Changes in Couples’ Earnings Following Parenthood and Trends in Family Earnings Inequality

Pilar Gonalons-Pons  
*University of Pennsylvania*, pgonalon@sas.upenn.edu

Christine R. Schwartz  
*University of Wisconsin-Madison*, cschwart@ssc.wisc.edu

Kelly Musick  
*Cornell University*, musick@cornell.edu

Follow this and additional works at: https://repository.upenn.edu/psc_publications

Part of the Family, Life Course, and Society Commons, Finance Commons, Gender and Sexuality Commons, Income Distribution Commons, and the Inequality and Stratification Commons

**Recommended Citation**


This paper is posted at ScholarlyCommons. https://repository.upenn.edu/psc_publications/42

For more information, please contact repository@pobox.upenn.edu.
Changes in Couples’ Earnings Following Parenthood and Trends in Family Earnings Inequality

Abstract
The growing economic similarity of spouses has contributed to rising income inequality across households. Explanations have typically centered on assortative mating, but recent work has argued that changes in women’s employment and spouses’ division of paid work have played a more important role. We expand this work to consider the critical turning point of parenthood in shaping couples’ division of employment and earnings. Drawing on three U.S. nationally representative surveys, we examine the role of parenthood in spouses’ earnings correlations between 1968-2015 and ask to what extent changes in spouses’ earnings correlations are due to: (1) changes upon entry into marriage (assortative mating), (2) changes between marriage and parenthood, (3) changes following parenthood, and (4) changes in women’s employment. Our findings show that increases in the correlation between spouses’ earnings prior to 1990 came largely from changes between marriage and first birth, but after 1990 have come almost entirely from changes following parenthood. In both instances, changes in women’s employment are key to increasing earnings correlations. Changes in assortative mating played little role in either time period. An assessment of the aggregate-level implications points to the growing significance of earnings similarity after parenthood for rising income inequality across families.

Keywords
income inequality, parenthood, women’s employment, assortative mating, economic homogamy

Disciplines
Economics | Family, Life Course, and Society | Finance | Gender and Sexuality | Income Distribution | Inequality and Stratification | Social and Behavioral Sciences

This working paper is available at ScholarlyCommons: https://repository.upenn.edu/psc_publications/42
Changes in Couples’ Earnings Following Parenthood and Trends in Family Earnings Inequality

Pilar Gonalons-Pons

University of Pennsylvania

Christine R. Schwartz

University of Wisconsin-Madison

Kelly Musick

Cornell University

Acknowledgments: This research has been supported by the Russell Sage Foundation Award (83-16-13). Direct correspondence to: Pilar Gonalons-Pons, Department of Sociology, University of Pennsylvania. McNeil 217 3718 Locust Walk, Philadelphia PA, 19104-6299; 215 573 9196; e-mail: pgonalon@sas.upenn.edu
ABSTRACT

The growing economic similarity of spouses has contributed to rising income inequality across households. Explanations have typically centered on assortative mating, but recent work has argued that changes in women’s employment and spouses’ division of paid work have played a more important role. We expand this work to consider the critical turning point of parenthood in shaping couples’ division of employment and earnings. Drawing on three U.S. nationally representative surveys, we examine the role of parenthood in spouses’ earnings correlations between 1968-2015 and ask to what extent changes in spouses’ earnings correlations are due to: (1) changes upon entry into marriage (assortative mating), (2) changes between marriage and parenthood, (3) changes following parenthood, and (4) changes in women’s employment. Our findings show that increases in the correlation between spouses’ earnings prior to 1990 came largely from changes between marriage and first birth, but after 1990 have come almost entirely from changes following parenthood. In both instances, changes in women’s employment are key to increasing earnings correlations. Changes in assortative mating played little role in either time period. An assessment of the aggregate-level implications points to the growing significance of earnings similarity after parenthood for rising income inequality across families.
INTRODUCTION

Growing economic similarity between spouses has contributed to increasing economic inequality across households. The correlation between husbands’ and wives’ earnings more than doubled between 1970 and 2013 (Gonalons-Pons and Schwartz 2017) and studies estimate that between 16% and 51% of the increase in inequality across married couples is due to increasing earnings homogamy, depending on the measured used and time period studied (Gonalons-Pons and Schwartz 2017; Schwartz 2010). When there are more households that have two high-earning partners and more that have two low-earning partners, economic disparities across households grow, as the doubly-advantaged move further apart from the rest (Schwartz 2010). The dominant explanation for the increase in economic similarity among spouses has been assortative mating, or the increased tendency for partners to match on socio-economic characteristics. Empirical support for this hypothesis, however, has been weak. Recent research points instead to women’s employment as playing a pivotal role in explaining the rise of spouses’ economic similarity (Boertien and Permanyer 2019; Breen and Salazar 2011; Gonalons-Pons and Schwartz 2017; Greenwood et al. 2014). Further, the bulk of work on aggregate-level inequality has found no link between conventional measures of assortative mating (i.e., educational homogamy) and changes in economic inequality (Boertien and Permnyer 2019; Breen and Salazar 2010; 2011; Eika, Mogstad, and Zafar 2014; Hryshko, Juhn, and McCue 2015; Kremer 1997; Sudo 2017; Torche 2010; Western, Bloome, and Percheski 2008; but see Fernandez and Rogers, 2001; Greenwood et al, 2014).

Only a handful of studies have addressed the relationship between women’s employment, earnings similarity, and inequality. Breen and Salazar (2010) argued that relatively high levels of women’s employment were critical for assortative mating to affect inequality given that the
resemblance between spouses’ earnings would necessarily be higher in dual-earner versus single-earner families. They found that educational homogamy increased inequality in Denmark but not in the U.S., and speculated that this was because of higher levels of women’s employment in Denmark. Consistent with this reasoning, Greenwood et al. (2014) showed that women’s labor force participation moderated the extent to which educational assortative mating contributed to inequality in the United States. They showed, for instance, that a reduction in educational assortative mating back to 1960s levels would only decrease inequality if women remained employed at 2005 levels. Using a similar approach, Boetiger and Permanaer (2019) suggested that high levels of employment among low-educated women could contain rather than exacerbate the dis-equalizing potential of educational assortative mating. Moving beyond cross-sectional simulations, Gonalons-Pons and Schwartz (2017) showed that increases in economic homogamy in the U.S. between 1970 and 2013 were largely driven by increasing economic similarity during marriage and strongly associated with increases in women’s employment over the life course.

Despite growing evidence pointing to the role of women’s employment in shaping economic homogamy, existing studies have yet to directly assess its mechanisms. This article proposes that shifts in the relationship between family transitions – in particular parenthood – and women’s employment are central to understanding recent increases in economic homogamy. Parenthood has conventionally been a key point in the life course when women’s employment declines (Byker 2015; Lu, Wang, and Han 2017) and the earnings of husbands and wives diverge (Killewald and Garcia-Manglano 2016; Musick, Gonalons-Pons, and Schwartz 2017). But mothers’ employment and earnings have shifted dramatically across cohorts, from marginal attachment in earlier cohorts to a model that much more often combines work and family (Goldin 2006; Goldin and Mitchell 2017; Ruggles 2015). In concert with broad shifts in
women’s economic advancement, the reduction of economic penalties associated with parenthood suggest a growing equality in spouses’ earnings following parenthood and in turn, an increase in spouses’ earnings resemblance.

To assess these ideas, we examine how family transitions have shaped spouses’ earnings associations and aggregate-level inequality, with a particular focus on parenthood as a key turning point in spouses’ economic trajectories. First, we decompose changes in overall earnings associations into changes due to shifts in earnings associations before and after the transition to parenthood. This locates the timing of increases in earnings homogamy before or after first birth. Second, we disaggregate changes in pre-birth earnings similarity to examine the extent to which these can be explained by matching at the time of marriage ( assortative mating) and changes in men’s and women’s economic behavior following marriage but before parenthood. Third, we assess the role of women’s employment in shifting pre- and post-birth earnings similarity. This analysis offers more precise estimates of the contribution of women’s employment to shifts in economic homogamy than prior research (Gonalons-Pons and Schwartz 2017; Greenwood et al. 2014; Boertien and Permanyer 2019).

Our study makes two novel contributions. First, we broaden the scope of prior research by studying how spouses’ earnings associations change across key family junctures: (1) upon entry into marriage, (2) between marriage and parenthood, and (3) following parenthood. Previous research has differentiated only spouses’ economic homogamy at the beginning of marriage and after marriage, leaving open questions about the role of parenthood in this process (Gonalons-Pons and Schwartz 2017). Second, we consider the possibility that increases in economic homogamy have come from different points in this process at different time points, and thus, in addition to studying overall shifts, we compare an earlier and later period, 1968-1990.
and 1990-2015. This extends prior work that has largely analyzed single periods of time and helps us identify how and when mechanisms of change in economic homogamy come into play.

BACKGROUND

Parenthood as a Key Mechanism

Changes in women’s responses to parenthood are a potentially important and understudied mechanism shaping trends in spouses’ economic homogamy and family earnings inequality. In the context of growing gender equality in various dimensions of life in and out of the home, parenthood remains a critical turning point when many women pull back at work to accommodate new time demands at home (Baxter, Hewitt, and Haynes 2008; Musick, Bea, and Gonalons-Pons 2020), while having little impact on men’s work hours (Lundberg and Rose 2000). Gender wage gaps have narrowed much more among childless women than mothers (Goldin and Mitchell 2017), and the gender earnings gap today largely reflects parenthood (Kleven, Landais, and Søgaard 2019). The economic impacts of parenthood are consequential and long-lasting (Abendroth, Huffman, and Treas 2014; Aisenbrey, Evertsson, and Grunow 2009; Cooke 2014; Budig, Misra, and Boeckmann 2012; Gangl and Ziefle 2009; Sanchez and Thomson 1997), and the degree to which they remain gendered shapes couples’ earnings similarity (Musick et al. 2020). For example, if fewer married women drop out of the paid labor market after childbearing, then the association between spouses’ earnings will rise, and this change ceteris paribus will increase family earnings inequality.

Although enduring, the association between parenthood and the gender division of paid labor has nonetheless declined. Over the past decades, women have become more likely to remain employed after parenthood, while men’s labor supply remains unchanged upon
parenthood (Musick, Gonalons-Pons, and Schwartz 2017; Juhn and McCue 2017). Between 1960 and 2000, the employment rate of mothers with young children grew faster than any other group, going from 28% to 65% (Cotter, England, and Hermsen 2007). Women return to work faster than they did in the past (Laughlin 2011) and are less likely to drop out of the labor market upon the transition to parenthood (Byker 2015; Musick, Gonalons-Pons, and Schwartz 2017).

Research shows that parenthood is a key mechanism of economic inequality between men and women but one that has declined in recent decades (Goldin and Mitchell 2017; Goldin 2014). These changes are consistent with the transition from a male-breadwinner to a dual-earner family model, in which women’s economic contributions to the household shift from being conceived as secondary and largely incompatible with family needs to being perceived as necessary and positive for families’ well-being (Ruggles 2015; Goldin 2006).

In addition to these changes in women’s employment, shifts in the motherhood wage penalty and fatherhood wage premium also have the potential to contribute to increases in spouses’ economic homogamy, although evidence about change over time is relatively weak. Some studies show that motherhood wage penalties – which capture effects of work interruptions, job changes, and discrimination – have declined over the past decades (Pal and Waldfogel 2016; Glauber 2008), but others find no substantial change (Jee, Misra, and Murray-Close 2019). Studies also show little change in fatherhood wage bonuses (Lundberg and Rose 2000; Glauber 2018).

Taken together, past research indicates parenthood is a key family transition that reduces spouses’ economic homogamy largely by reducing women’s employment levels, and suggests that the decline in economic homogamy following parenthood may have become less pronounced as women remain employed after childbirth. These changes point to increases in
economic similarity after parenthood that are likely to constitute a powerful mechanism driving general trends in economic homogamy.

Changes in Economic Similarity Prior to Parenthood

Although past research points to parenthood as a key mechanism of life course variation in women’s employment and earnings (Blau and Kahn 2016; Goldin 2014), there are two types of changes prior to parenthood that may also play a role in shaping couples’ economic similarity: (1) changes in economic similarity at marriage entry, or assortative mating, and (2) changes in economic similarity after marriage but before parenthood.

The first potential mechanism – assortative mating – has been the most common explanation for increased economic similarity between spouses. Some scholars emphasize that changes in the meaning of marriage contribute to accentuating the relevance of socioeconomic similarity on the marriage market (Sweeney 2002; Sweeney and Cancian 2004; Buss et al. 2001). Others point out that growing income inequality can put pressure on “marrying well” and result in increased homogamy (Fernandez, Guner, and Knowles 2005). Additionally, developments like the intensification of patterns of income segregation in schools and neighborhoods (Reardon and Bischoff 2011) could also lead to segregated marriage markets and greater socioeconomic homogamy.

Although there is substantial evidence for increasing similarity in partners’ education (Schwartz and Mare 2005; Hou and Myles 2008; Rosenfeld 2008; Eika, Mogstad, and Zafar 2019; Greenwood et al. 2014; Mare 2016), the support for increases in matching on earnings or earnings potential is much weaker (Gonalons-Pons and Schwartz 2017). This suggests that educational homogamy may not have directly translated into greater sorting into marriage on
earnings. Estimates of a wide cross-section of married spouses’ earnings associations show increases in tandem with increased educational similarity (Schwartz 2010), but estimates of earnings similarity at the beginning of marriage show little change (Gonalons-Pons and Schwartz 2017). The stalled economic similarity at the point of marriage raises skepticism about assortative mating as a primary driver of observed increases in spouses’ economic similarity during marriage, and points instead to mechanisms related to either changes post-marriage and pre-parenthood or changes post-parenthood.

A second potential mechanism is increases in women’s employment and earnings after marriage but before parenthood. Historically, many women dropped out of the labor force upon marriage (Kessler-Harris 1982; Goldin 1988). Beginning in the 1920s, the majority of single women regularly engaged in wage employment (Ruggles 2015), but cultural expectations and institutional barriers in place until the 1960s discouraged and precluded women from remaining employed after getting married (e.g., marriage bars allowing employers to discriminate against married women were not fully outlawed until 1964) (Goldin 1988). Married childless women were less likely to work than their unmarried, childless counterparts in 1960, and this relationship reversed by 1990 (Juhn and McCue 2016). Thus, stronger attachment to the labor market following marriage may also have contributed to growing spouses’ economic homogamy. Wage returns to marriage could also play a role to the extent they have declined or become less gendered. The evidence points against this, however. Both women and men receive marriage premiums, the size of the premium is only slightly larger for men (Korenman and Neumark 1991; Gray 1997; Chun and Lee 2001; Killewald and Gough 2013; Budig and Lim 2016), and there is little evidence of substantial change in wage premiums in recent decades (Gray 1997; Budig and Lim 2016).
ANALYTIC APPROACH

Our study focuses on the transition to parenthood as a mechanism of rising earnings homogamy and the role of women’s employment in this process. We use a life-course approach to track how spouses’ earnings similarity changes with key family events and to estimate how they contribute to trends in overall earnings homogamy and inequality. Because we are interested in how mechanisms that drive earnings homogamy can shift over time, all our analyses are conducted for the overall period 1968-2015 and also for 1968-1990 and 1990-2015. This design allows us to assess the relative importance of parenthood as a driver of spouses’ economic similarity in earlier vs. later periods (1968-1990 and 1990-2015). There are two main parts of our analysis.

The first examines the mechanisms driving increases in spouses’ economic homogamy. We analyze the extent to which changes in spouses’ earnings homogamy are driven by changes in homogamy before and after parenthood. In addition, we estimate the extent to which changes in earnings homogamy before parenthood are driven by changes in assortative mating or changes within marriage but before parenthood, and whether women’s employment drives changes in economic homogamy across these stages. In this section, we also discuss how changes in fertility rates and in timing and selection into parenthood may have contributed to economic homogamy trends.

The second part examines the implications of these results for aggregate-level family income inequality. We decompose the contribution of economic homogamy to income inequality into parts due to changes in economic homogamy before and after parenthood, and disaggregate the portion in each of these parts that is driven by changes in women’s employment.
Building on past literature, we have the following expectations about the drivers of changes in couples’ economic homogamy between 1968 and 2015. (1) We expect that changes in spouses’ economic similarity after parenthood will play a major role in explaining increases in couples’ economic homogamy, and they will be largely driven by changes in women’s employment. (2) We expect that changes in spouses’ economic similarity before parenthood will play a smaller role in explaining increases in couples’ economic homogamy, and that these changes will be driven more by shifts in women’s employment patterns between the start of marriage and parenthood and less by changes in assortative mating as measured at the start of marriage. If our expectations are correct, we will find that changes in how parenthood shapes women’s economic contributions to families are a key driver of the contribution of economic homogamy to inequality across families.

METHOD

Data, Samples, and Measures

As shown in Table 1, we use data from three different surveys to conduct our analyses: the 1968-2015 March Current Population Surveys (CPS), the 1960, 1970, and 1980 U.S. decennial censuses (Ruggles et al. 2010), and the 1984-2014 Survey of Income and Program Participation (SIPP) (U.S. Census Bureau 2015). The CPS is our primary data source for examining trends in economic homogamy before and after parenthood. It is a cross-sectional household survey that has been extensively used to study changes in inequality in the United States. It is well-suited to our analysis because it has large samples, includes earnings information on both partners, and is consistent across a long span of time. The CPS includes
information on age of the oldest child in the household, which we use to proxy the timing of entry into parenthood.

Most of our CPS analyses rely on a sample of married couples in which wives are age 45 and younger and have an oldest child between the ages 0 to 10 (N = 333,455 couples). The CPS records annual earning measures from the previous year, which means that the earnings reported by couples with a newborn correspond to earnings in the year prior to childbirth. We leverage this feature and use couples’ earnings from the year prior to childbirth to measure *pre-birth homogamy* and couples in the 10 years after parenthood to measure *post-birth homogamy*.

The CPS data do not allow us to pinpoint the timing of earnings relative to parenthood for couples going further back than one year prior to first birth. One way to expand the pre-birth homogamy measure with CPS data, however, is to include all married childless couples (see last row in Table 1). This sensitivity test expands the measurement window of earnings to more than just the year prior to birth, in which earnings could be affected by pregnancy, and also tests the sensitivity of our results to changes in selection into parenthood, given that some of those couples will transition to parenthood in subsequent years, and others will not. In other sensitivity analyses we also expand the measurement window of post-birth homogamy to include couples with an eldest own child age 0 to 18 years old. The main sample is restricted to young parents to minimize the inclusion of re-partnered couples, attrition due to divorce, and older couples with children out of the household and thus not reported on the CPS roster.

Another limitation of the CPS is that, because date of marriage is not available, it cannot be used to assess changes in economic homogamy at the start of marriage or between marriage and parenthood. To overcome this, we supplement our analysis using the Census and the SIPP for our analyses of the pre-birth phase. As shown in Table 1, we use the Census for the earlier
period (1960, 1970, and 1980, after which marriage dates are no longer available) and the SIPP for the later period (1984-2014). The Census (N = 445,336 couples) and SIPP (N = 56,869 couples) samples are comprised of married childless couples with wives ages 45 and below, i.e., couples in their first year of marriage and the years that follow as long as they do not have a child. We use couples’ earnings in their first year of marriage to measure *assortative mating*, and couples’ earnings in the years after marriage but before parenthood to measure *married, childless homogamy*. Unlike the annual CPS and SIPP data, Census data is only available once per decade, and we use linear interpolation for trends in the intervening years. Appendix Table S1 shows sample sizes and key descriptive statistics for each dataset.

To measure economic homogamy, we use spouses’ *annual earnings* and the *correlation* coefficient as a measure of the association between spouses’ earnings. The correlation is a useful summary measure that can be easily incorporated into our analysis of inequality. Other measures of association from log-linear models show trends similar to those presented here (see Online Appendix Figure S1). Annual earnings are adjusted for inflation to 2012 dollars using the consumer price index (CPI-U) (Crawford and Church 2014) and top-coded consistently across all years to avoid measures of inequality and homogamy being affected by changes in surveys’ top-coding schemes. We follow Burkhauser et al. (2004) and impose a top-code equal to the maximum percentage of the husband/wife sample with top-coded earnings in the March CPS in each year; a maximum of 3% of husbands had their earnings top-coded, whereas <1% of wives’ earnings were top-coded. *Women’s employment* is measured as *non-zero annual earnings*. This counts any part-time or part-year employment as employment, meaning that not employed indicates substantial detachment from the labor force.

**Decomposition Methods**
We use decomposition methods to analyze changes in couples’ earnings homogamy between 1968 and 2015 and to estimate their contribution to family income inequality. We conduct three analyses: (1) a decomposition of economic homogamy into parts due to changes in economic homogamy at different family junctures (i.e., before and after parenthood using the CPS; at the start of marriage and between marriage and childbirth using the Census and the SIPP), (2) an analysis of the contribution of women’s employment to changes in economic homogamy before and after parenthood, and (3) an analysis of the contribution of changes in economic homogamy to family income inequality. Table 1 Column E provides a summary of these analyses.

Trends in economic homogamy. The decomposition of trends in economic homogamy follows prior work on this topic (Gonalons-Pons and Schwartz 2017) that adapts classic methods for decomposing change in correlation trends into parts due to differences in rates and differences in composition (Kitagawa 1955). This method generates counterfactual correlation trends that estimate the contribution of changes in earnings correlations among given population subgroups to overall changes in economic homogamy. In our analysis, the population subgroups are defined by the timing of marriage and parenthood. This method is first used to decompose overall trends in economic similarity into parts due to changes before and after parenthood using the CPS, and then to further decompose trends in economic similarity before parenthood into parts due to changes in assortative mating and changes following marriage but before parenthood with the Census and the SIPP. We briefly summarize below how this method works and refer to Gonalons-Pons and Schwartz (2017) for more details.

The first step is to construct a dataset with earnings correlations by year and time since birth and reconstruct the period correlation trend estimated from individual-level data as the
weighted average of earnings correlations among couples from different first birth cohorts. The correlation for 1968, for instance, is estimated as the weighted average of post-birth earnings correlations for couples with children ages 0-10 in 1968 (these are couples who had a first birth between 1958-1968) and pre-birth earnings correlations for couples who had a first birth in 1969. Next, we simulate counterfactual trends holding constant key components of interest. The first simulation constrains pre-birth homogamy to remain constant between 1968 and 2015, i.e., we assign 1969 pre-birth correlation values to all birth cohorts that follow the 1969 cohort and leave post-birth correlation trajectories to evolve as observed. This estimates what trends in the correlation would have been if earnings associations before parenthood had not changed over this period. The second simulation constrains pre-birth and post-birth homogamy to remain at the 1969 birth cohort levels, i.e., we assign all couples who had a birth between 1969 and 2015 the pre- and post-birth correlation values of couples who had their first birth in 1969. This estimates what trends in the correlation would have been if earnings association before and after parenthood had not changed over this period. The part of the trend that remains after these two simulations is the result of two factors: (1) compositional changes in the distribution of couples by time since birth among couples with births in 1968 or after (the time period of the CPS data series) and (2) differences in earnings correlations among couples who had already had children when the CPS data series begins and who contribute to earnings correlation estimates until 1978.

Below are the equations for the correlation trend and the first simulation (Online Supplement Table S2 summarizes equations for all simulations in the analyses):

\[ \tilde{r}_t = \sum_i r_{it}w_{ti} \quad \text{where } i = -1 \text{ to } 10 \]  
(1)

\[ r'_t = \sum_i r'_{it}w_{ti} \quad \text{where } i = -1 \text{ to } 10 \]  
(2)
where \( r \) is the correlation between spouses’ earnings, \( t \) is year, \( i \) is the time since first birth in years, and \( w \) is the proportion of couples at time \( i \) in year \( t \). In equation (1) \( \tilde{r}_t \) reconstructs the cross-sectional correlation trend as a weighted average of correlation coefficients across groups. In equation (2) \( r'_t \) estimates the counterfactual correlation trend that would be observed if earnings associations before parenthood had not changed since 1968 (or since the 1969 first birth cohort); \( r'_{c|t} \) is obtained from a cohort-to-period transformation where all first birth cohorts have the 1969 cohort pre-birth correlations and their own post-birth correlation trajectories, or \( r'_{c|t} = r_{1969,1} + (r_{c|t} - r_{c|1}) \) where \( c \) is cohort and \( c > 1969 \), else \( r'_{c|t} = r_{c|t} \). This method is also applied to the decomposition of trends in pre-birth homogamy into parts due to changes in assortative mating and changes in homogamy after marriage but before parenthood, switching parenthood cohort for marriage cohort.

Role of women’s employment. One important limitation of the correlation decomposition above is that it does not identify the extent to which changes in the correlation are driven by shifts in women’s employment, because we cannot calculate separate correlations for the group of couples in which wives work versus do not work, given that all nonworking wives have zero earnings. We solve this problem by using a re-weighting method that identifies the role of women’s employment in driving changes in earnings correlations before and after parenthood. This re-weighting method has been most extensively employed in research on income inequality (DiNardo, Fortin, and Lemieux 1996; Lemieux 2002) and is based on a re-weighting factor that yields counterfactual estimates for any distributional statistic showing the value that would have prevailed if the distribution according to any given categorical variable \( x \) had been fixed at a given period (Lemieux 2002; Daly and Valletta 2006). We apply this approach to estimate counterfactual correlations that would have prevailed if patterns of women’s employment had
not changed since 1968. Following prior research, we stratify changes in women’s employment by husband’s earnings decile to account for shifts in the association between husbands’ earnings and wives’ employment (Schwartz 2010).

The first step in this analysis requires using the individual-level dataset and dividing the sample by women’s employment status (employed vs. not employed) and husbands’ earnings decile, resulting in a 2 x 10 cell table for each year and time since birth. If we let $\theta_{jty}$ be the proportion of sample in cell $j$ in time since birth $t$ and year $y$ we can calculate the reweighting factor, $\psi_{jt} = \theta_{jt1968}/\theta_{jty}$. Applied to individual-level data this can be written as:

$$\psi_{ijt} = \frac{\sum_j x_{ijty} \theta_{jt1968}}{\theta_{jty}}$$

(3)

where $x_{ijty}$ are dummy variables identifying $J$ cells and $\psi_{ijt}$ is an individual-level re-weighting factor that assigns to each observation the 1968 to period $y$ ratio of the sample proportions of the cell to which it belongs. For instance, if only 20% of women married to top-decile earning men were employed the year before birth in 1968 and this increased to 60% by year 2000, the re-weighting factor for employed women married to top-decile earning men in 2000 would equal $.2/.6$ and the factor for non-employed women married to top-decile income men would be $.8/.4$, thus deflating the observations with working wives and inflating those of non-working wives to match the 1968 distribution. Online Supplement Table S2 Panel B summarizes how these equations are employed for analyses of women’s employment as drivers of pre- and post-birth correlations, respectively.

We multiply the re-weighting factors by the sample probability weights and obtain new analysis weights, and we re-calculate all correlations for each year and time since birth using these re-weights. Following the example above, this analysis estimates the pre-birth correlation that would have prevailed in 2000 if women’s employment by husbands’ decile was the same as
in 1968. The difference between the observed pre-birth correlation and the re-weighted pre-birth correlation estimates the contribution of changes in women’s employment to shifts in pre-birth correlations. The residual changes in the correlation remaining after adjusting for women’s employment reflect changes in earnings correlations driven by other factors, including changes in women’s employment on the intensive margin (number of months and hours worked in any given year), women’s wages, and men’s employment and wages.

*Contribution to family income inequality.* The final analysis examines the contribution of changes in economic homogamy before and after parenthood to changes in family income inequality. Following prior literature, we use a standard decomposition of the coefficient of variation (CV) to estimate the contribution of changes in earnings correlations to changes in income inequality (see Cancian et al. 1993 for more details).¹ This analysis uses the simulated correlation trends estimated using the methods described above and calculates how inequality would have evolved under four counterfactual scenarios: 1) if women’s employment before birth had not changed since 1968, 2) if earnings correlations before birth had not changed since 1968, 3) if women’s employment before and after birth had not changed since 1968, and 4) if earnings correlations before and after birth had not changed since 1968. The difference between the observed and counterfactual inequality trends is an estimate of the contribution of each component to changes in inequality. For instance, the difference between the observed inequality trend and the first simulated trend (when women’s employment before birth is fixed at 1968

¹ The CV can be decomposed into three parts: (1) husbands’ and wives’ earnings inequality, (2) husbands’ and wives’ share of total earnings, and (3) the correlation between their earnings: \( CV^2 = S^2_{th} CV^2_{th} + S^2_{tw} CV^2_{tw} + 2 \tau_t S_{th} S_{tw} CV_{th} CV_{tw} \), where \( CV_{th} \) and \( CV_{tw} \) are the coefficient of variation for husbands’ and wives’ earnings respectively, \( S_{th} \) and \( S_{tw} \) are their respective shares of total family earnings, and \( \tau_t \) is the correlation between their earnings. Substituting any component in this equation (e.g., the correlation) produces a counterfactual inequality trend. The difference between the observed and the counterfactual inequality trends is an estimate of the contribution of the substituted component to changes in inequality.
levels), estimates the contribution of changes in women’s employment before birth to increases in family income inequality.

RESULTS

Trends in Earnings Homogamy Before and After Parenthood

Figure 1 shows trends in the correlation between husbands’ and wives’ earnings before parenthood, after parenthood, and at the time of marriage by data source from 1960-2015. It shows that earnings associations are higher before parenthood and lower after parenthood. This is in line with research indicating that parenthood is a crucial event that shifts wives’ economic contributions and lowers couples’ earnings similarity (e.g., Baxter, Hewitt, and Haynes 2008; Musick, Bea, and Gonalons-Pons 2020). Both the CPS and Census show that post-birth earnings correlations notably increased since the 1970s, from about -0.1 to about 0.2. This is consistent with our hypothesis that declining parenthood penalties on women’s employment and earnings are contributing to increase spouses’ economic similarity.

We find that economic similarity before the transition to parenthood also increased, but only during the first half of this period. CPS, Census, and SIPP data indicate that pre-birth earnings correlations increased from about 0.1 in 1968 to about 0.2 in 1990, remaining flat thereafter. This pre-birth correlation trend is replicated using the alternative specification that includes all childless married couples (versus earnings in the year prior to birth, which could be affected by pregnancy; see Online Appendix Figure S2). Last, consistent with prior findings (Gonalons-Pons and Schwartz 2017), we find little evidence that economic similarity among newlyweds has changed since the 1960s.
Taken together, these descriptive patterns suggest that parenthood is likely to be a crucial mechanism explaining the increase in spouses’ economic homogamy. However, these patterns also suggest that changes in economic similarity before parenthood have played a role, particularly in the earlier period, and that these early changes are more likely related to shifts in economic similarity after marriage than at the start of marriage.

Correlation Decomposition by Parenthood

We start by reporting the results of a decomposition that estimates the extent to which changes in earnings correlations are driven by changes before and after parenthood. In this analysis, the first simulation fixes the correlation before parenthood to be constant at the 1969 first birth cohort values for all cohorts and leaves post-birth correlations to vary as observed. The second simulation fixes the correlations before and after birth to be constant at the 1969 cohort values. The difference between changes in the observed trend and changes in the first simulated trend estimates the contribution of changes in pre-birth correlations to overall changes in economic homogamy, whereas the difference between changes in the first and second simulated trends estimates the contribution of changes in post-birth correlations to overall changes in economic homogamy. The change in the correlation trend that remains after these simulations reflects compositional changes due to shifts in the distribution of couples by time since birth and due to differences in earnings correlations among couples who already have children when the CPS time series starts (pre-1969 birth cohorts). In Online Supplement Table S3 we present results disaggregating these two components of the composition component as part of an assessment of the influence of changes in fertility rates discussed further below.
Panel A of Table 2 presents results for this decomposition and shows that between 1968 and 2015, 54% of the increase in the correlation between spouses’ earnings was driven by changes in couples’ similarity before birth and 44% was due to changes after birth. The change in the correlation trend that remains after these simulations amounts to 2%, indicating that the influence of compositional shifts and differences in the correlation among couples who already were parents in 1968 is small. These results indicate that couples’ increasing similarity after parenthood is an important component of the overall increase in spouses’ economic similarity between 1968 and 2015, but the role it plays is smaller than we anticipated based on prior research’s emphasis on parenthood as a key turning point in women’s employment and earnings. This finding is, however, consistent with descriptive patterns presented in Figure 1 showing increase in earnings correlation before birth between 1968 and 1990.

We further disaggregate this decomposition into two periods: change between 1968-1990 and between 1990-2015. Panels B and C of Table 2 summarize the results. These indicate that the drivers of increasing economic homogamy are markedly different in the first and second periods. In the first period from 1968 to 1990, changes in pre-birth correlations account for 57% and changes in post-birth correlations account for 33% of the increase in spouses’ economic homogamy. In the second period from 1990 to 2015, changes in post-birth earnings correlations account for 94% of the increase in economic similarity, and changes in pre-birth earnings correlations play no role. Thus, changes in pre-birth homogamy contribute substantially, but only in the years prior to 1990, whereas changes in post-birth homogamy contribute in both periods and explain the vast majority of increases in economic homogamy after 1990. Shifts in economic responses to parenthood have become an increasingly important mechanism of economic
homogamy, bolstering support for our expectation that changes in the transition to parenthood would play a critical role in increasing economic homogamy.

How sensitive are these results to alternative specifications? In additional analyses reported in Online Supplement Tables S4-S10 we examine the robustness of our findings using alternative measures of pre- and post-birth homogamy. Using the alternative pre-birth homogamy measure that includes all childless couples addresses the possibility that changes in fertility rates as well as changes in timing and selection into parenthood might contribute to changes in economic homogamy, and it expands the window of measuring earnings to more than just one year prior to birth, when earnings could be affected by pregnancy. The results show that our findings are robust to this alternative measure of pre-birth homogamy, indicating that increases in economic homogamy in the year before birth reflect shifts among married childless couples more generally rather than reflecting changes pertaining only to couples in the year before birth (see Tables S4-S6). These results also indicate that changes in selection into parenthood do not play a substantial role driving economic homogamy, given no systematic differences between the contribution of changes among childless couples and changes among couples in the year before birth. This is consistent with descriptive trends presented in Figure S2, showing that the trend in economic similarity among married childless couples follows closely the trend for couples in the year prior to their first birth\textsuperscript{2}. These analyses provide some evidence that declining fertility contributed to increasing economic homogamy in the first period, because

\[2\] Supplementary descriptive analyses using SIPP and PSID data to capture couples up to 5 years before parenthood and compare their earnings correlations to those of couples who are never observed transitioning to parenthood also confirm this result and show no systematic differences between these two groups. Supplementary decomposition results using the CPS sample to decompose the trend in pre-birth homogamy into parts due to changes among couples for whom we do not observe the transition to parenthood and changes among couples in the year before birth also confirm that their contribution to changes are virtually the same. Consistent with the descriptive trends, these results show no systematic differences in homogamy trends between childless couples and couples about to become parents. Both of these supplementary analyses are available upon request.
the contribution related to changes in the distribution of couples by time since birth is larger when childless couples are added to the sample (compare the composition component in Tables S3 and S4), but the magnitude is small.

Analyses using the alternative post-birth homogamy measure that includes couples up to 18 years after first birth are also consistent with our main findings (see Tables S7-S8). Results are also robust to shortening the window of observation for post-birth homogamy, keeping only couples up to 5 years after parenthood (see Tables S9-S10). Overall, pre- and post-birth contributions to overall increases in economic homogamy are similar using these alternative measures, indicating that our main results reflect patterns that apply to a broader sample of couples.

Disaggregating Changes Before Parenthood

We turn to the 1960-1980 Censuses and 1984-2014 SIPP to consider two drivers of the increase in spouses’ earnings correlations before parenthood: a) increases in assortative mating, which suggests rising economic similarity at the point of marriage, and b) increases in pre-birth homogamy resulting from shifts in economic adjustments following marriage but before parenthood, as suggested in research reporting a declining negative effect of marriage on women’s employment (Goldin 1988; Ruggles 2015). Descriptive trends in Figure 1 showed that our indicator of assortative mating, i.e., economic similarity among newlyweds, stayed remarkably flat over this period, suggesting little support for assortative mating as an explanation for pre-birth earnings homogamy. We test this more directly using the same decomposition method as above, now decomposing changes in pre-birth correlations into parts due to shifts in
the correlation among newlyweds and shifts in the correlation in the years after marriage and before parenthood.

Panel A of Table 3 shows Census results covering the period between 1960-1980 and Panel B shows SIPP results covering years 1984-2014. We find that changes in earnings similarity among newlyweds, our measure of assortative mating, do not contribute to observed increases in earnings correlations among married childless couples in either period. Our results indicate instead that increases in economic homogamy before birth are driven by changes following marriage but before parenthood. The next section will directly test whether these changes are related to shifts in women’s employment, as previous research suggests.

Role of Employment in Changes Pre- and Post-Birth

This section turns back to the CPS data to assesses the extent to which changes in women’s employment explain changes in economic homogamy before and after parenthood, applying the re-weighting method described in equation 3 above. Table 4 shows that shifts in women’s employment have played an important role in increases in spouses’ economic homogamy before and after parenthood. Panel A of Table 4 reports results for pre-birth homogamy trends. Consistent with findings so far, we observe that pre-birth homogamy increased only in the first period, stalling after 1990. We find that changes in women’s employment account for the entirety of the increase in pre-birth economic homogamy, including 114% for the overall period and 92% in the first period. This lends substantial support to the

---

3 Recall that estimates of change in pre-birth correlations from Tables 3 and 4 do not exactly match because we are using different datasets with slightly different start and end dates. For the earlier period, Table 3 Census data shows that pre-birth correlations between 1960-1980 increased in 0.046 points and Table 4 CPS data shows that pre-birth correlations between 1968-1990 increased in 0.086 points. For the later period, SIPP data shows that between 1984-2014 pre-birth correlations slightly increased in 0.005 and Table 4 CPS data shows that between 1990-2015 pre-birth correlation actually slightly decreased -0.017. The main takeaway is that change in pre-birth correlation is substantial only in the earlier period.
expectation that declining negative effects of marriage on women’s employment are an important part of the story behind increasing economic similarity before parenthood, particularly in combination with results in Table 3 showing that newlyweds did not contribute to this increase. The remaining increase in pre-birth economic homogamy after adjusting for women’s employment, what we term the residual, can reflect shifts in the correlation related to women’s wages and employment on the intensive margin (weeks and hours worked), men’s wages and employment, and assortative mating. For example, as women became less likely to entirely quit jobs upon marriage, they may also have become less likely to reduce work hours or downgrade job positions, thus contributing to increasing earnings similarity before parenthood.

Panel B of Table 4 shows results for the contribution of women’s employment to increases in economic homogamy after parenthood. The results confirm that changes in women’s employment are also an important driver of increasing earnings correlation after parenthood in both periods. Changes in women’s employment after first births accounts for 65% of the overall change in post-birth economic homogamy 1968-2015, and 63% and 46% in periods 1968-1990 and 1990-2015 respectively. These results are consistent with research reporting substantial reductions in the negative effects of parenthood on women’s employment (Byker 2015; Musick, Gonalons-Pons, and Schwartz 2017; Juhn and McCue 2017). These results also indicate that the role of changes in women’s employment as a driver of post-birth earnings correlations is declining over time.

The decline in the role of women’s employment as a mechanism of increases in post-birth homogamy (or conversely, the increasing role of the residual—weeks and hours worked, men’s earnings, or assortative mating) indicates that complete detachment from the labor market is playing a smaller role in recent years, consistent with prior studies (Killewald and Zhuo 2015).
This result does not imply that \textit{all} changes in women’s labor supply are playing a smaller role. Recall that our measure of employment only captures non-zero annual earnings. All other changes in labor supply, e.g., in annual weeks and hours of work, are captured in the residual, and these may be important drivers of changes in post-birth homogamy in the recent period.

The increasing importance of the residual may thus be due to longer hours or full-year effort; it may also be due to wages, as women are also becoming less likely to downgrade to lower paying jobs following parenthood. Research on the motherhood wage penalty offers some support here, showing that motherhood wage gaps may have declined over time (Pal and Waldfogel 2016; Glauber 2018). Changes in men’s earnings following parenthood could further lead to increases in post-birth economic similarity captured in the residual. This could be the case if men were becoming increasingly likely to take time off, reduce work hours, or change jobs to accommodate the needs of parenthood. Sensitivity analyses that adjust for the distribution for men’s employment (instead of women’s employment), however, find little support for this explanation, consistent with recent research (Musick, Gonalons-Pons, and Schwartz 2017).

Consequences for Family Income Inequality

Our analyses confirm that growing economic homogamy is increasingly driven by changes in spouses’ economic similarity after parenthood. What do these patterns imply for inequality across families? We turn to the decomposition of the coefficient of variation (CV) to estimate how changes in earnings correlations shape income inequality. We use simulated correlation trends from Table 4 to show the contribution of four drivers of interest: changes in women’s employment before birth, changes in earnings correlation before birth net of changes in
women’s employment, changes in women’s employment after birth, and changes in earnings correlations after birth net of changes in women’s employment.

Figure 2 summarizes the results of this analysis for the entire period as well as for the earlier and later periods, 1968-1990 and 1990-2015. The top panel shows the contribution of changes in economic homogamy to aggregate-level changes in income inequality, and the bottom panel shows the drivers of change in economic homogamy. Full decomposition tables are available in the Online Appendix Table S11. We find that income inequality as measured by the CV increased by .24 points between 1968 and 2015, and that changes in spouses’ earnings correlation account for 31% of this increase, aligning with previous published results (Gonalons-Pons and Schwartz 2017; Schwartz 2010).

Changes in economic similarity before parenthood accounts for 45% of the contribution of the correlation to increases in inequality from 1968-2015, and this increase is entirely due to shifts in women’s employment. Increasing economic similarity after parenthood accounts for 53%, and over half of this contribution is due to shifts in women’s employment. Disaggregating results for the two periods 1968-1990 and 1990-2015 reinforces patterns reported above, i.e., that changes in economic homogamy after parenthood has increased in the more recent period.

Increases in economic similarity before parenthood are an important driver of the contribution of the correlation to increasing inequality between 1968 and 1990, whereas increasing economic similarity after parenthood is virtually the sole driver of changes in the correlation after 1990 and its contribution to increased income inequality. In sum, these results confirm that the transition to parenthood is becoming the primary driver of increased economic homogamy and its impact on rising inequality.
DISCUSSION

This paper examines the mechanisms of increased economic homogamy among married couples in the U.S. and their implications for economic inequality across households. Our focus has been to analyze parenthood as a key mechanism driving trends in spouses’ economic resemblance. We hypothesized that the declining negative effects of parenthood on women’s economic contributions, in particular through employment, would play a central role in increasing spouses’ earning similarity. We assessed this mechanism alongside others, such as assortative mating and the declining effects of marriage on women’s employment. Our results have corroborated that changes following parenthood have played a central role in increasing spouses’ economic homogamy in the U.S., particularly since the 1990s. The analyses have also revealed that shifts in the relationship between marriage and women’s employment played a pivotal role in the earlier period; a finding that, although consistent with historical research on women’s employment (Goldin 1988; Kessler-Harris 1982), was somewhat unexpected given the lack of recent studies pointing to this possibility. Taken together, the results reinforce the argument that shifts in the relationship between women’s employment and key family transitions (marriage, parenthood) are central to understanding increasing economic homogamy, while assortative mating on earnings has played a negligible role.

Our study thus adds to the growing body of research that challenges assortative mating as the primary explanation for increasing economic homogamy. Although assortative mating has been the dominant frame in prior work studying couples’ homogamy and its implications for inequality, recent studies raised serious questions about its explanatory power and point to changes in women’s employment and shifts in the division of paid labor among married couples as a crucially underappreciated mechanism (Breen and Salazar 2011; Greenwood et al. 2014;
Gonalons-Pons and Schwartz 2017). Our study contributes to this body of research in two important ways. First, we quantify the contribution of observed changes in women’s employment over the life course to shifts in spouses’ economic homogamy. These estimates underscore how changes in women’s employment are heavily patterned by key family transitions. Second, by separately analyzing earlier and later periods, we illustrate how the mechanisms driving changes in economic homogamy have changed over time. We show that increases in spouses’ economic homogamy prior to birth were important in the earlier period, but that changes following the transition to parenthood have become the primary driver of increases in spouses’ economic homogamy.

Although prior literature has documented a decline in the association between marriage and employment (Goldin 1988; Kessler-Harris 1982), there has been little discussion about this shift in the literature on assortative mating, economic homogamy, and inequality. We uncover novel evidence about how changes in the points at which women’s labor supply is affected by family events contribute to couples’ earnings similarity and family income inequality. It was once common for women to drop out of the labor force soon after marriage. Thus, from 1968-1990, as this effect was ebbing, spouses’ economic similarity after marriage but before parenthood notably increased, leading to increased economic homogamy. After this effect waned, parenthood became the primary contributor to increasing economic homogamy.

Women’s growing labor market attachment after parenthood can be seen in parallel with other economic changes, such as increased wages and work hours. By following women through these three key family transitions – marriage, post-marriage/pre-birth, and post-birth – we have been able to track where and when shifts have occurred. We not only show that changes in parenthood are a key driver in increasing economic homogamy, but we also uncover something that past
literature has focused much less on – the role of smaller marriage penalties on women’s employment.

Our findings have several implications for future research and for debates about economic homogamy and its implications for income inequality. We find that increased economic homogamy has not been driven by changes in assortative mating, but rather changes in the division of paid work—in particular, increases in women’s paid labor. These increases were once driven by reductions in the tendency for women to drop out of the labor force upon marriage prior to parenthood, but since 1990s have been driven by reductions in the tendency for women to drop out of the labor force after parenthood. About 15% of increased income inequality across families can be attributed to shifts in economic homogamy due to changes in women’s employment before and after parenthood. Furthermore, prior research shows that changes in economic homogamy during marriage (Gonalons-Pons and Schwartz 2017) and after parenthood (Musick et al. 2017) have been fairly similar by SES, indicating that this dis-equalizing effect is not simply the result of higher-income couples becoming more homogamous.

Although these findings might raise concerns about the unintended dis-equalizing effects of progress towards an egalitarian division of paid labor, it is important to note that this dis-equalizing contribution is small compared to the much larger dis-equalizing force of growing wage inequality, particularly among men. Our results are consistent with research showing that men’s earnings continue to be the primary driver of growing income inequality across households (Sudo 2017; Harkness 2013). Thus, effective interventions to reduce family income inequality should focus on the drivers of inequality in men’s earnings (or directly on family income, via taxation). This could include policies that encourage men’s involvement in family care, reducing men’s hours of work and the likelihood of overwork following childbirth. Outside
the U.S., these policies include parental leave months reserved for fathers and work hours
regulations that limit overwork (Gornick and Meyers 2003; Rege and Solli 2013). Policies like
universal paid parental leave or childcare could also help reduce inequality by supporting
continuity in women’s earnings in lower- and middle-income households (Hook and Paek 2020).

Our analyses have some limitations that are important to note. First, in relying on
multiple datasets to conduct our analysis, we are vulnerable to various forms of measurement
error. We sought to address this limitation by benchmarking estimates across datasets and
examining the sensitivity of our conclusions to alternative specifications of key measures.
Second, our measure of women’s employment only identifies changes in annual non-
employment spells, and does not capture how shorter-term employment changes shape spouses’
economic similarity. This is an important limitation given the prevalence of short-time
employment interruptions around parenthood (Byker 2015; Musick, Gonalons-Pons, and
Schwartz 2017; Lu, Wang, and Han 2017). We anticipate that including short-time employment
changes would accentuate the contribution of shifts in women’s employment to economic
homogamy, particularly in the later period. Finally, our sample is restricted to married couples
and does not include cohabiting couples, which comprise a growing yet still small share of
households (Musick and Michelmore 2015; Kennedy and Bumpass 2008). This exclusion is
related to limitations in our data that pose challenges to identifying transitions to parenthood
among cohabiting couples in earlier decades.

Our focus on married couples raises the question of implications for the broader
population. Because married-parent families continue to comprise a significant share of all
families with children (Census Bureau 2010), changes among these families have the potential to
substantially shape economic inequality. Further, the mechanisms we focus on here are
potentially important for other family forms. The link between employment patterns and inequality is relevant for all families, and the link between economic homogamy and inequality has direct applicability to cohabiting couples. Prior studies on economic homogamy that include cohabiting couples find that the results are not substantially altered (Schwartz 2010). That said, it is less clear how large the impact of parenthood-related shifts in economic homogamy and employment on inequality might be in the broader population of families, and how their magnitude compares to other well-known mechanisms that have contributed to increasing inequality across families, such as the growth in single-parent and unmarried families (McLanahan and Percheski 2008). Future research should examine how shifts in family composition as well as economic dynamics within families shape economic inequality.

Our analysis shows that changes in economic homogamy are intimately linked to family transitions and to women’s employment responses to these family transitions. We show that family processes and shifts in the economic organization of families are crucial to understanding how partnering, childbearing, and dividing work shapes inequality.
REFERENCES


TABLES AND FIGURES

Table 1. Summary of datasets and analyses

<table>
<thead>
<tr>
<th>A. Dataset</th>
<th>B. Period</th>
<th>C. Measures</th>
<th>D. Operationalization</th>
<th>E. Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPS</td>
<td>1968-2015</td>
<td>Pre-birth</td>
<td>Year before parenthood</td>
<td>• <em>Decomposition of trends in economic homogamy</em> into changes before and after parenthood</td>
</tr>
<tr>
<td></td>
<td>1968-1990</td>
<td></td>
<td></td>
<td>• <em>Contribution of women's employment</em> to changes in economic homogamy before and after parenthood</td>
</tr>
<tr>
<td></td>
<td>1990-2015</td>
<td>Post-birth</td>
<td>Years 0-10 after parenthood</td>
<td>• <em>Contribution to income inequality</em> of changes in economic homogamy before and after parenthood</td>
</tr>
<tr>
<td>Census</td>
<td>1960-1980</td>
<td>Assortative mating</td>
<td>Year of marriage</td>
<td>• <em>Decomposition of trends in pre-birth economic homogamy</em> into changes at marriage and after marriage before parenthood</td>
</tr>
<tr>
<td>SIPP</td>
<td>1984-2014</td>
<td>Assortative mating</td>
<td>Year of marriage</td>
<td>• <em>Decomposition of trends in pre-birth economic homogamy</em> into changes at marriage and after marriage before parenthood</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Married, childless</td>
<td>Childless married</td>
<td></td>
</tr>
</tbody>
</table>

Sensitivity tests

<table>
<thead>
<tr>
<th>A. Dataset</th>
<th>B. Period</th>
<th>C. Measures</th>
<th>D. Operationalization</th>
<th>E. Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPS</td>
<td>1968-2015</td>
<td>Pre-birth</td>
<td>Childless married</td>
<td>• <em>Decomposition of economic homogamy</em> before and after parenthood</td>
</tr>
<tr>
<td>alternative</td>
<td>1968-1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>measures</td>
<td>1990-2015</td>
<td>Post-birth</td>
<td>Years 0-18 after parenthood</td>
<td></td>
</tr>
</tbody>
</table>

• Pre-birth
• Year before parenthood
• Post-birth
• Years 0-10 after parenthood
• Sensitivity tests

37
Table 2. Decomposition of trends in the correlation between husbands’ and wives’ earnings by parenthood, CPS 1968-2015

<table>
<thead>
<tr>
<th>Decomposition</th>
<th>Change</th>
<th>Explained change</th>
<th>% Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. 1968 - 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.262</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-birth fixed</td>
<td>0.121</td>
<td>0.140</td>
<td>53.6</td>
</tr>
<tr>
<td>Post-birth fixed</td>
<td>0.006</td>
<td>0.116</td>
<td>44.2</td>
</tr>
<tr>
<td>Composition + pre-1969 cohort fixed</td>
<td>0.000</td>
<td>0.006</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>0.262</td>
<td>100</td>
</tr>
<tr>
<td><strong>B. 1968 - 1990</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.155</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-birth fixed</td>
<td>0.066</td>
<td>0.089</td>
<td>57.6</td>
</tr>
<tr>
<td>Post-birth fixed</td>
<td>0.015</td>
<td>0.051</td>
<td>32.9</td>
</tr>
<tr>
<td>Composition + pre-1969 cohort fixed</td>
<td>0.000</td>
<td>0.015</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>0.155</td>
<td>100</td>
</tr>
<tr>
<td><strong>C. 1990 - 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-birth fixed</td>
<td>0.111</td>
<td>-0.004</td>
<td>-3.3</td>
</tr>
<tr>
<td>Post-birth fixed</td>
<td>0.010</td>
<td>0.101</td>
<td>94.2</td>
</tr>
<tr>
<td>Composition + pre-1991 cohort fixed</td>
<td>0.000</td>
<td>0.010</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>0.107</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3. Decomposition of trends in the correlation between husbands’ and wives’ earnings before parenthood, Census 1960-1980 and SIPP 1984-2014

<table>
<thead>
<tr>
<th>Decomposition</th>
<th>Change</th>
<th>Explained change</th>
<th>% Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Census 1960 - 1980</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.046</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newlyweds fixed</td>
<td>0.065</td>
<td>-0.018</td>
<td>-39.6</td>
</tr>
<tr>
<td>Childless married fixed</td>
<td>0.012</td>
<td>0.053</td>
<td>114.0</td>
</tr>
<tr>
<td>Composition + pre-1960 cohort fixed</td>
<td>0.000</td>
<td>0.012</td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.046</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td><strong>B. SIPP 1984 - 2014</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newlyweds fixed</td>
<td>0.008</td>
<td>-0.003</td>
<td>-52.6</td>
</tr>
<tr>
<td>Childless married fixed</td>
<td>0.002</td>
<td>0.006</td>
<td>112.9</td>
</tr>
<tr>
<td>Composition + pre-1984 cohort fixed</td>
<td>0.000</td>
<td>0.002</td>
<td>39.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.005</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4. Women’s employment contributions to changes in the correlation between husbands’ and wives’ earnings before and after parenthood, CPS 1968-2015

<table>
<thead>
<tr>
<th>Decomposition</th>
<th>Change</th>
<th>Explained change</th>
<th>% Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Before parenthood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1968 - 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>-0.010</td>
<td>0.078</td>
<td>114.10</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>-0.010</td>
<td>-14.10</td>
</tr>
<tr>
<td>Total</td>
<td>0.068</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>1968 - 1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>0.006</td>
<td>0.079</td>
<td>92.66</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>0.006</td>
<td>7.34</td>
</tr>
<tr>
<td>Total</td>
<td>0.086</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>1990 - 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>-0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>-0.009</td>
<td>-0.008</td>
<td>46.63</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>-0.009</td>
<td>53.37</td>
</tr>
<tr>
<td>Total</td>
<td>-0.017</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>B. After parenthood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1968 - 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.261</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>0.091</td>
<td>0.170</td>
<td>65.02</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>0.091</td>
<td>34.98</td>
</tr>
<tr>
<td>Total</td>
<td>0.261</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>1968 - 1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>0.054</td>
<td>0.091</td>
<td>63.05</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>0.054</td>
<td>36.95</td>
</tr>
<tr>
<td>Total</td>
<td>0.145</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>1990 - 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>0.116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's employment fixed</td>
<td>0.062</td>
<td>0.054</td>
<td>46.73</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td>0.062</td>
<td>53.27</td>
</tr>
<tr>
<td>Total</td>
<td>0.116</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1. Trends in the correlation between husbands’ and wives’ earnings before parenthood, after parenthood, and at the time of marriage by data source, 1960-2015

Figure 2. Contributions of pre- and post- birth correlations to overall change in earnings inequality, CPS 1968-2015