.28 | 0.37 | 24.32 |
| Georgia | 2016 | 2,768 | 815 | 280 | 0.05 | 0.40 | 0.44 | 0.62 | 29.03 |
| Germany | 2015 | 14,426 | 5,475 | 4,240 | 0.30 | 0.34 | 0.28 | 0.45 | 37.78 |
| Greece | 2013 | 8,620 | 2,868 | 1,205 | 0.13 | 0.44 | 0.35 | 0.52 | 32.69 |
| Guatemala | 2014 | 11,536 | 7,462 | 2,474 | 0.00 | 0.35 | 0.44 | 0.63 | 30.16 |
| Hungary | 2015 | 2,772 | 904 | 661 | 0.41 | 0.44 | 0.29 | 0.37 | 21.62 |
| Iceland | 2010 | 3,018 | 1,829 | 1,628 | 0.39 | 0.41 | 0.24 | 0.37 | 35.14 |
| India | 2011 | 42,152 | 20,994 | 7,538 | 0.00 | 0.31 | 0.54 | 0.73 | 26.03 |
| Ireland | 2010 | 4,333 | 1,534 | 849 | 0.38 | 0.45 | 0.35 | 0.50 | 30.00 |
| Israel | 2016 | 8,903 | 4,615 | 3,150 | 0.35 | 0.39 | 0.32 | 0.44 | 27.27 |
| Italy | 2014 | 8,156 | 2,498 | 1,236 | 0.31 | 0.40 | 0.31 | 0.46 | 32.61 |
| Lithuania | 2013 | 5,194 | 1,880 | 1,411 | 0.38 | 0.40 | 0.36 | 0.47 | 23.40 |
| Luxembourg | 2013 | 3,879 | 1,783 | 1,245 | 0.37 | 0.41 | 0.31 | 0.43 | 27.91 |
| Mexico | 2012 | 9,002 | 3,761 | 1,036 | 0.00 | 0.41 | 0.46 | 0.64 | 28.13 |
| Netherlands | 2013 | 10,174 | 5,148 | 4,099 | 0.31 | 0.35 | 0.27 | 0.42 | 35.71 |
| Norway | 2013 | 2,35,732 | 88,412 | 74,610 | 0.38 | 0.40 | 0.26 | 0.37 | 29.73 |
| Panama | 2013 | 11,905 | 5,639 | 2,640 | 0.10 | 0.42 | 0.46 | 0.59 | 22.03 |
| Paraguay | 2016 | 10,219 | 3,135 | 918 | 0.17 | 0.41 | 0.39 | 0.58 | 32.76 |
| Peru | 2013 | 30,453 | 8,875 | 2,113 | 0.00 | 0.38 | 0.42 | 0.63 | 33.33 |
| Russia | 2016 | 1,60,008 | 60,252 | 39,578 | 0.38 | 0.41 | 0.34 | 0.45 | 24.44 |
| Serbia | 2016 | 6,457 | 1,793 | 861 | 0.43 | 0.46 | 0.32 | 0.46 | 30.43 |
| Slovakia | 2013 | 5,490 | 2,327 | 1,619 | 0.40 | 0.43 | 0.26 | 0.39 | 33.33 |
| Slovenia | 2012 | 3,663 | 1,664 | 1,122 | 0.46 | 0.47 | 0.32 | 0.41 | 21.95 |
| South Africa | 2010 | 6,786 | 1,378 | 521 | 0.17 | 0.41 | 0.50 | 0.64 | 21.88 |
| Spain | 2013 | 11,965 | 5,174 | 3,177 | 0.33 | 0.41 | 0.38 | 0.52 | 26.92 |
| Switzerland | 2013 | 6,792 | 3,009 | 2,528 | 0.29 | 0.33 | 0.29 | 0.45 | 35.56 |
| Taiwan | 2016 | 16,528 | 7,401 | 3,598 | 0.29 | 0.40 | 0.31 | 0.50 | 38.00 |
| United Kingdom | 2016 | 19,380 | 7,079 | 4,989 | 0.38 | 0.42 | 0.33 | 0.45 | 26.67 |
| United States | 2016 | 69,957 | 30,234 | 19,785 | 0.35 | 0.42 | 0.35 | 0.52 | 32.69 |
| Uruguay | 2016 | 45,158 | 17,978 | 11,400 | 0.35 | 0.41 | 0.38 | 0.50 | 24.00 |

*Table A2: Summary of 39 Datasets used in Detailed Analysis*

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[i] It would have been ideal to have representation from Africa and South/Central Americas, but it was not possible as the data required for this analysis was not available.