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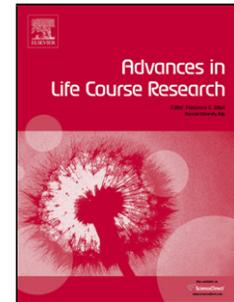
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Do women's pre-birth relative wages moderate the parenthood effect on gender inequality in working hours?

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Abstract:

Although young couples increasingly divide paid and unpaid work equally, the transition to parenthood is associated with the production of gender inequality. Given the rising prevalence of female breadwinner households in Europe, this paper assesses whether the parenthood effect on gender inequality in employment is counteracted in couples where women were the main income providers before the onset of family formation. Using longitudinal micro-data (1999-2010) from the Belgian Crossroads Bank for Social Security and the National Register, population-averaged logit models assess the effect of pre-birth relative earnings on parental employment strategies following the transition to parenthood. Results indicate that a female main earner constellation positively relates to egalitarian and female-oriented employment strategies. Although pre-birth relative earnings affect the magnitude of the negative relationship between parenthood and gender inequality in paid work, male-oriented parental employment strategies continue to occur most, even among female main earner couples. Hence, variation in pre-birth relative earnings cannot fully account for the rise in gender inequality in employment following the transition to parenthood, suggesting that cultural as well as structural factors limit parents to opt for an egalitarian employment division.

Keywords: relative resources; Belgium; childbearing; life course; labor; gender

Introduction

For the first time in European history, there are more highly educated women than men reaching the reproductive ages (Klesment & Van Bavel, 2015; Van Bavel, 2012). Due to this changing educational balance as well as the rise in unemployment in male dominated employment sectors, the prevalence of work-family constellations with female main wage earners has increased (Vitali & Mendola, 2014)¹. In line with New Home Economics (Becker, 1991) and bargaining theories (Lundberg & Pollak, 1996), increasing female education and women's wages relative to the wages of men are expected to reduce or even reverse gender specialization within households. In practice, however, women continue to perform more housework and childrearing tasks, but also less paid work in comparison to their partners (Altintas, 2009; Lachance-Grzela & Bouchard, 2010). The fact that the gender revolution is unfinished suggests that cultural and structural constraints discount the bargaining power of women (Blumberg, 1984; England, 2010; Esping-Andersen, 2009).

Former research has shown that especially the transition to parenthood encourages gender inequality by producing and strengthening a gendered division of housework and childcare as well as paid work (Baxter, Hewitt, & Haynes, 2008; Grunow, Schulz, & Blossfeld, 2012; Lundberg & Rose, 1999; Nitsche & Grunow, 2016; Nomaguchi & Milkie, 2003). As the birth of a child increases the demand for housework, childcare tasks and financial resources, it is potentially associated with a reorganization of the division of paid and unpaid labour within couples. In addition, the transition to parenthood implies that couples develop new social roles as mothers and fathers, influenced by prevailing parenting norms. This paper aims to enhance our understanding of the mechanisms of gender specialization around the transition to parenthood, looking into the effect of women's pre-birth wages relative to their partner's wages on gender equality in paid working hours after childbearing. Using longitudinal register data on Belgium for the period 1999–2010, we analyse varying impacts of the transition to parenthood on couples' division of paid working hours depending on the female partner's wage position compared to her male partner, prior to birth.

Our study extends the literature in four ways. First, we explore whether higher pre-birth wages of women relative to those of their partners can counteract the emergence of a traditional gendered division of paid working hours following the transition to parenthood.

¹ Yet, because of the persisting gender pay gap – which is related to gender segregation in educational field, sector and occupation - women's educational advantage compared to men does not automatically translate into a relative wage advantage.

Previous research has shown that larger relative wages for women compared to their partners diminish the parenthood effect on gender inequality in paid work (Begall & Grunow, 2015; Herrarte, Moral-Carcedo, & Saez, 2012; Kanji, 2011; Sanchez & Thomson, 1997; Schober, 2013). However, only a limited body of research has looked into the population-level predictions of couples' parental employment strategies by women's pre-birth wages relative to the male partner (Kühhirt, 2012). As a result, this article assesses whether female pre-birth relative wages are significantly associated to parental employment strategies, but also studies whether gender egalitarian or even female-oriented parental employment strategies are more likely than male-oriented strategies when the female partner had higher pre-birth wages compared to the male partner. Second, former research has predominantly considered the USA (Sanchez & Thomson, 1997), the UK (Kanji, 2011; Schober, 2013), the Netherlands (Begall & Grunow, 2015) and Germany (Kühhirt, 2012) which are characterized by high employment gaps between mothers and non-mothers (Boeckmann, Misra, & Budig, 2015) as well as limited family policies (USA and UK) or policies indirectly supporting women to reduce employment after childbearing (Germany and the Netherlands). Although female full-time employment is not exceptionally high, the Belgian setting provides an interesting case as it is known for low employment gaps between mothers and non-mothers, a well-developed formal childcare sector and an innovative system of subsidized household work, supporting parents' - and in particular mothers' - employment (Cukrowska-Torzewska, 2016). The relatively little structural barriers to mothers' employment could lead to larger positive effects of women's relative wages on gender equality in couples' employment in comparison to the other contexts. Third, the use of administrative panel data allows to analyse the effect of relative wages for a larger sample size and because of the quarterly information on labour market characteristics, this panel more closely approximates continuous time measurement compared to panel survey data. Fourth, earlier studies examining the parenthood effect on gender inequality in the division of paid work assessed the impact of relative resources on labour market attachment of men and women separately (Begall & Grunow, 2015; Herrarte et al., 2012; Kanji, 2011; Kühhirt, 2012; Sanchez & Thomson, 1997; Schober, 2013). In contrast, our focus on the distribution of paid work within couples fully acknowledges the couple as a unit of analysis.

Background

Couples where both partners work full-time and thus exhibit a high degree of gender equality in paid work are increasingly common. However, when these full-time dual earner couples become parents, the employment position of both partners potentially changes. Partners may continue to work the same hours or they can choose to adapt their working hours by reducing or increasing them. As a result gender differences in working hours are also potentially subject to change. We distinguish three possible parental employment strategies. First the *egalitarian employment strategy* implies that gender equality in working hours is maintained. Second, the *male-oriented employment strategy* means that the male partner works more hours than the female partner after the birth of the first child. Third, the *female-oriented employment strategy* occurs when the female partner works most hours after childbearing.

Studying the choice between these different strategies, it is generally assumed that couples behave as normative and economic rational actors, meaning that they act in a way that maximizes utility, or satisfaction. Whereas economic rationality is treated in theories of New Home Economics and household bargaining, the concept of gendered moral rationality and role performance expands the concept of rationality to, strictly speaking, non-economic areas. As individual or household behaviour does not occur in a social vacuum, we also discuss perspectives focusing on structural and cultural factors (Blossfeld & Drobnic, 2001; Buhmann, Elcherath, & Tettamanti, 2010; Schober, 2013).

Micro-economic theories of the family

The *New Home Economics theory* assumes that individuals in a household will pool their resources to achieve joint utility maximization (Becker, 1991). To reach an efficient task division, each household member typically specializes in paid or domestic work, depending on the comparative advantages of the partners. With respect to relative wages, the partner with the lowest wage potential within a couple is more likely to disinvest in his or her labour market career in order to increase productivity in household production activities such as housework and child rearing. *Bargaining theories* on the other hand assume that partners will try to maximize their individual utilities (Lundberg & Pollak, 1996). Housework is considered an unpleasant task and the division of household tasks takes the form of bargaining (Blood & Wolfe, 1960; Brines, 1993). The partner who has the best negotiation position – based on relative resources such as educational credentials, occupational status or wage – will bargain for less involvement in household chores, which indirectly implies that he or she takes up a

larger role in paid work. Hence, both micro-economic and bargaining theories predict that the partner with the highest pre-birth wage will take up a larger role in paid work following the transition to parenthood, because of joint utility maximization on the one hand and individual negotiation positions on the other (Jacob & Kleinert, 2014).

Structural factors

Structural factors also shape the context in which couples make decisions (Barnes, 2015). We distinguish differential opportunity structures in the labour market and institutional factors facilitating the combination of work and family. With respect to the former, persistent gender segregation by sector and occupational class in the Belgian labour market perpetuates gender inequality in paid work. A high share of women is employed in sectors such as health and social services, education or the public sector in general. Female occupational sectors and classes are routinely characterized by a combination of lower wages and a higher degree of work-family compatibility as a result of school matching or flexible working hours and higher access to parental leave (Bygren & Duvander, 2006; Geisler & Kreyenfeld, 2011; Haas, Allard, & Hwang, 2002). As part-time work and parental leave use are less institutionalized in male-dominated sectors (European Commission, 2009), the (temporary) change from full-time to part-time working hours is less evident. While 61% of working mothers is employed part-time in Belgium, only 5% of working fathers is employed part-time (Data for 2010, Eurostat, 2016).

With respect to the compatibility of work and family, leave policies and the subsidized outsourcing of childrearing and household tasks are important institutional factors. The Belgian parental leave system provides both mothers and fathers the right to reduce their labour by 100% for three months, by 50% for six months or by 20% up to 15 months while receiving a relatively low flat rate benefit. The 20% labour reduction is the most popular one which indicates that work and family are considered as two spheres of life which can be combined (Desmet, Glorieux, & Vandeweyer, 2007; Ray, Gornick, & Schmitt, 2008). The parental leave right is individual and not transferable from one parent to the other, which is identified as an essential feature of parental leave regulation in the promotion of gender equality (Farre, 2016). However, Belgian leave policies do not seem to counter gendered parenting roles and have been labelled as ‘genderizing’ (Saxonberg, 2013). Mothers are entitled to longer periods of leave (15 weeks maternity leave) compared to fathers (10 days paternity leave) and while both parents have the right to take parental leave, only 25% of all parental leave is used by fathers in Belgium (RVA, 2012). Consequently, it are mainly

mothers who take up childcare responsibilities during the first months after birth, which tends to create or strengthen a gendered task division between parents in the following years (Kotsadam & Finseraas, 2011).

In contrast to the flexible yet genderizing parental leave policies, the possibility to outsource childrearing and household tasks in Belgium is widely considered as a major factor facilitating work-family combination for men and women (Gornick, Meyers, & Ross, 1997; Saxonberg, 2013). This is materialised in a high provision of formal childcare services. As of the early 2000s, Belgium is included in a short list of countries that meet the Barcelona childcare targets of 33 per cent enrolment for 0-2 year olds and 90 per cent for children from three to six (Population Council, 2006). In 2010, the most recent year under consideration in this study, Belgium exhibits a 36% enrolment for children aged 0 to 2 and a 99% enrolment for children aged 3 to 5 (Eurostat, 2010). It is also a forerunner country with respect to the subsidized outsourcing of household work (service vouchers) (Marx & Vandelannoote, 2015; Raz-Yurovich, 2014). However, the (positive) effect of these policies on gender equality in the division of paid work, might be predominantly a consequence of positive effects of these policies on female labour market participation (Del Boca, 2002; Kornstad & Thoresen, 2007; Lokshin, 2004; Saxonberg, 2013; Whrolich, 2011). Although subsidized formal childcare and service vouchers are less likely to reinforce gendered parenting behaviour, these outsourcing policies do potentially reinforce socio-economic inequalities between couples with many and few resources. Available literature exhibits clear positive socio-economic gradients in the uptake and benefits from subsidized formal childcare and service vouchers in Belgium (Marx & Vandelannoote, 2015; Van Lancker, 2017; Van Lancker & Ghysels, 2012).

Attitudes & Preferences

The aforementioned micro-economic theories pay relatively little attention to individual preferences as determinants of the gender division of paid work. Similarly to micro-economists' observations of increased free choice throughout the 20th century (Becker, 1991), Hakim (2002) was struck by the greater degree of free choice for women to design work and family life in modern 21st Century societies. However, in contrast to micro-economic theory, she argued that in this context attitudes, values and personal preferences become increasingly important predictors of lifestyle choices such as paid work and caring roles. The *Preference Theory* (Hakim, 2002) puts forward three ideal types of women. First, home-centred women prefer to give priority to family life above working life, especially after they marry and have children. Second, work-centred women on the contrary prioritise working life and remain

childless or organise family life around a professional career. Third, adaptive women – the majority of women according to the theory – prefer to combine both family and working life. It is likely that this group of women is influenced most by institutional factors geared towards work-family combination.

Cultural norms

In contrast to the Preference Theory which focusses on free-choice and individual preferences, other approaches have spent more attention to the relation between preferences and behaviour at the individual level and norms and expectations at the societal level. In this vein, the term ‘*gendered moral rationalities*’ was coined to note that, besides economic rationality, individuals behave in line with the collective understanding of what is best for men and women to do (Duncan & Edwards, 1997). Similarly, *Gender Identity Theories* emphasize that couples conform to and reproduce gender norms (Blumberg, 1984; Coltrane, 2000; West & Zimmerman, 1987). While women must trade-off between occupational and familial roles, contemporary normative expectations for the male and father roles still do not include fully shared responsibility and involvement in household child-care activities (Bielby & Bielby, 1989; Vinkenburg, van Engen, Coffeng, & Dijkers, 2012). Although gendered role expectations continuously evolve, men are still expected to act as financial providers, whereas women are considered caregivers (Haas et al., 2002). These gender norms became firmly entrenched in the cultural system during the late 19th and early 20th centuries and are continuously reproduced by emphasizing gender in social interaction (Coltrane, 2000; Lupton & Barclay, 1997; West & Zimmerman, 1987).

These normative expectations about how fathers and mothers ought to behave might lead couples to adopt a gendered division of work after becoming parents as a means to display their cultural identity as men and women (West & Zimmerman, 1987). The persistence of traditional gender norms potentially “discounts” women’s bargaining power connected to relative socio-economic positions (Blumberg, 1984). Deviating from gender role expectations may entail social penalties (Heilman et al., 2004) or compensation behaviour. With respect to the latter, Brines (1993) shows that in counter-normative situations – for example when the female partner earns more than the male partner – women will ‘do gender’ by engaging in more stereotypically female activities while men will do gender by engaging in more stereotypically male work and avoiding typically female activities. In a similar vein, men who deviate from the socially expected role of family breadwinner may retain their full-time

employment position following the transition to parenthood, even if this does not increase utility.

Hypotheses

Based on the aforementioned theoretical framework, we conclude that micro-economic theories and ideational or structural theories can be combined to enhance our understanding of gendered parental employment strategies. This article argues that micro-economic theory is helpful in grasping the micro-level association between women's relative pre-birth wages and parental employment strategies, whereas to understand why parental employment strategies remain gendered in general, theories taking into account structural conditions and cultural norms and preferences are required (See Schober, 2013 for a similar perspective). We develop two hypotheses which at first may seem contradictory yet are in fact complementary. First, following the assumptions of family economics and household bargaining, we expect that female main earner couples will be less likely to adopt a male-oriented parental employment strategy in comparison to equal earner households, and more likely to adopt a female-oriented employment strategy (*hypothesis 1*). Second, due to gendered structural factors and cultural norms, we expect that – on average – couples will be more likely to adopt a male-oriented parental employment strategy, regardless of their pre-birth relative resources (*hypothesis 2*). For female main earner couples these hypotheses for instance imply that on the one hand these couples will be more likely to adopt a female-oriented parental employment strategy compared to equal earner couples. But on the other hand, even for female main earner couples, male-oriented strategies will be more likely to emerge than female-oriented strategies due to gendered structural and cultural factors.

Previous Research

The topic of gender equality in paid labour among parents has been part of the research agenda for many decades and a considerable number of contributions study variation in the effect of parenthood on female employment and gender equality in paid work between different population subgroups. Although these studies progressively assess partner's relative socio-economic positions – such as occupational status, pre-birth working hours, or level of education (Begall & Grunow, 2015; Corijn, 2001; Herrarte et al., 2012), – as potential explanations for this variation, only a limited number of contributions use longitudinal data to

assess the effect of relative resources on the division of paid work over the transition to parenthood. Results considering the US (Sanchez & Thomson, 1997), UK (Kanji, 2011), Germany (Kühhirt, 2012) and the Netherlands (Begall & Grunow, 2015) indicate that pre-birth relative resources positively relate to labour force attachment following parenthood. Research by Sanchez and Thomson (1997) shows that among married couples where the wife was economically dependent on her husband before childbirth, the husband is more likely to increase his working hours following the transition to parenthood, while no effect is found on the wife's working hours. Results of a study by Kanji (2011) indicate that mothers who are the main wage earners in the household are much more likely to continue in full-time employment compared to mothers that have equal or lower wages relative to their partner. Research by Kühhirt (2012) also found that women who earned the same wage or more than their partner before childbirth were less likely to decrease working hours following childbirth. Accordingly, results of a study by Begall and Grunow (2015) indicate that new mothers with an occupational status at least as high as that of their male partner (1 year before birth) were less likely to reduce their working hours. To our knowledge, solely the study of Schober (2013) - considering change in paid working hours among men and women after childbirth for the UK - did not find significant effects of partners' pre-birth relative wages. This study aims to extend to this body of research by focussing on Belgium.

Although most studies find positive effects of women's relative resources on their labour market position after the transition to parenthood, very few assess the implications of this association at the population level. In this vein Kühhirt (2012) finds that partners' pre-birth relative resources cannot counteract the general shift to a more traditional division of paid work following the transition to parenthood. Based on population-averaged model predictions, we aim to assess the probability that female main earner couples before birth exhibit an egalitarian or even female-oriented parental employment strategy after birth.

Data & Method

Data

We use data from the Belgian Administrative Socio-Demographic panel (BASD Panel) that was constructed using longitudinal microdata from the National Register and the Crossroads Bank for Social Security. The BASD Panel covers the period 1999-2010 and is representative of the female population aged 15 to 50 years that legally resides in Belgium between 1

January 1999 and 31 December 2010. To maintain the cross-sectional representativeness of the panel throughout the observation period, annual top-up samples of 15 year olds were drawn to guarantee the presence of the youngest age group in the sample. Similarly, supplementary annual samples were drawn of women aged 16 to 50 years who settled in Belgium in the preceding year. Apart from the sampled women, the BASD Panel also includes all individuals officially being part of the household of a sampled individual on 1 January in each year. The panel provides annual information on the household composition of sampled women, as well as detailed information on labour market positions and wages of sampled individuals and household members on a quarterly basis (characteristics observed at the end of every quarter).

We limit our sample to couples that worked full-time before childbearing (i.e. 100 per cent of the number of working hours of a standard full-time contract) for three reasons. First, the group of full-time dual earner couples is becoming increasingly important in Western societies in which dual full-time employment is progressively stimulated by social policy and supported by societal norms. As a result work-family behaviour of these couples is of particular interest. Second - in a study on the impact of childbearing on the distribution of paid work – a selection of gender equal couples in terms of working hours is advantageous as it allows to focus our analysis on the potential move from a gender equal employment distribution to an unequal distribution. Third, given that pre-birth working hours and wages are highly correlated, some type of control for working hours is needed. As the BASD-panel does not provide information on hourly wages, we control for working hours by focussing on full-time employed couples.

In our dataset, working hours are expressed as the percentage of the amount of working hours in a standard full-time contract in the employment sector under consideration. This approach has the advantage of capturing differences in work hours which are not related to sectorial differences in standard contracts. This is important in the Belgian context, as collective bargaining and collective agreements constitute a major factor with respect to job contracts and working hours (Keune & Galgóczi, 2006). Unfortunately, the absolute number of hours worked is not available in the data, which prevents robustness checks in this sense. In our measure of working hours, information on several jobs is combined and full-time employment is defined as working 100 per cent of the hours or more than prescribed in the standard contract.

The analyses document couples' parental employment strategies across 4 619 heterosexual couples that had their first birth between the first quarter of 2000 and the fourth quarter of 2010 and were both full-time employed one year before birth. We observe these couples i) until one quarter before their second child is born, ii) as long as their first child is under five years old, iii) until the couple separates, iv) until death or emigration or v) until the end of the observation window in 2010. When only selecting couples for whom none of the covariates are missing, we end up with 4 509 couples. Couple-quarters in which the female partner is on maternity leave are excluded from the analyses in order to focus on changing working hours unrelated to maternity leave. Given that maternity leave cannot be identified in our data before 2003, the quarter of birth of the child is also excluded from the analysis. As labour market positions are observed at the end of every quarter this means that children younger than three months are excluded. The maximum length of maternity leave for employees after the birth of a child in Belgium is 14 weeks² (Merla & Deven, 2013).

It should be noted that the sample of interest - dual full-time earner couples which experience their first birth within the observation period - is selective in several respects. First, as a result of research aims geared towards dual earner couples and changing work hours, this study excludes other potentially relevant couple types such as male breadwinner, female breadwinner or jobless couples. Second, despite the aforementioned advantages of focussing on dual full-time earner couples, couples in which for instance one partner works part-time one year before childbearing are excluded. These excluded dual earner couples are likely to differ from dual full-time earner couples and different patterns of parental employment strategies can be expected to emerge. Our data indicates that 73 per cent of all dual earner couples are couples in which both partners work full-time four quarters before childbearing³. Third, we only consider couples that made the transition to parenthood during the observation window. Available literature indicates that both couples' absolute and individuals' relative socio-economic and labour market positions are important determinants of having a first birth (Balbo, Billari, & Mills, 2013). Research for Belgium indicates that first birth probabilities are positively related to female employment (Wood & Neels, 2016), the dual earner model (Wood, Van den Berg, & Neels, 2017), and analyses not shown here also indicate positive household income effects on the transition to parenthood. As a result the labour market

² The total length of maternity leave for employees in Belgium is 15 weeks. One week before the due date and nine weeks after delivery are obligatory, whereas the remaining weeks can be used before or after birth.

³ The remaining 27% mainly consists of couples where the male partner works full-time while the female partner works part-time (20%). In 5% of cases the female partner works full-time while the male partner works part-time. In the other 2% of cases, both work part-time.

positions of sampled couples before the first birth are likely to differ in both absolute and relative terms from couples who do not (yet) have a first child. To account for anticipation effects, robustness checks are performed using two instead of one year as the measurement point for pre-birth labour market positions. However, as some couples might forgo childbearing for reasons connected to the labour market, our sample remains selective in this respect.

Analysis

The multivariate analysis estimates the effect of women's relative wages before the onset of family formation on the parental employment strategy following the transition to parenthood, distinguishing between egalitarian, male-oriented and female-oriented employment strategies. We put out two logit analyses comparing (i) the male-oriented to the egalitarian employment strategy, and (ii) the female-oriented to the egalitarian employment strategy. As in most cases an egalitarian employment strategy is maintained following the transition to parenthood, we use this group as the base category. This strategy implies a retention of full-time employment for both parents in 59% of cases, while in 1% of parents both reduce their hours to the same extent.

The estimations are based on random-effects logit models where person-quarters (N: 40,431) are nested in women (N: 4 509). Hence a random intercept is included at the woman (or couple)-level. This random-effects approach yields the advantage of unbiased parameter standard errors when using clustered data. A potential disadvantage is that parameter estimates reflect covariate effects within women (or couples). To avoid that covariate effects are conditional on a specific value for the random disturbance, we report population averaged effects that compare employment outcomes between average individuals in different categories of the covariate considered (Szmaragd, Clarke, & Steele, 2013). These effects will be used to assess the relation between pre-birth relative resources and parental employment strategies (hypothesis 1). Next, based on these population-averaged effects from random-effects models, we estimate the population-level impact of women's pre-birth relative wages on the gendered employment division following parenthood by calculating population-averaged predicted probabilities for the different pre-birth relative wage positions while fixing all observed characteristics at their means or most prevalent category. This way we aim to assess whether the impact of women's pre-birth relative wages is strong enough to significantly alter the gendered response to childbearing (hypothesis 2).

The main independent variable of interest in this study is women's pre-birth wages relative to their partner's pre-birth wages, which only includes earnings from formal paid labour. The possible values of the indicator range from 0 to 100, where 0 refers to a situation in which the male partner is the sole earner within the couple and 100 implies that the female partner earns the total household wage. Three categories are distinguished: (1) couples in which the male partner earns more (0-44), (2) couples in which both partners have equal wages (45-54) and (3) couples in which the female partner earns more (55-100). This measure is calculated based on wages four quarters before parenthood. Taking into account the year prior to birth instead of using a lagged time-varying measure of relative wages might lead to false identification of the main wage earner following the transition to parenthood because of short-term fluctuations in the resource constellation. However, pre-birth observations of the resource constellation are used because the wage share following parenthood is highly dependent on how couples divide paid work after becoming parents and thus has to be considered endogenous (Kühhirt, 2012). Table 1 provides an overview of the distribution of the covariates and sample sizes. While 43% of full-time working couples earn about the same before parenthood, in almost as many couples (39%) the male partner earned more than the female partner. The proportion of female main earner couples is substantially smaller, with approximately 18% of couples in which she earns substantially more than him.

In addition to women's pre-birth relative wages compared to men, we take into account several other socio-demographic and socio-economic characteristics. Regarding the socio-demographic characteristics, we control for the age of the first child, marital status, region of residence, age and migrant origin of the mother as well as the father. Apart from migrant origin, all socio-demographic covariates are time-varying. Due to parental leave uptake the largest drop in female labour market participation occurs during the first quarters after the quarter of birth (T. Kil, Neels, Van den Berg, & de Valk, 2015; T. Kil, Wood, et al., 2015). We therefore take into account a dummy variable for *couples with a child age one quarter*, as well as a linear and squared term of the *age of the child in quarters*. To allow for differential parental employment strategies by previous earnings over time (Kühhirt, 2012), we also run analyses including an interaction between age of the child and women's relative pre-birth wages. Assuming that couples that become parents at unconventionally young or old ages may adopt different parental employment strategies, we also take into account a linear and squared term of the *age of the father* (centred around the average, 33 years) and the *mother* (centred around the average, 31 years) in years. In addition, we distinguish *married* from

unmarried cohabiting couples. Previous research provides some indications for a higher degree of gender equality in both paid and unpaid work among unmarried cohabiting couples (Baxter, 2005; Davis, Greenstein, & Marks, 2007). In addition, unmarried cohabitation is also associated with less respective legal liability within couples compared to marriage (e.g. alimony after separation) (Borghs, 2017), which may increase the individual need for financial and labour market security. As the labour market conditions and family policy legislation and coverage slightly differs between Flanders, Wallonia and Brussels⁴, the analyses also control for *region* of residence. Furthermore, we take into account the *origin* group to which the male and female parent belong, distinguishing origin region (Belgium, Neighbouring countries, Other EU countries, Turkey or Morocco, other non-EU countries) and generation (first and second) groups. Former research on migrant-native differentials in maternal employment in Belgium has shown that – although these differentials mostly reflect pre-birth labour market disadvantages – the effect of childbearing on labour market positions also varies by origin group. Especially among migrants of the first generation and non-European origin – labour market positions are disproportionately affected by childbirth compared to natives and second generation women (T. Kil, Neels, et al., 2015). Men and women are identified as migrants when he/she (first generation) or one of the grandparents from his/her side (second generation) is not born in Belgium. In order to limit the amount of origin groups and safeguard cell sizes, the most distant country is considered as the country of origin when grandparents of the maternal/paternal lineage are born in different countries.

In addition to partners' relative wages before birth, which is the main independent variable of interest, available literature indicates that absolute labour market positions are also important determinants of work-family strategies (Kühhirt, 2012; Lyonette & Crompton, 2015; Schober, 2013). The main argument is that affluent individuals or couples in comfortable labour market positions have higher opportunity costs of working hours reduction and will be more likely to be able to outsource childcare or household tasks, in turn yielding an easier combination of work and family, for women in particular (Kühhirt, 2012; Schober, 2013). As a result we control for a number of absolute employment characteristics at the individual- or couple-level

⁴ In Flanders formal childcare coverage is largest with 38 places per 100 children from 0 to 2 year old, in comparison to 15 places per 100 children in Wallonia and 25 places per 100 children in Brussels (own calculations based on data of CKG & ONE, 2010). Parental leave is a federal responsibility and thus applicable to the entire Belgian population. However, the Flemish community government provides an additional benefit for people living in Flanders, making an additional effort to encourage leave uptake (Merla & Deven, 2010).

one year before the birth of their first child: total household wages, the number of jobs of the male and female partner and the sector of employment of both partners. All these covariates are time-constant as they refer to one year before the first child is born. The *total household wages* are operationalized by cumulating the quarterly wages of both partners. Based on this sum, we calculated the percentiles per year. The indicator thus ranges from 0 to 100 and is centred around 50. Regarding the *number of jobs*, a dummy variable identifies mothers and fathers that combined more than one job before parenthood. To control for numerous sector-specific factors which may facilitate or hamper the combination of parenthood and paid work (e.g. on-site childcare arrangements, convenient working hours in the educational sector), we also take into account the *sector* in which the female and the male partner worked, categorised in 10 groups: (1) agriculture and industry, (2) wholesale and retail, (3) logistics and energy distribution, (4) education, (5) public administration and extraterritorial organisations, (6) health care and social services, (7) recreation and other services, (8) finance and estate, (9) administration, support services and ICT, and (10) hotel and catering.

Results

Descriptive results

Before turning to the multivariate results, figure 1 shows the change in the division of paid work in the period ranging from one year before the birth of the first child to couples with a child below age five. The quarter in which the first child is born is denoted as '0' in the figure and is not included in the multivariate analyses. As our sample consists of couples working full-time four quarters before childbearing, all couples have equal working hours at the start of the observation. In the following quarters the proportion of couples with equal working hours gets smaller until it reaches its lowest point during the quarter when the child is born. The figure indicates that this is largely explained by maternity leave. However, the results for this quarter should be interpreted with care as maternity leave before 2003 cannot be identified. In addition, it is possible that quarterly measurement fails to capture some maternity leave spells as labour market positions are observed at the end of every quarter only. As a result, the multivariate analyses exclude the quarter of birth in addition to maternity leave spells. As the first child grows older⁵, the proportion of couples with equal working hours rises and stabilizes around 60%. When the child's age approximates three years, the proportion of couples with equal working hours slightly diminishes again.

The decreased proportion of couples with equal working hours is of course mirrored by an increase in the proportion of couples with unequal working hours. One year following the transition to parenthood, 34% of the couples have adopted a male-oriented parental employment strategy, however, whereas only 5% display a female-oriented employment strategy. In the following years the share of female-oriented employment strategies remains relatively constant at 4 to 5%, while the percentage of male-oriented employment strategies rises to 39%. In summary, for 40 to 45% of dual full-time working couples the transition to parenthood is followed by the emergence of gender inequality in employment that did not exist beforehand. Among the parents that changed to an unequal division of working hours, 85 to 90% adopts a male-oriented parental employment strategy.

⁵ It should be noted here that, our sample becomes increasingly selective at higher ages of the first child, due to potentially selective higher-order childbearing patterns, but also selective separation risks, emigration and mortality.

Multivariate results

To assess whether the rise in gender inequality over the transition to parenthood can be explained by differences in pre-birth relative wages, we estimate random-effects logit models that distinguish couples that adopt a male-oriented, female-oriented, or egalitarian parental employment strategy. Male-oriented parental employment strategies in 77% of cases imply a part-time working mother whereas in other cases the mother is unemployed or inactive. In contrast, female-oriented parental employment strategies imply father's part-time employment in 54% of cases, while other cases exhibit male unemployment or inactivity.

In the first analysis (model 1, table 2) we compare the probability of adopting a male-oriented parental employment strategy (N=13,944, 34.55%) to the probability of maintaining an egalitarian employment strategy (N=24,432, 60.54%). In line with the descriptive figures, results indicate that the probability that couples adopt a male-oriented employment strategy are 51.1% smaller in comparison to the probability that couples retain an egalitarian employment constellation (Odds=0.489***, model 1), when holding constant socio-demographic and socio-economic characteristics of the couple at their means or most prevalent category.

With respect to pre-birth relative wages, results indicate that the odds of turning to a male-oriented parental employment strategy are significantly larger among couples where the father was the main wage earner before entering parenthood. These odds are 45% higher for couples where the father was the main wage earner before childbearing compared to couples with equal wages before childbearing. In contrast, the odds of adopting a male-oriented employment strategy do not differ significantly between female main earner couples and equal earner couples (OR=0.904). These results confirm our first hypothesis: Male main earner households have a significantly higher probability to adopt a male-oriented parental employment strategy following the transition to parenthood in comparison to equal earner and female main earner households.

The coefficients of the socio-demographic covariates show that – besides significant parental age effects – the age of the child also significantly affects the odds of a male-oriented employment strategy, indicating that parental employment strategies are dynamic over time. Regarding region and marital status, results of the analysis indicate larger (but insignificant) odds for inhabitants of Flanders and significantly smaller odds for married couples. Although

the differences between different origin groups are limited, it is noteworthy that first generation European migrant women are more likely to exhibit a male-oriented employment strategy, whereas first generation migrant men are more likely to display a female-oriented employment strategy compared to the Belgian origin group. These findings are in line with previous research highlighting weaker labour force attachment for first generation migrants, but also available literature indicating that the motives to marry an import bride or groom vary by gender (Tine Kil, Neels, Wood, & de Valk, 2017; Lievens, 1999; Wood et al., 2017). Whereas marrying an import bride has been related to a sought for traditional gender divisions, marrying an import groom is more likely to be connected to more progressive values and labour divisions. With respect to the socio-economic covariates, we observe a negative effect of the total household wages before childbirth. With every percentile that the pooled household wage is higher, the odds to adopt a male-oriented employment strategy significantly decrease with 0.8%. This effect suggests the importance of opportunity costs as well as the affordability of outsourcing strategies, but may also reflect higher income and more egalitarian values among higher educated couples. Also, the number of combined jobs of the female partner before childbearing is found to positively affect the odds of displaying a male-oriented employment constellation. In contrast, the amount of jobs that the male partner combined exhibits an insignificant negative effect.

The second analysis (model 2, table 2) compares the probability of adopting a female-oriented parental employment strategy (N=1,984, 4.92%) to the probability of maintaining an egalitarian employment strategy (N=24,432, 60.54%). In line with the descriptive results, the probability of adopting a female-oriented employment strategy is 92.4% smaller in comparison to the probability that parents retain equal working hours (odds=0.076***, model 2b), when holding constant socio-demographic and socio-economic characteristics of the couple at their means or most prevalent category.

Complementary to the previous analysis, the odds of adopting a female-oriented parental employment strategy are 61.7% larger (OR = 1.617***) for female main earner households in comparison to equal earner households. In contrast, the odds of displaying a female-oriented employment strategy are 11.4% smaller in male main earner households (OR = 0.886), but the difference is not significant. Hence, these results again confirm the first hypothesis: female main earner couples are more likely to adopt a female-oriented parental employment strategy following the transition to parenthood in comparison to equal and male main earner households (hypothesis 1).

In addition to significant parental age effects, parental employment strategies also vary significantly by the age of the child, which indicates that they cannot be assumed static over time. In addition, results indicate that region of residence, marital status and origin of the mother are not significantly related to the odds to adopt a female-oriented employment strategy. In contrast, a first generation foreign origin of the father has a significantly positive effect. Regarding the socio-economic characteristics of the couple, we find a significantly negative effect of the total household wages on the odds to adopt a female-oriented employment strategy. Hence both analyses indicate that (higher) total household wages positively relate to the continuation of an egalitarian employment strategy. The number of jobs that the female partner combines as well as the number of jobs that the male partner combines is negatively associated with the odds of female-oriented employment constellation, but both odds-ratios are insignificant.

Based on logit models including an interaction between pre-birth relative wages and the age of the child⁶, we used the population averaged effects to calculate predicted probabilities for the different parental employment strategies, by women's pre-birth relative wages (figure 2). The predicted probabilities apply to couples where the mother is aged 31 and the father 33, that live in Flanders, are unmarried, where both partners originate from Belgium and both had one job, worked in wholesale and had mean total household wages one year before the birth of their first child.

Figure 2a shows the predicted probabilities for the egalitarian parental employment strategy for couples that both worked full-time before the transition to parenthood. The probability to maintain an equal division of paid work differs between couples where the father earned more on the one hand and couples with equal wages or where the mother earned more on the other hand. While male main earner couples have a 57% probability to adopt an egalitarian employment strategy in the first quarter after the transition parenthood, female main earner and equal earner couples respectively have a 63% and 65% probability to do so. As the first child grows older than one, the difference between male main earner couples and other types grows, whereas the probability for all types converges around 50% when the child reaches the age of five⁷.

For all three pre-birth relative wage categories, the probability of (adopting) a male-oriented employment strategy is relatively large (figure 2b). In the first quarter after the quarter of birth the probability that couples adopt a male-oriented employment strategy amounts to 41% among male main earner couples, whereas it amounts to 33% in equal earner and female main earner couples. Similar to the results for egalitarian employment strategies, the difference between male main earner couples and other types grows until the child reaches the age of 2.5, whereas probabilities converge afterwards.

The probability that a couple adopts a female-oriented employment strategy is much smaller than the probability of the male-oriented strategy, independently of pre-birth relative wages (figure 2c). While the probability to adopt a female-oriented employment strategy amounts to 4% for couples where the father earned more before childbearing, the corresponding

⁶ Full results are available upon request.

⁷ It should be noted here that, our sample becomes increasingly selective at higher ages of the first child, due to potentially selective higher-order childbearing patterns, but also selective separation risks, emigration and mortality.

probability amounts to respectively 5% and 8% for equal earner and female main earner couples. As the first child grows older, the difference between female main earner couples and other types grows continuously.

Hence, among full-time working couples the probability to adopt an egalitarian employment strategy following the transition to parenthood, is relatively large. The probability ranges from 49% to 65% depending on the pre-birth wage constellation and the age of the child. However, among couples adopting an unequal employment division, the probability of a male-oriented parental employment strategy is considerably larger compared to female-oriented strategies, beyond the effects of pre-birth relative wages. This confirms the second hypothesis: although pre-birth relative wages influence the employment constellation following parenthood, the male-oriented parental employment strategy is more likely than the female-oriented strategy, regardless of pre-birth relative wage category.

Sensitivity analyses

Finally, four sets of sensitivity analyses have been performed to test the robustness of our findings. First, as information on educational level of both partners is available for 28% of the sampled couples, we included partners' relative and her absolute educational level as a control variable for this subset. However, when controlling for educational level, the effect of pre-birth relative wages remains substantial and significant in both analyses.

Second, the measurement of pre-birth labour market characteristics at one year before the birth of a child is arbitrary. To the extent that labour market positions change in the immediately preceding years, anticipation effects may distort the results. It is possible for instance that one or both partners increase working hours because they are planning a birth and anticipate the costs of childbearing. As a result, all analyses have been replicated using two years before the birth as the pre-birth point of measurement. The results – which are available upon request - indicate similar patterns of effects as well as predicted parental employment strategies.

Third, the aim of this study is to assess gendered parental employment strategies for couples in the first five years after the first birth. However, as the child approaches the age of five, the sample becomes increasingly selective. This is due to potentially selective continued childbearing, separation, mortality and migration. In addition to these natural forms of selection, we also introduce selection by research design, as couples who have their first birth

closer to the end of the observation period are followed for a shorter time. As a result of this potential bias, all models have been re-estimated excluding couples who experienced a first birth during the last four observation years. Again, the results – which are available upon request - indicate similar patterns of effects as well as predicted parental employment strategies.

Fourth, our analyses consider one-child parents until one quarter before the second child is born. It is possible that some women reduce their working hours during the second pregnancy, which potentially biases our analyses of parental employment strategies for one-child parents. Consequently, all models have been re-estimated observing couples until the third quarter before the second birth. This alternative approach – results of which are available upon request – does not alter the main findings of this study.

Discussion and conclusion

Young couples increasingly divide paid and unpaid work equally (Grunow & Evertsson, 2016; T. Kil, Neels, & Vergauwen, 2016). However, over the process of family formation, gender roles are traditionalized and these patterns of labour division persist during later stages of the life course (Grunow et al., 2012; Kühhirt, 2012; Langner, 2015). Given the rising prevalence of dual earner households and – more recently – female breadwinner households in Europe (Vitali & Arpino, 2016), this paper assesses whether pre-birth relative wages are able to counteract a shift towards male-oriented paid employment strategies when dual earner couples become parents. It engages with a small but growing number of longitudinal studies finding evidence of the effect of relative resources on gender inequality in paid work following the transition to parenthood but which have predominantly considered countries with minimal policy support for parents' employment and relied on survey data. Using administrative panel data for Belgium – characterized by a small motherhood employment gap, well-developed formal childcare provisions and an innovative system of subsidized outsourcing of housework – we compare the probability that couples maintain an egalitarian employment strategy following the transition to parenthood in dual earner households where men or women were the main wage providers before the onset of family formation.

In accordance with studies for the USA (Sanchez & Thomson, 1997), the UK (Kanji, 2011), Germany (Kühhirt, 2012) and the Netherlands (Begall & Grunow, 2015), our results show that pre-birth relative wages significantly moderate the parenthood effect on gender inequality

for dual full-time working couples living in Belgium. In comparison to female main earner and equal earner couples, male main earner couples have a significantly larger probability to adopt a male-oriented parental employment strategy. Conversely, in comparison to male main earner and equal earner couples, female main earner couples have a significantly larger probability to display female-oriented parental employment strategies. These associations persist when controlling for socio-demographic and socio-economic characteristics. Hence, pre-birth relative wages partially determine whether partners maintain equal paid working hours over the course of family formation, as well as who cuts back in working hours when equal working hours are not retained. These results are in line with the expectations derived from micro-economic theories in the sense that gender-specific strategies after the transition to parenthood depend on the amount of relative utility (e.g. wage) is derived from both partners' engagement in market work (Becker, 1991; Lundberg & Pollack, 1996) (hypothesis 1).

Although relative resources affect the magnitude of the negative relationship between parenthood and gender equality in paid work, gender specialisation in the form of a female-oriented parental employment strategy is much less likely to emerge compared to a male-oriented employment constellation, even for female main earner couples (Kühhirt, 2012). Consistent with earlier research (Kühhirt, 2012), we show that pre-birth relative resources moderate but do not counteract the move to a male-oriented paid employment strategy in general. The limited effect of pre-birth relative wages is potentially related to structural constraints, individual preferences and cultural norms (Schober, 2013) and confirms our expectation that – on average – couples will be more likely to adopt a male-oriented parental employment strategy, regardless of their pre-birth relative resources (*hypothesis 2*). With respect to structural factors, Belgian work-family policy is characterised by the widespread availability of childcare, subsidized service vouchers and flexible parental leave possibilities, but also by limited paternity leave compared to maternity leave and highly gendered uptake of parental leave. The latter is potentially related to a stronger institutionalisation of parental leave in sectors, companies, occupations in which a large share of the workforce is female. Hence these institutional factors potentially limit parents to adopt egalitarian and especially female-oriented employment strategies. In addition, it is possible that couples are more likely to adopt a male-oriented parental employment strategy because this is in line with their preferences. These preferences are likely to be fuelled by the persistence of normative assumptions of mothers as the main carer, and of fathers as the main breadwinner play an

important role here. Although we assume that varying cultural and structural factors to a certain extent explain the remaining variance in gender inequality in parents' employment, our data do not provide the possibility to test this assumption.

To conclude, this study revealed that in Belgium most dual earner couples maintain an equal division of paid working hours after the transition to parenthood, which is potentially related to extensive work-family reconciliation policies. This context of relatively little structural barriers to mothers' employment also exhibits positive effects of women's relative wages on gender egalitarian and female-oriented parental employment strategies. However, despite the large proportion of gender egalitarian employment strategies and the micro-economic linkage between pre-birth relative wages and couples parental employment strategies, even couples that are – from a rational micro-economic perspective – assumed to adopt a gender-oriented employment strategy frequently adopt a male-oriented employment strategy following the transition to parenthood. In similar vein, although women have outpaced men in higher education among the younger cohorts, male main earner households are still much more widespread than female main earner households (Vitali & Arpino, 2016), suggesting that a changing gender balance in educational attainment does not automatically translate into a changing gender balance in wages. Hence, the fact that equal educational levels do not automatically translate in equal wages and that equal wages do not automatically translate in equal employment patterns following the transition to parenthood suggests that change towards gender equality in paid work is a slow and gradual process (McDonald, 2000), but also that this evolution is not guaranteed by the development of strong work-family policies such as in Belgium. As long as gender differences in paid employment are exacerbated after the transition to parenthood and lower working hours are connected to penalties in terms of economic dependence and social security (e.g. pension rights), the determinants of this dynamic deserve academic interest and the potential of work-family policies and more targeted gender policies should be of interest to policy makers.

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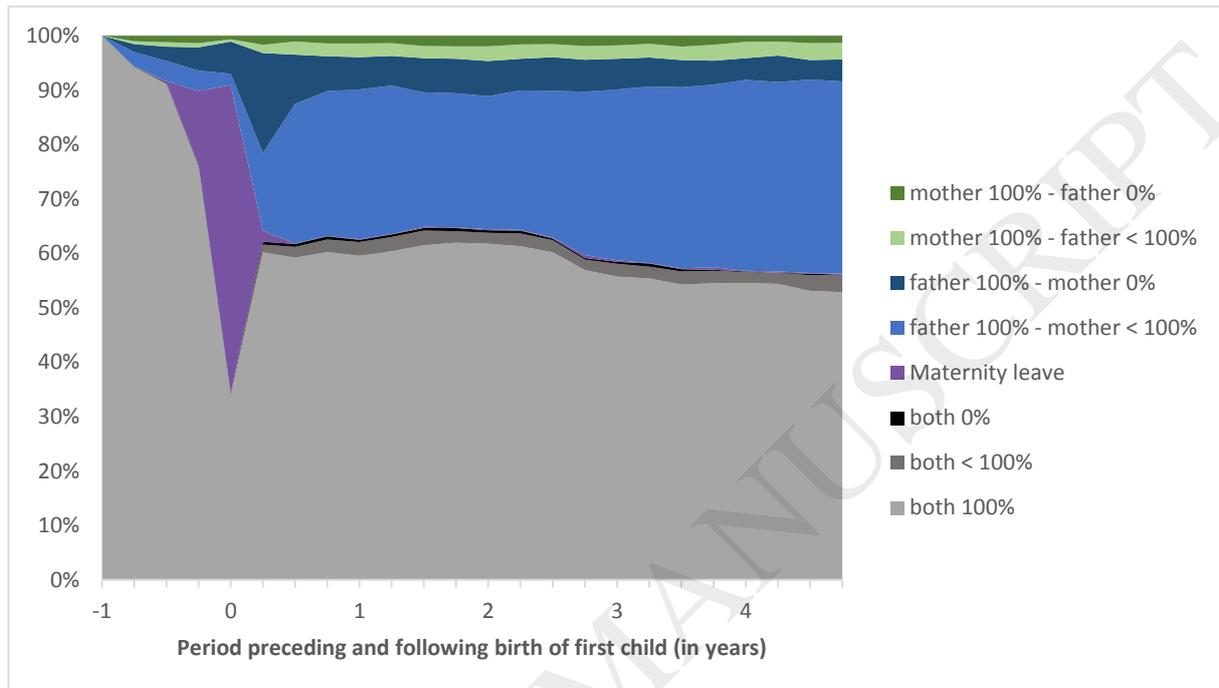
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Figure captions

Figure 1: Division of paid work 1 year before childbirth until 4 years after the birth of a first child

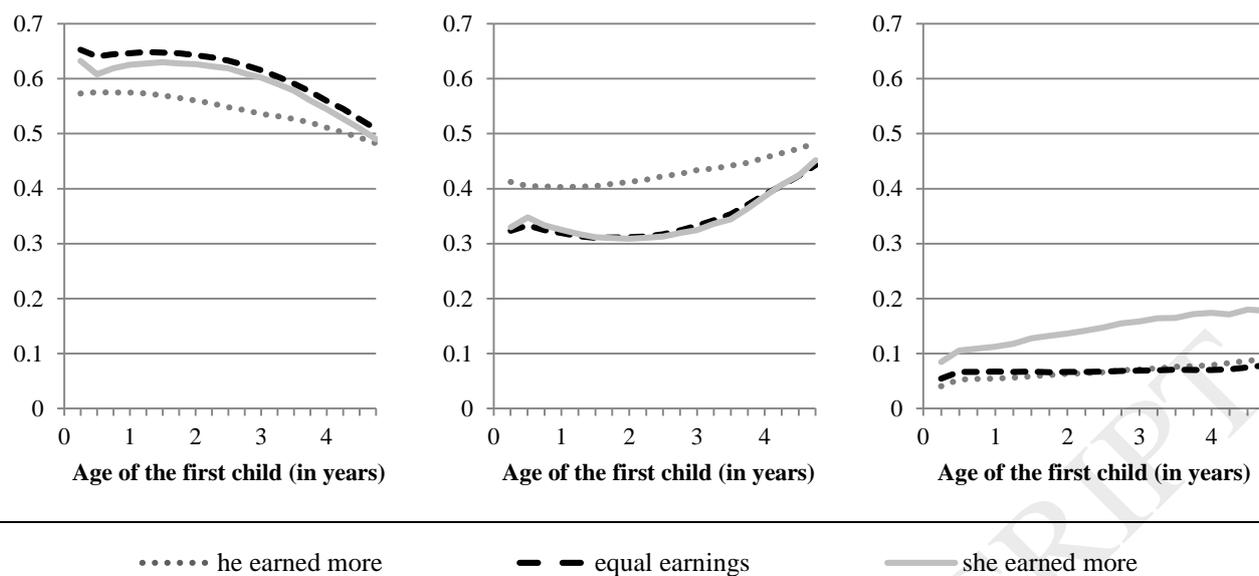
Note: The sample is restricted to one-child parents that both worked full-time 4 quarters before childbirth, 1999-2010, Belgium
 Source: Belgian Socio-Demographic Panel 1999 – 2010

Figure 2: Predicted probabilities of (2a) an equal employment division, (2b) an unequal division where the father works more hours than the mother and (2c) an unequal division where the mother works more hours than the father by pre-birth resource constellation

2a: Probability of equal working hours

2b: Probability that the father works more than the mother

2c: Probability that the mother works more than the father



Note: The sample is restricted to one-child parents that both worked full-time 4 quarters before childbirth, 1999-2010, Belgium. The predicted probabilities apply to couples where the mother is aged 31 and the father 33, that live in Flanders, are unmarried, where both originate from Belgium and where both had one job, worked in wholesale and had mean total household earnings before childbirth.

Source: Belgian Socio-Demographic Panel 1999 - 2010

Table 1: Summary statistics

	Couples (1 year before birth)		Couple-quarters(1) (following birth)	
	N	%	N	%
Division of work				
<i>both work 100%</i>	4,509	100.00	24,026	59.42
<i>both work <100%</i>	0	0.00	906	2.24
<i>both 0%</i>	0	0.00	186	0.46
<i>father works 100%, mother <100%</i>	0	0.00	10,637	26.31
<i>father works 100%, mother 0%</i>	0	0.00	3,084	7.63
<i>mother works 100%, father <100%</i>	0	0.00	962	2.38
<i>mother works 100%, father 0%</i>	0	0.00	630	1.56
Relative wages before parenthood				
<i>father earned more</i>	1,750	38.81	-	-
<i>equal wages</i>	1,954	43.34	-	-
<i>mother earned more</i>	805	17.85	-	-
Household wages before parenthood (euros) (2)				
<i>0-8300</i>	462	10.25	-	-
<i>8350-9600</i>	447	9.91	-	-
<i>9650-10550</i>	453	10.05	-	-
<i>10600-11400</i>	460	10.20	-	-
<i>11450-12200</i>	435	9.65	-	-
<i>12250-13150</i>	462	10.25	-	-
<i>13200-14300</i>	440	9.76	-	-
<i>14350-15800</i>	459	10.18	-	-
<i>15850-18350</i>	442	9.80	-	-
<i>18400-47750</i>	449	9.96	-	-
Age mother (years)				
<i>19-25</i>	1,407	31.20	3,952	9.77
<i>26-30</i>	2,255	50.01	18,864	46.66
<i>31-35</i>	726	16.10	13,377	33.09
<i>36-40</i>	116	2.57	3,627	8.97
<i>41-50</i>	5	0.11	611	1.51
Age father (years)				
<i>19-25</i>	659	14.62	1,347	3.33
<i>26-30</i>	2,165	48.02	13,216	32.69
<i>31-35</i>	1,168	25.90	15,811	39.11
<i>36-40</i>	394	8.74	7,172	17.74
<i>41-65</i>	123	2.73	2,885	7.14
Marital status				
<i>not married</i>	1,984	44.00	14,697	36.35
<i>married</i>	2,525	56.00	25,734	63.65
<i>total</i>	<i>4,509</i>	<i>100.00</i>	<i>40,431</i>	<i>100.00</i>

Note: (1) The distribution of couple-quarters for time-constant covariates measured one year before parenthood are not shown as the values do not change over time.

Note: (2) Percentiles of the distribution of household income over all years 1999-2010. Multivariate analyses use percentiles calculated separately for every year to account for period changes in wages.

Table 1: Summary statistics (continued)

	Couples (1 year before birth)		Couple-quarters (following birth)	
	N	%	N	%
Region				
Region				
<i>Flanders</i>	3,036	67.33	26,424	65.36
<i>Wallonia</i>	1,100	24.40	11,146	27.57
Origin mother				
<i>Belgium</i>	3662	81.22	32,651	80.76
<i>Neighbouring countries, generation 1</i>	96	2.13	821	2.03
<i>Neighbouring countries, generation 2</i>	132	2.93	1,248	3.09
<i>Other EU-countries, generation 1</i>	93	2.06	790	1.95
<i>Other EU-countries, generation 2</i>	204	4.52	2,159	5.34
<i>Turkey or Morocco, generation 1</i>	35	0.78	287	0.71
<i>Turkey or Morocco, generation 2</i>	85	1.89	698	1.73
<i>Other non-EU-countries, generation 1</i>	111	2.46	991	2.45
<i>Other non-EU-countries, generation 2</i>	91	2.02	786	1.94
Origin father				
<i>Belgium</i>	3761	83.41	33,737	83.44
<i>Neighbouring countries, generation 1</i>	83	1.84	667	1.65
<i>Neighbouring countries, generation 2</i>	144	3.19	1,299	3.21
<i>Other EU-countries, generation 1</i>	63	1.40	565	1.40
<i>Other EU-countries, generation 2</i>	180	3.99	1,801	4.45
<i>Turkey or Morocco, generation 1</i>	79	1.75	738	1.83
<i>Turkey or Morocco, generation 2</i>	51	1.13	357	0.88
<i>Other non-EU-countries, generation 1</i>	71	1.57	625	1.55
<i>Other non-EU-countries, generation 2</i>	77	1.71	642	1.59
Employment sector mother before parenthood				
<i>agriculture, industry</i>	576	12.77	-	-
<i>logistics, storage, distribution</i>	671	14.88	-	-
<i>education</i>	256	5.68	-	-
<i>public administration, extraterritorial organizations</i>	570	12.64	-	-
<i>health services, social care</i>	533	11.82	-	-
<i>art, recreation, other services</i>	846	18.76	-	-
<i>finances, estate</i>	141	3.13	-	-
<i>administration, support services, technical activities and ICT</i>	297	6.59	-	-
<i>hotel and catering</i>	532	11.80	-	-
<i>agriculture, industry</i>	87	1.93	-	-
Employment sector father before parenthood				
<i>agriculture, industry</i>	1541	34.18	-	-
<i>logistics, storage, distribution</i>	703	15.59	-	-
<i>education</i>	431	9.56	-	-
<i>public administration, extraterritorial organizations</i>	207	4.59	-	-
<i>health services, social care</i>	446	9.89	-	-
<i>art, recreation, other services</i>	180	3.99	-	-
<i>finances, estate</i>	106	2.35	-	-
<i>administration, support services, technical activities and ICT</i>	234	5.19	-	-
<i>hotel and catering</i>	584	12.95	-	-

<i>agriculture, industry</i>	77	1.71	-	-
Number of jobs mother				
<i>One job</i>	4,357	96.63	-	-
<i>Two or more jobs</i>	152	3.37	-	-
Number of jobs father				
<i>One job</i>	4,390	97.36	-	-
<i>Two or more jobs</i>	119	2.64	-	-
<i>total</i>	<i>4509</i>	<i>100.00</i>	<i>40,431</i>	<i>100.00</i>

Note: (1) The distribution of couple-quarters for time-constant covariates measured one year before parenthood are not shown as the values do not change over time.

Note: (2) Percentiles of the distribution of household income over all years 1999-2010. Multivariate analyses use percentiles calculated separately for every year to account for period changes in wages.

Table 2: Population averaged logit models of couples' employment following the transition to parenthood (in odds-ratios)

	Father works more hours (1) – equal working hours (0)		Mother works more hours (1) – equal working hours (0)	
	Model 1 OR	sig.	Model 2 OR	sig.
Constant	0.489	***	0.076	***
Relative wages before childbirth (ref. equal wages)				
<i>Father earned more</i>	1.453	***	0.886	
<i>Mother earned more</i>	0.904		1.617	***
Age mother (centered 31)				
<i>Linear</i>	1.013		0.988	
<i>Squared</i>	1.005	**	0.999	
Age father (centered 33)				
<i>Linear</i>	1.004		1.016	
<i>Squared</i>	1.001		1.002	*
Age of first child (quarters)				
<i>1</i>	0.952		0.824	*
<i>2-19 (centered 6), linear</i>	0.994		1.038	**
<i>2-19 (centered 6), squared</i>	1.002	**	1.000	
Region (ref. Flanders)				
<i>Wallonia</i>	0.909		0.960	
<i>Brussels</i>	0.834		1.005	
Marital status				
<i>Married</i>	0.857	*	0.898	
Origin mother (ref. Belgium)				
<i>Europe, first generation</i>	1.558	**	1.056	
<i>Europe, second generation</i>	1.010		0.712	
<i>Non-Europe, first generation</i>	1.057		0.682	
<i>Non-Europe, second generation</i>	0.997		1.278	
Origin father (ref. Belgium)				
<i>Europe, first generation</i>	1.063		2.496	***

<i>Europe, second generation</i>	0.924		1.143	
<i>Non-Europe, first generation</i>	1.057		2.351	***
<i>Non-Europe, second generation</i>	0,997		1.549	
Total household wages before childbirth (in percentiles, centered 50)				
<i>linear</i>	0.992	***	0.993	**
<i>squared</i>	1.000	*	1.000	
N couple-quarters	38,376		26,416	
N couples	4459		3956	

Note: The sample is restricted to one-child parents that both worked full-time 4 quarters before childbirth, 1999-2010, Belgium

*Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$*

Source: BASD Panel 1999-2010, calculations by authors

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Table 2: Population averaged logit models of couples' employment following the transition to parenthood (in odds-ratios, continued)

	Father works more hours (1) – equal working hours (0)		Mother works more hours (1) – equal working hours (0)	
	Model 1 OR	sig.	Model 2 OR	sig.
Sector before childbirth mother (ref. wholesale)				
<i>agriculture, industry</i>	1.005		0.778	
<i>logistics, storage, distribution</i>	1.433	**	0.930	
<i>education</i>	0.753	*	0.827	
<i>public administration, extraterritorial organizations</i>	0.913		0.996	
<i>health services, social care</i>	1.101		0.908	
<i>art, recreation, other services</i>	1.078		1.274	
<i>finances, estate</i>	1.327	*	1.138	
<i>administration, support services, technical activities and ICT</i>	1.137		0.953	
<i>hotel and catering</i>	0.985		0.950	
Sector before childbirth father (ref. wholesale)				
<i>agriculture, industry</i>	1.038		1.124	
<i>logistics, storage, distribution</i>	1.177		1.204	
<i>education</i>	1.058		2.242	**
<i>public administration, extraterritorial organizations</i>	1.046		0.756	
<i>health services, social care</i>	0.982		1.817	*
<i>art, recreation, other services</i>	1.180		1.326	
<i>finances, estate</i>	0.887		0.563	
<i>administration, support services, technical activities and ICT</i>	1.008		1.273	
<i>hotel and catering</i>	0.685		1.243	
N jobs before childbirth mother (ref. 1 job)				
<i>>1 job</i>	1.414	*	0.964	
N jobs before childbirth father (ref. 1 job)				
<i>>1 job</i>	0.807		0.943	
N couple-quarters	38,376		26,416	
N couples	4459		3956	

Note: The sample is restricted to one-child parents that both worked full-time 4 quarters before childbirth, 1999-2010, Belgium

Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Source: BASD Panel 1999-2010, calculations by authors