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### **Family Policies, Women's Earnings, and Relative Inequality Among Households: Trends in 18 OECD Countries from 1981 to 2008**

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## **Abstract**

This paper examines to what extent family policies have been associated with women's earnings and earnings inequality among coupled households, using LIS data from 18 OECD countries, from 1981 to 2008. Women's earnings contribute more to *reducing* inequality among households in countries with generous paid leave and public childcare, because these policies were associated with higher female labour force participation rates (FLFP). While a higher FLFP was associated with a more strongly positive correlation between spouses' earnings, increasing the contribution of women's earnings to inequality among household, it was also associated with lower earnings inequalities among women and with women contributing a larger share to household earnings. These latter two factors were found to attenuate household inequality *to a larger extent* than the higher correlation between spouses' earnings contributed to household inequality. We found no association between financial support policies, such as family allowances and tax benefits to families with children, and the degree to which women's earnings contribute to inequality among coupled households. Countries with family policy arrangements that facilitate women's employment and earnings contribute to smaller inequalities among households.

### **Keywords:**

Women's earnings; income inequality; homogamy; childcare; paid leave; family allowance; family policy; incomplete revolution

## **Background and Research Questions**

The rise in female labour force participation in OECD countries in recent decades was not only shaped by demographic determinants such as women's rising educational levels (Bradley, 2000) and decreasing fertility (Van der Lippe & Van Dijk, 2002), but also by the implementation of family policies facilitating the reconciliation of the responsibilities associated with work and family, such as paid parental leave and public childcare services (Charles, 2011; Gornick, Meyers & Ross, 1998; Hegewisch & Gornick, 2011; Jaumotte, 2003; Matysiak & Vignoli, 2008; Pettit & Hook, 2005). Such policies have been shown to reduce the gap in employment between women with and women without children (Author). Yet, it has become increasingly clear that the benefits offered by such family policies are not distributed uniformly, but are socially stratified (Pettit & Hook, 2009, Author). For instance, family policies selectively benefit those women already in a strong position to have high earnings (Mandel, 2012). The benefits of (public expenditure on) childcare policies were found to be biased against low-income families (Ghysels & Van Lancker, 2011). Consequently, family policies may exacerbate social inequalities in employment among households (Van Lancker & Ghysels, 2012).

Much less is known about how levels of *relative earnings inequality* among households are associated with family policies. Based on the literature two competing positions can be formulated on this issue. The first position characterises the trend toward increased female labour force participation as a polarisation between work-rich and work-poor households (Esping-Andersen, 2007, 2009). Dual earnership was found to be less common among couples with low earnings capacity (Cantillon et al., 2001). As partners' labour market participation as well as partners' earnings tend to be positively correlated, it has been hypothesised that higher female labour force

participation contributes to an exacerbation of earnings inequalities among households (Esping-Andersen, 2007, 2009; McCall & Percheski, 2010). According to this position, family policies have supported the rise in female labour force participation and the associated earnings have increased the earnings inequality among households.

The second, competing position in the literature is based on the empirical finding that women's earnings have an *attenuating* contribution, rather than an *exacerbating* contribution, to earnings inequality among households (Gregory, 2009). As women's earnings have been rising over time, with more women being employed and having gained stronger positions in the labour market with higher status positions and higher wages (Costa, 2000), the attenuating impact of their earnings on household inequality has even been found to have increased. This finding was replicated, and found to hold, in a wide range of country-contexts (Blau & Kahn, 2000; Charles, 2011; Cancian & Schoeni, 1998; Cancian & Reed, 1999; Harkness, 2013; Jenkins & Van Kerm, 2009; Lam, 1997; Mastekaasa & Birkelund, 2011; Pasqua, 2002; Author).

To summarise, it was suggested that family policies especially facilitate the employment of women with a relatively high level of education, exacerbating earnings inequality across work-rich and work-poor households. It was also found that women's rising employment and earnings attenuated earnings inequality among households. This juxtaposition warrants further examination of the mechanisms through which family policies affected earnings inequality among households. This study does so, while distinguishing between two types of family policies that are often found to have different outcomes on women's employment: work-family reconciliation policies and financial support policies (Gauthier, 1996; Thévenon, 2011; Thévenon & Luci, 2012). Reconciliation policies, such as various forms of parental, maternity and childcare leave,

continued pay during leave, and (public) childcare services, were found to increase women's employment by facilitating women to combine motherhood and employment. Financial support policies, such as family allowances and tax benefits to families with children, were found to provide women the financial opportunity not to be employed (Author). This study answers:

**Explanatory Question:** To what extent can trends in female labour force participation and the contribution of women's earnings to inequality among households in 18 OECD countries from 1973 to 2007 be explained by trends in (a.) reconciliation policies and (b.) financial support policies in these countries?

## **Theory and hypotheses**

This study focuses on the degree to which work-family reconciliation policies and financial support policies are associated with female labour force participation and in turn how women's earnings contributed to inequality among households. Our line of argumentation is developed in three steps. We first outline three mechanisms through which women's earnings affect inequality among households. Secondly, we link these mechanisms to female labour force participation rates. Third, we hypothesize how reconciliation policies and financial support policies affect female labour force participation and the contribution of women's earnings to inequality among households.

### ***Three mechanisms shaping the contribution of women's earnings to inequality among households***

It has been well established in the literature that the contribution of women's earnings to inequality among households depends on three aspects of women's earnings: the share of women's earnings in total household earnings, the correlation of women's earnings with the earnings of their spouse, and the earnings inequality among women (Lam, 1997; Harkness, 2013). As a fourth factor the inequality among men's earnings plays a role, which we do not focus on here but control for in the empirical analyses.

Regarding the first mechanism, the share women contribute to household earnings, it is difficult to a-priori argue how an increase in women's earnings will inequality among households, as this depends on the correlation between spouses' earnings and the degree of inequality among women's earnings. However, empirical research has shown consistently that the current correlation between spouses' earnings and the current levels of inequality among women are such, that women's earnings have

an attenuating contribution to inequality among households and more so in the case of an increase of women's share in household earnings (Author; Harkness, 2013). Secondly, an increase in the correlation between women's earnings with those of their spouses leads to women's earnings contributing to a higher inequality among households, everything else equal. This is in line with the first position in the literature introduced in the previous section, that characterized the rise in female labour force participation as a polarization as work-rich couples, with both spouses having high earnings, versus work-poor couples with low earnings. However, contrary to commonly held assumptions, a positive correlation between spouses' earnings is not a sufficient condition for women's earnings to increase inequality between households (Lam, 1997). This is where the third mechanism comes into play: the level of inequality among women's earnings. If women's earnings become more unequal over time (with men's inequality held constant), their earnings also contribute more to household inequality.

### ***Female labour force participation and household inequality***

A higher female labour force participation rate is expected to be associated with women, on average and after accounting for unemployment, contribute a larger share to total household earnings. Following the arguments in the previous section, we would thus expect that a higher female labour force participation rate is associated with women's earnings *reducing* inequality among households to a larger extent. However, it should be accounted for that women, on average, earn less than men even in similar occupations. This would limit the attenuating contribution of women's earnings to household inequality, despite rises in female labour force participation. Hence, in all our analyses we will control for the female/male wage ratio. Secondly, it is to be expected that a rise

in female labour force participation and in women's earnings is associated with a more strongly positive correlation between spouses' earnings. The reason for this expectation was given by Oppenheimer, who argued that with the stronger position of women in the labour market, the degree of educational homogamy increases because the marriage preferences of men and women converged (1988; 1994). Similarly, Sweeney (2004) found that with the increased participation of women on the labour market, women's pre-marriage income became a more important determinant of partner selection. It could also be that couples face similar unemployment risks, which could increase the correlation between spouses' earnings. Thirdly, it is to be expected that a rise in female labour force participation reduces earnings inequality among women. The reason for this is that, again after accounting for unemployment, the number of women with zero earnings is reduced (Cancian & Reed, 1999; Gregory, 2009). Of course, it remains to be tested to what extent a rise in female labour force participation reduces earnings inequality among women. If only women who will receive very high earnings enter the labour market, their earnings will reduce inequality among to a much lesser extent – or even increase it – compared to when women who will earn low or median levels of earnings enter the labour market (cf. Kenworthy, 2008).

### ***Family policies and gendered inequalities***

In our third and final step we hypothesize how two different types of family policies affect female labour force participation and the contribution of women's earnings to inequality among households. Family policies can affect women's employment and earnings in different and opposing ways: some will facilitate female labour force participation while other will impede it. We distinguish between two types of family

policies: reconciliation policies and financial support policies to families with children. Reconciliation policies provide opportunities to combine employment and motherhood (Gornick et al., 1998; Jaumotte, 2003; Matysiak & Vignoli, 2008; Pettit & Hook, 2009; Author). For maternity leave, this refers to the relatively short period before and after childbirth, and parental leave provides these opportunities when the child(ren) in the household are young. Continued pay during leave further facilitates the opportunity to take up leave, without facing the consequences of reduced or no income. Reconciliation policies also include (public) childcare services, which have played a similarly important role in trends towards more female labour force participation. – particularly when the quality of childcare is assured and the childcare is affordable. We expect that in a society with extensive reconciliation policies, women’s employment and consequently women’s earnings will be high which based on the three mechanisms outlined above determines how women’s earnings affected inequality among households. Furthermore, it was found that the absence of work-family reconciliation policies reduces the employment of particularly low-educated women (Korpi, Ferrarini & Englund, 2013), which further points towards the equalizing effect of the availability of such policies.

To summarize, we test: In countries with extensive reconciliation policies, (a) women’s earnings reduce earnings inequality among households to a *larger* extent than in countries without extensive reconciliation policies, because (b.) although the higher female labour force participation in these countries is associated with a more strongly positive correlation between spouses’ earnings, it is also associated with lower earnings inequalities among women and with women contributing a larger share to household earnings. We refer to this expectation as the **reconciliation policy hypothesis**.

While our main expectation is the attenuating contribution of women's earnings on household inequality has become stronger in association with the rise of female labour force participation and work-family reconciliation policies, we also need to account for the possibility that these policy outcomes were not uniform, and biased towards higher educated and women with high earnings potential and well-earning partners (Ghysels & Van Lancker, 2011; Mandel, 2012; Pettit & Hook, 2009). This corresponds to the first position in the literature discussed above, which states that family policies have the (unintended) consequence of predominantly facilitating the employment of women with a high earnings potential and who have high earning partners. Therefore, in our analyses, we also test an **alternative reconciliation policy hypothesis** stating that at a given level of female labour force participation, reconciliation policies contribute to more earnings inequality among women and a higher correlation between spouses' earnings.

Regarding the second type of family policy examined here, we expect that in countries with extensive financial support policies for families with children, female labour force participation will be lower. Financial support policies were found to also provide the opportunity to women not to be employed, or in other words: to be a disincentive for employment (also see: Gauthier, 1996; Thévenon, 2011, Author). Countries vary substantially in the degree to which they financially support families with children (Gauthier, 1996), using different strategies to do so. Here we distinguish between cash benefits to families, and tax advantages to single-earner families with children (compared to single-earner families with children). Both are commonly associated with the traditional breadwinner model (Korpi, 2000).

To summarize: In countries with extensive financial support policies, (a) women's earnings reduce earnings inequality among households to a *lesser* extent than in countries without extensive reconciliation policies, because (b.) although the lower female labour force participation in these countries is associated with a weaker correlation between spouses' earnings, it is also associated with higher earnings inequalities among women and with women contributing a smaller share to household earnings. We refer to this expectation as the **financial support policy hypothesis**.

Again, we will examine whether the outcomes of these financial support policies were homogeneous. However, as there is much less literature on such non-homogeneous outcomes of financial support policies to families with children (in contrast to the literature on nonhomogeneous effects of work-family reconciliation policies), we do not formulate an alternative financial support policy hypothesis.

## **Data and method**

### ***Person-level data***

Our hypotheses were tested using data from the Luxembourg Income Study (LIS, 2016). LIS provides country-comparative household-level and person-level surveys on income, organised in waves. We have used data from LIS waves 1 through 6 for 18 OECD countries, covering the period from 1981 to 2008. The countries covered by our data are listed in Table 1. In total, 116 LIS datasets were used, providing information on 1,726,700 individuals in 863,350 coupled households. Sampling weights were applied.

Our sample was limited to coupled households, defined as two spouses living together, either married or in a consensual union. The sample was further limited to couples where both spouses were aged between 18 and 59 at the time of interview.

Same-sex couples were removed from the dataset. These restrictions on the data were required to allow for the decomposition of earnings inequalities among households, and were necessary to determine the (influence of the changing) correlation between spouses' earnings. These decisions correspond to those made in similar studies (e.g. Harkness, 2013), ensuring comparability of the results.

The LIS data provide measurements on earnings, defined as the monetary returns from paid employment. Negative earnings were recoded to 0, and earnings were trimmed at the level of the 99th percentile. We measured earnings for both spouses. Household earnings were defined as the sum of the earnings of two spouses, even when either or both spouses had no earnings. Based on these measurements, for each country-year we aggregated the following measures:

**Contribution women's earnings to inequality among households:** This is a commonly used measure, expressed as the percentage by which inequality among households would change in a scenario where women had no earnings at all. That is, the observed earnings inequality among households (measured by the coefficient of variation) is compared to the earnings inequality among men (representing the scenario in which all women in coupled households had zero earnings). This is a standard calculation (Lam, 1997), and detailed by Harkness (2013).

**Earnings inequality among women:** Calculated as the coefficient of variation of women's earnings.

**Women's share in total household earnings:** Calculated as the women's earnings as a proportion of total household earnings.

**Correlation between spouses' earnings:** Pearson's correlation coefficient between spouses' earnings.

**Earnings inequality among men:** Calculated as the coefficient of variation of men's earnings. This variable serves as a control variable.

The measure of inequality on which this study is based is the coefficient of variation, which is defined as the standard deviation of the earnings distribution divided by its mean. This is a relative measure of inequality, which is insensitive to an overall increase or decrease of earnings over time. Hence, it is also comparable across countries with different levels of earnings. It is the typical measure of inequality used in studies on the contribution of women's earnings to household inequality (Lam, 1997). Descriptive statistics of our measures of inequality are presented by country in Table 1.

<< TABLE 1 ABOUT HERE >>

Income variables in LIS were reported either net of taxes and social security contributions, or gross of taxes and social security contributions. Without accounting for the fact that net and gross earnings are different constructs, these measures cannot be compared. We used earnings net of taxes and social security contributions where available, and when necessary net earnings were calculated by subtracting taxes and social security contribution from gross earnings (Author). It should be pointed out that the advantage of using net earnings data, thus after taxes and social security contributions were subtracted, is that the analyses are controlled for differences in the redistributive effect of taxes and social contributions across countries.

### *Country-Level Data*

All variables describing family policies and institutional context were measured at the country-level and were measured for each year separately, so they represent the variation in context both across countries as well as within countries over time.

**Paid parental leave:** Our first indicator of reconciliation policies is an index of three leave policies: maternity leave, parental leave, and childcare leave. We calculated the total number of weeks of leave of which the replacement rate was at least 60 per cent. In other words, the final measure represents the total number of weeks of leave during which least 60 per cent of wages were substituted. This variable was obtained from the Comparative Family Policy Database (Gauthier, 2010).

**Childcare expenditure:** This variable represents governmental expenditure on public childcare, expressed as the percentage of GDP divided by the total fertility rate. Although data on expenditure on governmental policies is commonly used in comparative welfare state research, it is not without problems as such measures tend to be higher when (a.) the policy is more generous and (b.) when the demand for the policy is high (for instance, in the context of the current study, case when fertility rate is high). By dividing by the fertility rate of a country, we correct for these problems to an important extent. This variable was obtained from the OECD Family Database (OECD, 2016).

**Family Allowances:** The average amount of family allowances that families are entitled to for their first, second and third child. To ensure comparability across countries

and over time, the originally reported nominal amounts were standardised by expressing them as a percentage of the average gross monthly earnings of a production worker. This variable was obtained from the Comparative Family Policy Database (Gauthier, 2010).

**Tax Benefits to Single-Earner Families with Children:** The annual amount of tax and benefit transfers that a single-earner family with children receives more than a comparable family without children. To ensure comparability across countries and over time, the originally reported nominal amounts were standardised by expressing them as a percentage of the average annual gross earnings of a production worker, following recommendations for use of the data obtained from the Comparative Family Policy Database (Gauthier, 2010).

In addition, we control for two important labour market variables. As the share of women's earnings in total household earnings might be strongly dependent upon the gender wage gap among those who are employed, we control for the female / male wage ratio at the country-level. We also control for the overall unemployment level as an indicator of the employment opportunities in an economy and because unemployment is an important determinant of inequality.

**Female / Male Wage Ratio:** Calculated as the hourly wages in manufacturing for women divided by the hourly wages in manufacturing for men. This variable was obtained from the Comparative Family Policy Database (Gauthier, 2010).

**Unemployment:** Unemployment rates defined as the number of unemployed persons as a percentage of the civilian labour force. This variable was obtained from the Comparative Family Policy Database (Gauthier, 2010).

<< TABLE 2 ABOUT HERE >>

***Statistical method: Structural Equation Modelling***

As our hypotheses refer to several mechanisms *mediating* the impact of family policies and female labour force participation on the indicator of how women's earnings affect inequality among households, we have used a structural equation model (SEM) to estimate all relevant effects simultaneously. All variables were measured at the interval level, and there were no latent variables (other than errors) in this model. Country fixed effects were included for all endogenous variables to account for time-invariant, unobserved heterogeneity, in addition to the two control variables. Models were estimated in R using the Lavaan package (Rosseel, 2012), and inferences were based on (Huber-White) robust standard errors. In the results section below we focus on a diagram that presents the estimates of our main interest, based on our hypotheses. In addition, we present one table with direct, indirect and total effects, and one table with the parameter estimates of a sensitivity test.

**Results**

Figure 1 presents the results of our structural equation model. The presented estimates represented the standardized coefficients. The effects of predictors of the contribution of

women's earnings to household inequality are controlled for the degree of men's earnings inequality. In addition, all estimates are controlled for two labour market variables (female/male wage ratio and unemployment) as well as fixed effects for countries (estimates not shown in Figure 1).

<<< FIGURE 1 ABOUT HERE >>>

The key outcome variable interest in our analyses was the degree to which women's earnings affect the inequality among households. We saw in the descriptive Table 1 that this contribution is negative in all countries, indicating that women's earnings reduce inequality among households. The degree to which this was the case varied within countries over time (in addition to varying across countries, but that variation is accounted for by the fixed effects for countries). Here, the results show that women's earnings reduce inequality more when women's share in household earnings is larger, as well as when the inequality of men's earnings is higher. Women's earnings reduce household inequality less when the inequality among women is high and when the correlation between spouses' earnings is more strongly positive. Although we saw in Table 1 that women's earnings have reduced household inequality in all countries and years in our analyses, our findings do suggest that an increase over time of the inequality among women, or an increase in the correlation between spouses' earnings, would contribute to more inequality among households (*ceteris paribus*).

Figure 1 shows that women's share in household earnings not only has a direct effect, but also indirect effects by reducing the inequality among women and by increasing the correlation between spouses' earnings. Therefore, in Table 3, we

calculated for all independent variables the direct, indirect, and total effects on the contribution of women's earnings on inequality among households. Table 3 shows that the indirect effect of women's share in household earnings is .11 (not statistically significant), and the significant total effect is -.54.

<<< TABLE 3 ABOUT HERE >>>

Going further to the left in Figure 1 shows the impact of female labour force participation (FLFP) on the three mechanisms through which women's earnings affect inequality among households. Higher female labour force participation relates to a higher share of women's earnings in total household earnings, and lower inequality among women. This latter effect is reinforced by the indirect effect of female labour force participation on women's share in household earnings, which is also associated with a lower level of inequality among women. A higher female labour force participation rate seems associated with a weaker (or more negative) correlation between spouses' earnings, which is contrary to what we hypothesized. However, as a larger women's share in household earnings is associated with a higher correlation between spouses' earnings, the total effect of female labour force participation does contribute to a higher correlation (this was confirmed by a sensitivity analysis (not shown) in which only the total effect of FLFP on the correlation between spouses' earnings was estimated). This suggests that the correlation between spouses' earnings are higher with women contributing larger shares to household earnings, but that at a given level of women's earnings a higher female labour force participation rate indicates that these

earnings are contributed by a larger proportion of all women. In other words, as labour force participation is more equal, the correlation between spouses' earnings is lower.

The total effect of female labour force participation on the contribution of women's earnings to inequality among households, as shown in Table 3, is -.58. This effect is explained by the associated rise of women's share in household earnings and a reduction in the earnings inequality among women, and somewhat suppressed by the increase in the correlation between spouses' earnings that is associated with the increase of women's share in household earnings.

Finally, to the left-most side of Figure 1, we turn to the role of family policies. The estimates indicate that both reconciliation policies are positively associated with higher female labour force participation rates. The total effects of these policies on the contribution of women's earnings to inequality among households are -.28 for paid leave and -.17 for childcare expenditure (see Table 3). This corroborates our reconciliation policy hypothesis. We did not find support for our hypothesis that financial support policies reduce female labour force participation, nor that they affect how women's earnings affect inequality among households. The financial support policy hypothesis therefore needs to be rejected.

Next, we specified an alternative model to examine whether the family policies had non-uniform outcomes on women's female labour force participation, thereby affecting their earnings inequality and correlation between spouses' earnings. To do so, we have estimated the effects of the family policy variables on all endogenous variables in the model. The results were not shown in Figure 1, but are presented in Table 4. First, it becomes clear from the estimates presented in Table 4 that the inclusion of the family

policy variables on all endogenous variables (rather than just on female labour force participation) does not substantively change the estimates of the variables that were presented in Figure 1. Regarding the family policy variables, the results in Table 4 further show that higher expenditure on childcare is associated with women's earnings reducing inequality among households to a larger extent. This direct effect, is relatively small and does not substantively affect the other estimates in the model. The other family policy variables did not have a direct effect on women's earnings inequality. These findings run against the alternative reconciliation policy hypothesis, which expected childcare and paid leave to predominantly facilitate the employment of women with higher earnings potential, and therefore to increase earnings inequality among women after accounting for female labour force participation rates. Similarly, the correlation between spouses' earnings and women's earnings inequality were not affected by any of the family policy variables (after controlling for women's share in household earnings and female labour force participation rates).

<<< TABLE 4 ABOUT HERE >>>

Regarding women's share in household earnings, we found that after controlling for female labour force participation, longer periods of paid parental leave were associated with women's earnings constituting a smaller share in household earnings, and childcare expenditure with a larger share. This is interesting, since both work-family reconciliation policies were found to be positively associated with the number of employed women. Our interpretation of this finding is that at a given level of female labour force participation, women tend to have higher earnings in countries that provide

more generous opportunities for public childcare and that provide shorter periods of leave. This could result from longer periods of leave being associated with women having a weakened attachment to the labour force, for instance due to mothers returning from leave to part-time jobs with lower wages (Pettit & Hook, 2009), while childcare provides opportunities to work longer hours in more demanding occupations. Yet, these differences in employment did not result in (substantive) differences in the level of earnings inequality among women.

Family allowances were found to be associated with women contributing a larger share to household earnings, but it should be noted that this is after controlling for female labour force participation. This could mean that at any given level of female labour force participation, higher levels of family allowances are associated with particularly women with lower earnings (potential) reducing their labour force participation.

Finally, it should be noted that the three aspects of women's earnings (share, inequality and correlation between spouses' earnings) are not independent from each other (see Lam, 1997; Author). It was found here that the effect of the inequality among women's earnings on the contribution of women's earnings to household inequality is more strongly positive when women's share in household earnings is larger (not shown). This is in line with equations developed by Lam (1997). We did not find that – within the countries and time-period studied here – women's share in household earnings interacted with the impact of the correlation between spouses' earnings.

## **Conclusion and discussion**

Women's earnings were found to attenuate earnings inequality among households. This attenuating effect was stronger in societies with longer paid leave but did not seem to be different in societies with higher family allowances. Reconciliation policies, such as paid leave and public childcare, facilitate female labour force participation and consequently women's earnings. And if women's earnings contribute a larger share to the total household earnings and inequality among women is lower, women's earnings reduce inequality among households to a larger extent, even though the correlation between spouses' earnings is slightly increased as well.

We did not find that family allowances and tax benefits for families with children were associated with a country's female labour force participation rate, and therefore had to reject our financial support policy hypothesis. Other studies did find support for the hypothesis that this type of family policies reduces female labour force participation (Author; Thévenon, 2011; Korpi, 2000), but these studies were able to specifically look at maternal employment. Moreover, in these studies their effect on maternal employment was substantively weaker than the impact of work-family reconciliation policies such as parental leave (Author). Hence, our interpretation is that whereas we cannot conclude that financial support policies do not negatively affect maternal employment, their impact is not sufficiently strong to reduce the overall female labour force participation rate in a country and therefore their impact is not strong enough to affect the degree to which women's earnings contribute to inequality among households.

Before stating the substantive conclusion of this article, we discuss three limitations of this study. The first relates to the definition of our most important variable. The findings presented in this paper pertain to *relative* inequality; doubling the income

of all households does not have an effect on this relative inequality. The *absolute* differences between the richest and poorest households, however, are likely to increase in societies facilitating women's employment, as long as spouses' earnings are positively correlated.

Secondly, our findings apply to coupled households only. Whereas this is common in the literature on inequality decomposition (Harkness, 2013; Lam, 1997), this also means that our findings do not apply to the increasing number of single-parent families (Casey & Maldonado, 2012; Author). Yet, while the rise of single parenthood has contributed to more inequality among households (Kollmeyer, 2013), single parents have been front-runners with respect to women's employment (Jaehrling, Kalina, & Mesaros, 2015). Had women's employment not been high among single parents, inequality among all households would have been (even) higher. As it was found that women in single-parent families benefit more from reconciliation policies than women in coupled families (Author), in terms of employment and their risk of having earnings below the poverty line, this is in line with our conclusion that institutions supporting female labour force participation contribute to lowering inequality among households.

Third, the large-scale comparative nature of our study did not allow for including country-specific factors to our analyses, nor to fully address the endogeneity of family policies and female labour force participation rates. Future studies could complement our large-scale comparison by providing in-depth accounts of policy changes. Such detailed studies would be better suited for causal analysis of family policy outcomes. These countries could be selected on theoretical grounds, for instance focusing on the United States as that country shows both very high female labour force participation rates with little to no federal support for working mothers. Such a study could address

within-country variation, for instance focusing at state-level or even city-level public policies in the United States. Nevertheless, it should be noted that our results were controlled for country-level fixed effects, at least accounting for time-invariant heterogeneity at the country level.

Various authors have pointed towards the unintended consequences of family policies as being biased against low-income families and exacerbating among-household inequalities (Cantillon et al., 2001; Lancker & Ghysels, 2012). Ghysels and Van Lancker (2011) found low-income and low-educated families to be less likely to take up leave. Others have shown, in contrast, that the increased participation of women in the labour market has compressed the earnings distribution among women (Mandel, 2013). To this juxtaposition in the literature, we contribute the findings that despite selective uptake of the benefits of reconciliation policies, in the long run from 1981 to 2008 women's earnings in coupled households have increased and earnings inequality among women has decreased (also see: Cantillon, 2011). Thus, countries with family policy arrangements that facilitate women's employment and earnings, and consequently smaller earnings inequalities within households, also contribute to smaller inequalities among households.

Our findings have important implications for trends in inequality across OECD countries. In a series of reports, the OECD expressed their concerns about rising levels of inequality (2008; 2012; 2015), particularly in for instance Sweden. Our findings suggest that rising female labour force participation, as facilitated by work-family reconciliation policies, reduced household inequality. But it is also critical to realise that in many countries the trends in women's employment seem to have levelled off. This is,

for instance, the case in the Nordic countries as well as in the United States where even a decline in women's employment was observed (Boushey, 2008). These stagnating trends in female labour force participation put a dent in the capacity of women's earnings to further compensate trends in earnings inequality among households. Governments seeking to address current and future inequality should therefore ensure the continued growth of women's employment rates, implementing and maintaining policies that include, but are not limited to, paid parental leave and accessible and affordable public childcare.

Figure 1.

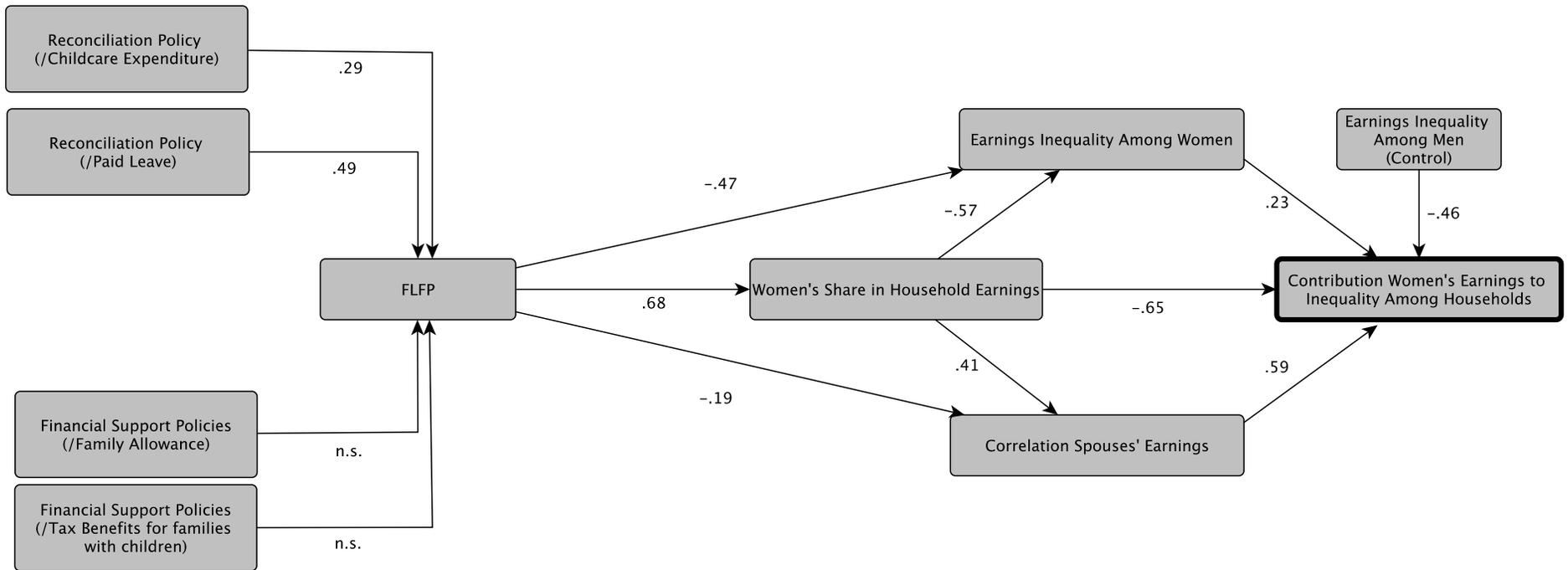


Table 1

**Descriptive Statistics on Earnings Inequality. Reported values apply to the Range and Mean of the measurements across country-years, by country (N = 116)**

Variable	Share			Women's Inequality			Correlation			Contribution to household inequality		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Country												
Australia	23.09	34.99	30.73	0.49	0.97	0.68	0.07	0.18	0.12	-35.16	-9.50	-21.79
Austria	28.22	31.07	29.76	0.54	0.72	0.63	0.01	0.10	0.07	-30.40	-16.23	-21.85
Belgium	25.24	32.93	29.28	0.43	0.81	0.64	0.05	0.16	0.11	-23.37	-4.22	-15.19
Canada	23.82	38.11	32.38	0.44	0.88	0.55	-0.01	0.13	0.06	-36.70	-13.20	-29.55
Denmark	37.42	41.35	39.71	0.19	0.27	0.23	0.15	0.17	0.16	-38.76	-32.03	-35.25
Finland	38.89	41.54	40.40	0.27	0.34	0.29	0.16	0.26	0.19	-40.04	-32.05	-36.27
France	30.37	40.32	34.82	0.29	0.69	0.51	0.13	0.21	0.17	-34.33	-19.56	-26.34
Germany	18.97	30.13	26.19	0.53	1.22	0.71	-0.21	-0.07	-0.12	-37.45	-21.09	-32.80
Greece	26.47	33.36	30.69	1.05	1.69	1.28	0.16	0.23	0.19	-22.19	-16.09	-18.91
Ireland	27.37	35.35	30.93	0.66	1.09	0.86	0.04	0.14	0.08	-36.32	-19.53	-27.19
Italy	23.05	32.82	28.93	0.84	1.60	1.22	0.08	0.22	0.17	-23.96	-6.11	-13.42
Luxembourg	16.39	28.08	21.92	0.63	1.81	1.16	-0.01	0.03	0.01	-27.04	-5.74	-13.96
Netherlands	14.44	30.51	23.52	0.46	1.86	0.92	-0.08	0.03	-0.02	-30.61	-9.52	-21.06
Norway	30.16	38.21	35.21	0.22	0.33	0.27	0.02	0.12	0.08	-40.07	-30.19	-34.88
Spain	24.43	34.99	29.72	0.66	1.79	1.11	0.14	0.18	0.15	-19.82	-10.50	-15.19
Sweden	33.03	39.56	36.82	0.21	0.27	0.25	0.14	0.23	0.20	-31.82	-26.01	-29.92
United Kingdom	24.33	35.25	31.41	0.59	0.92	0.68	0.09	0.14	0.11	-34.12	-20.51	-29.39
United States	26.66	33.76	31.07	0.52	0.64	0.57	-0.02	0.02	0.00	-36.53	-29.51	-33.88
Total	14.44	41.54	31.30	0.19	1.86	0.70	-0.21	0.26	0.10	-40.07	-4.22	-25.38

Source: Luxembourg Income Study (LIS, 2016)

Table 2

**Descriptive Statistics on Family Policies and Labour Market Conditions (N = 116)**

Variable	Minimum	Mean	Maximum	Standard Deviation
Paid Leave	0.00	18.26	68.60	19.50
Childcare Expenditure	0.00	0.29	1.06	0.29
Family Allowances	0.00	3.98	10.46	2.37
Tax Benefits	5.43	13.16	27.43	5.19
Female/Male Wage Ratio	0.54	0.78	1.06	0.08
Unemployment	1.20	7.59	23.00	3.58

Source: Comparative Family Policy Database (Gauthier, 2010) and OECD Family Database (OECD, 2016).

Table 3: Total effects on Contribution women’s earnings to inequality among households (Based on Figure 1, direct and indirect effects)

Independent Variable	Direct Effect	Indirect Effect	Total Effect
Earnings Inequality Among Women	.23*	-	.23*
Women’s Share in Household Earnings	-.65*	.11	-.54*
Correlation Spouses’ Earnings	.59*	-	.59*
Female Labour Force Participation	-	-.58*	-.58*
Childcare	-	-.28*	-.28*
Paid leave	-	-.17*	-.17*
Family Allowances	-	-.04	-.04
Tax Benefits for families with children	-	-.09	-.09

Source: Luxembourg Income Study (LIS, 2016), Comparative Family Policy Database (Gauthier, 2010)

and OECD Family Database (OECD, 2016). (Authors’ calculations)

\* P < .05 (one-tailed)

Table 4. Alternative specification of structural equation model. Original and Standardized

Coefficients (N=116)

Dependent Variable	Independent Variables	Estimate	Std.Err	Z-value	Standardized Coefficient
Contribution Women's Earnings to Household Inequality	Paid Leave	-0.000	0.000	-0.676	-0.034
	Childcare	-0.032	0.016	-2.062	-0.094
	Family Allowance	0.001	0.002	0.338	0.013
	Tax Benefits	-0.000	0.001	-0.143	-0.005
	Inequality Women	0.045	0.021	2.157	0.188
	Correlation	0.590	0.055	10.743	0.593
	Women's share in household earnings	-0.997	0.126	-7.888	-0.655
	Inequality Men	-0.424	0.077	-5.523	-0.440
Inequality Women	Female/Male Wage ratio	-0.066	0.064	-1.035	-0.054
	Unemployment	0.000	0.001	0.114	0.004
	Paid Leave	-0.002	0.001	-1.235	-0.072
	Childcare	0.031	0.074	0.421	0.022
	Family Allowance	-0.003	0.006	-0.446	-0.016
	Tax Benefits	0.003	0.003	0.982	0.042
	FLFP	-0.175	0.033	-5.355	-0.433
	Women's share in household earnings	-3.815	0.513	-7.430	-0.602
Correlation Spouses' Earnings	Female/Male Wage ratio	1.801	0.285	6.330	0.356
	Unemployment	0.022	0.005	4.466	0.193
	Paid Leave	0.001	0.000	1.838	0.125
	Childcare	-0.004	0.033	-0.114	-0.011
	Family Allowance	-0.007	0.003	-2.447	-0.176
	Tax Benefits	0.001	0.001	0.551	0.042
	FLFP	-0.024	0.010	-2.529	-0.246
	Women's share in household earnings	0.723	0.185	3.901	0.472
Women's share in household earnings	Female/Male Wage ratio	-0.166	0.120	-1.385	-0.136
	Unemployment	0.003	0.002	1.723	0.112
	Paid Leave	-0.001	0.000	-2.552	-0.282
	Childcare	0.077	0.022	3.572	0.343
	Family Allowance	0.004	0.002	2.894	0.161
	Tax Benefits	-0.000	0.001	-0.134	-0.009
	FLFP	0.043	0.008	5.270	0.675
	Female/Male Wage ratio	0.203	0.062	3.271	0.254
Female Labour Force	Unemployment	0.002	0.002	1.198	0.112
	Paid Leave	0.025	0.008	2.982	0.485

Participation	Childcare	1.061	0.345	3.079	0.300
	Family Allowance	0.029	0.028	1.027	0.067
	Tax Benefits	0.033	0.017	1.927	0.170
	Female/Male Wage ratio	4.698	1.524	3.083	0.376
	Unemployment	-0.048	0.016	-2.920	-0.168

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Source: Luxembourg Income Study (LIS, 2016), Comparative Family Policy Database (Gauthier, 2010)

and OECD Family Database (OECD, 2016). (Authors' calculations)

Country fixed effects included in all models, estimates not shown.

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