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Employment After Parenthood: Women of Migrant Origin and Natives Compared

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Abstract Motherhood negatively affects female employment in majority populations across Europe. Although employment levels are particularly low among women of migrant origin, little is known about the motherhood–employment link in migrant populations. This paper investigates whether family formation differentially affects the labour market position of migrant women and their descendants compared to natives. Using longitudinal microdata from the Belgian social security registers, 12,167 women are followed from 12 months before until 48 months after the birth of their first child for the period 1999–2010. Levels of activity (versus inactivity), employment (versus unemployment) and full-time employment (versus part-time employment) are compared between natives and first- and second-generation women of Southern European, Eastern European, Turkish and Moroccan origin. We find that activity and employment levels decrease to a larger extent following the transition to parenthood among women of migrant origin than among natives. With respect to activity levels, differences between second-generation women and natives are largely explained by socio-demographic and pre-birth job characteristics, while differences between first-generation women and natives are not, suggesting that other factors such as tied migration patterns determine labour market attachment among first-generation mothers. With respect to employment levels, unemployment is increasing more among women of migrant origin of both generations than among natives, also when controlling for background

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characteristics, which signals differential access to stable job positions as well as to family policies. In sum, the results draw attention to the challenge that parenthood creates for mothers of migrant origin in terms of retaining and gaining employment, but also to the role of labour market entry and early career positions.

Keywords Migration · Childbearing · Register data · Labour market · Maternal employment · Belgium

1 Introduction

Understanding the factors responsible for the low employment rates of migrant women has become paramount in view of the Europe 2020 target aiming at 75% employment in the population aged 20–64 (European Commission 2010). While studies for majority populations have shown that women's labour market position is strongly related to the transition to parenthood (Kil et al. 2015b; Gutierrez-Domenech 2005; Shapiro and Mott 1994; Jeon 2008), little is known about the link between motherhood and employment among women of migrant origin. Low employment among migrant mothers may reflect general factors adversely affecting migrant's labour market position such as a lack of country-specific human capital (Heath et al. 2008; Phalet et al. 2007), limited social capital or institutional knowledge (Verhaeghe et al. 2013) as well as discrimination in the labour market (Hermansen 2013; Safi 2010). The combination of work and parenthood, however, is additionally influenced by the availability and affordability of childcare, the accessibility of flexible work arrangements, as well as gender roles within households with respect to the division of paid work and care responsibilities following parenthood (Mussino and Duvander 2014; Kil et al. forthcoming).

Research specifically focussing on the labour force participation of migrant mothers is limited, however, and frequently based on cross-sectional data (Holland and de Valk 2017; Rubin et al. 2008; Bevelander and Groeneveld 2012; Dale et al. 2006; Bevelander and Groeneveld 2006). In cross-sectional studies, women having children are compared to women who have not yet had children as well as women who will never enter parenthood, making it complicated to distinguish the effect of family formation from selection effects and the effects of structural factors that already determine employment positions (e.g. wages and sector of employment) prior to parenthood (Khoudja and Platt 2016). Using longitudinal microdata from the Belgian social security registers this paper aims to fill this gap in knowledge by investigating whether labour market attachment (distinguishing activity, employment and full-time employment) of women of migrant origin is differentially affected by parenthood compared to natives. Furthermore, we analyse whether and to what extent differences in maternal employment between women of migrant and Belgian origin can be accounted for in terms of socio-demographic characteristics and precarious labour market positions held prior to parenthood. To this end, we compare levels of activity and (full-time) employment before and after the birth of a first child among first- and second-generation migrant mothers to levels found among natives. The Belgian case is particularly relevant because the country has a

substantial and diverse migrant population—like many European countries—while at the same time having the largest employment rate gap between migrants and natives in Europe, making insights into the processes leading to this gap relevant for theory and policy alike (Corluy 2014).

Our study adds to the literature in two ways. First, we adopt a life course perspective on the employment gap between women of migrant and native origin which allows to distinguish the differential impact of family formation on women's employment trajectories from variation in labour market positions that already existed before the onset of family formation. Second, whereas previous studies have frequently focused on a single indicator of labour market position (Khoudja and Platt 2016; Dale et al. 2006; Holland and de Valk 2017; Bevelander and Groeneveld 2012), our study considers different indicators of labour market position. This approach allows to test whether early career disadvantages invariably shape maternal employment patterns, and whether distinctive patterns emerge for different aspects of labour market attachment.

2 The Belgian Context

2.1 Migration

As a result of active recruitment of migrant workers after the second world war and the further diversification of immigration flows in recent decades, Belgium has become an immigration country characterized by a large diversity in terms of origin countries, backgrounds and migration histories (Corluy 2014; CGKR 2013). After the Second World War, the Belgian government recruited guest workers for industrial jobs from Italy (starting in 1946), Greece, Portugal (1955), as well as Morocco and Turkey (1964) (Phalet 2007). Following the economic recession in the early 1970s, the Belgian government stopped all immigration of new guest workers in 1974. The closure of the coalmines in the following years and the rapid shrinkage of industrial labour in the Southern part of the country marked a transition to a post-industrial economy. This socio-economic restructuring has disproportionately affected migrant workers, leading to massive and long-term unemployment or withdrawal from the labour force (Lesthaeghe 2000). The migration stop and the economic crisis, however, did not cause migration to halt and family reunification became the main reason for migration in subsequent years. The permanent settlement of migrant families in the 1980s and 1990s and their children born in Belgium (the second generation) increased the Southern European (mainly Italian), Moroccan and Turkish communities.

In contrast to second-generation women from European origin, a substantial share of the Turkish and Moroccan second-generation continues to marry partners from their parents' country of birth (Corijn and Lodewijckx 2009). This close link between family formation and migration is largely absent in the older migrant

groups from Southern Europe as well as the more recent migration from Eastern Europe that started since the late 1990s.

2.2 Labour Market and Family Policies

The Belgian economy is mostly service-based and characterized by a well-established public sector (Van Dooren et al. 2014). Belgian employment rates for men and women are overall rather low from a European perspective, reflecting high unemployment rates among the migrant population, young adults, the low qualified as well as the elderly, and a labour market that is segmented between workers with permanent contracts and those without (Høj 2013; Van Dooren et al. 2014).

The Belgian social security system is characterized by a relatively generous unemployment insurance. Unemployment benefits depend on former wages and current household position. Although the unemployment benefit decreases over time, the entitlement period is unrestricted in time (Rogowski 2008). As a result, the share of long-term unemployed in Belgium is among the highest in Europe (Di Domenico and Spattini 2008). In 2004, the share of the unemployed who had been unemployed for more than 1 year amounted 49.6%. As controls on active job search are limited and the lowest unemployment benefits (applied after a period of maximum 4 years in unemployment) approach social assistance benefits, unemployment sometimes conceals inactivity.

With respect to family policies, Belgium is characterized by a widespread availability of childcare and a relatively flexible parental leave system (Maron and O'Dorchai 2008; Ray et al. 2010). When working women expect a child, they are entitled to 15 weeks of maternity leave (with a benefit covering 75–82% of their previous income), as well as 3 months of full-time parental leave until their child reaches the age of 12 (at a flat-rate benefit of 727 euro per month) (Moss 2015). While the right to maternity leave is universal, parental leave is only available to mothers with a stable employment position, working for their current employer for 12 out of 15 months prior to the application. Apart from full-time parental leave, women can also opt for a part-time reduction of working hours by 50 or 20% for a longer period and a smaller benefit (Desmet et al. 2007; Anxo et al. 2007a).

Between ages 2.5 and 5 years, children have universal and free access to publicly provided pre-school arrangements, with an enrolment rate of almost 100% among 3 year old children (Eurostat 2010). For younger children, subsidized childcare services are widely available with fees that are income-related and tax deductible.

In addition to family policies, the availability of part-time work facilitates the reconciliation of work and care responsibilities, with 61% of working mothers in Belgium being employed part-time (Data for 2010, Eurostat 2016). This high proportion is supported by the parental leave system ('time credit') and supplementary social security benefits for involuntary part-time workers (Anxo et al. 2007b).

3 Background and Hypotheses

3.1 Labour Market Attachment of Migrant Origin Women

The labour market situation of migrant populations in Europe is generally worse than that of the native born population. Using data from the Labour Force Survey, Corluy (2014) shows that migrants have lower employment levels and that they are overrepresented at the lower end of the income distribution. In a similar vein, Rubin et al. (2008) find that non-European first-generation migrant women in several European countries are more frequently employed part-time involuntarily compared to both native women and migrant men. Although the labour market position of second-generation women is generally better than that of first-generation women, they also face more difficulties in finding a job compared to natives across Europe (Phalet et al. 2007; Heath et al. 2008; Phalet 2007; Neels 2000; Neels and Stoop 2000).

First-generation migrants often lack language skills and country-specific human capital (e.g. equivalent qualifications and/or experience in the local labour market), which can explain their lower participation. Although the children of immigrants have grown up in the host country, they are still in a disadvantaged position (Heath et al. 2008). Regardless of their individual qualifications, the children of labour migrants generally have a working class background and belong to ethnic communities that have limited human capital. Previous research has shown that the benefits of high human capital at the individual level are discounted as a result of low human capital at the community level (Portes 1998). Apart from individual and community resources (van Tubergen et al. 2004; Pichler 2011), segmented labour markets (Ballarino and Panichella 2013), discrimination in education and the labour market (Safi 2010; Hermansen 2013) and a lack of social capital or institutional knowledge (Verhaeghe et al. 2013) have been identified as important explanations for the weak labour market position of first- as well as second-generation migrants in Europe.

Labour market attachment of migrant origin women is also linked to their specific migration history. As migrants of Turkish and Moroccan descent in Europe often originate from rural regions where roles of men and women are more separated in the private and the public sphere, they generally have more traditional views on the gendered division of care and domestic work versus paid work (Hushek et al. 2011b; Merens et al. 2006; Goldscheider et al. 2011; Bernhardt and Goldscheider 2007; de Valk 2008). In addition, the experience of migration itself may also result in the accentuation of these values (Dion and Dion 2001). As values about family relationships and family traditions are often regarded as central components of identity, they are perceived as threatened in a new social environment. The second-generation finds itself in an intermediate position, having to negotiate potentially contradictory expectations from a more egalitarian host society and a more traditionally oriented family of origin (de Valk and Milewski 2011).

In addition, research has shown that economic migration is commonly initiated by men, which makes their partners ‘tied migrants’ and is associated with reduced employment and earnings among women (Boyle et al. 1999, 2009; Cooke 2008; Bielby and Bielby 1992). For Turkish and Moroccan women, family reunification and marriage remain the main official motives for migration to Europe (Eurostat 2011). A sizeable share of the Turkish and Moroccan women who recently migrated to Europe married a co-ethnic who migrated earlier or was born in the destination country (Lodewijckx 2010; Huschek et al. 2011a). For second-generation women, the choice to marry a Turkish or Moroccan partner may frequently be considered progressive. When women marry someone from the country of origin, they manage to avoid the traditional habit of moving in with their husbands’ parents allowing them to set up an independent household. Also, given that their recently arrived husbands do not know the country and therefore rely more on their partner, women may manage to modify the traditional gendered power relations. The choice to marry a Turkish or Moroccan partner is in contrast considered as more traditional for second-generation men (Lievens 1999; Hooghiemstra 2001; Timmerman 2006). The women chosen by these male partners residing in Europe frequently originate from rural areas and have low educational qualifications. For these women, it is more evident that their husband is the head of the household and takes full economic responsibility. This close link between family formation and migration is, however, typical for the Turkish and Moroccan group and largely absent in Eastern and Southern European migrant groups. The latter are considered to be less selective in terms of socio-economic position and gender role attitudes.

Partly due to their specific migration history, women of Turkish and Moroccan origin are characterized by relatively young ages at marriage and childbearing (Corijn and Lodewijckx 2009; Kleinepiers and de Valk 2014). Women from these groups may thus face a difficult entry into the labour market in combination with an early start of family formation, which potentially implies that these women enter family formation before being firmly established in the labour market. This may have a long-lasting effect as previous research has shown that periods of non-employment at the start of a work career negatively affects employment opportunities in later life (Luijkx and Wolbers 2009; Brandt and Hank 2014).

3.2 The Link Between Family Formation and Labour Market Attachment Among Migrant Origin Women

The limited existing research on family formation and female labour force participation in migrant populations has mainly adopted a cross-sectional approach and reports contradictory results. Holland and de Valk (2017) find that employment of second-generation women of Turkish origin in Germany, the Netherlands, France and Sweden is lower compared to natives. Differences between Turkish origin mothers and non-mothers are similar to differences between native mothers and non-mothers, suggesting that the transition to motherhood has the same effect on employment for both groups. Cross-sectional research on first- and second-generation women of Turkish and Moroccan origin in the Netherlands (Bevelander and Groeneveld 2006, 2012) finds that the negative link between the presence of

children in the household and employment is even smaller for women of migrant origin compared to native Dutch women. Also in the UK, the difference in economic activity between first-generation women with and without children has been found to be smaller among migrants of African, Indian and Pakistani/Bangladeshi origin (Dale et al. 2006). In contrast, research on first-generation non-European migrants in Belgium, the Netherlands, France, Luxembourg, the United Kingdom, Austria, Greece, Spain and Portugal suggests that the difference in labour force participation rates between women in general and women with a child younger than 5 years old is larger for migrant women (Rendall et al. 2010).

Only a limited number of studies have adopted a longitudinal approach to analyse the impact of childbearing on the labour market position of migrant women. Research for the UK shows that Pakistani and Bangladeshi women's labour market entries and exits are less sensitive to childbearing events compared to other women's (Khoudja and Platt 2016). Using data for the USA, Taniguchi and Rosenfeld (2002) show that having young children increases the risk of exiting employment to a greater extent for black women compared to other groups with or without migration background. Although using longitudinal data, these studies do not explicitly control for pre-birth labour market positions, taking into account women that get children during the observation period as well as women that already have entered parenthood and women that remain childless.

There are, however, abundant studies on the majority group population showing that women, unlike men, experience systematic career disadvantages when entering parenthood, which are often referred to as a motherhood penalty (Koelet et al. 2015). Many women decide to work part-time or stay at home full-time after the birth of a child (Gutierrez-Domenech 2005; Shapiro and Mott 1994). This leads to reduced financial independence, a devaluation of human capital and a reduction of future opportunities in the labour market. Micro-economic theories (Becker 1991) predict that when couples become parents, the parent with the lowest earning potential within a couple typically disinvests in his or her labour market career in order to increase productivity in household production activities such as childrearing. Due to differential experiences, differential investments in human capital as well as biological factors, mothers typically specialize in these tasks (Becker 1991). In addition, culturally reproduced gender roles stimulate women to take responsibility for household and childrearing tasks (Pfau-Effinger 2004; Coltrane 2000). However, the rise in female participation in education and labour force participation has increased the opportunity costs of cutting back on paid work after childbearing and the dual breadwinner model has become increasingly standard. In addition, the availability of subsidized formal childcare and paid parental leave have reduced the opportunity costs linked to the combination of work and children (van der Lippe and van Dijk 2002; Rindfuss et al. 1996).

Although it is frequently assumed that women adapt their labour market position after entering motherhood, women who want children may also anticipate the event by reducing their employment hours or changing jobs before children are born (Bass 2014). Socially constructed expectations surrounding motherhood, parenthood aspirations and the anticipation of family responsibilities may already constrain women's preferences for specific professional paths before actually entering parenthood.

For women of migrant origin, additional conflicts may arise between family formation and labour market activity (Andersson and Scott 2005). First, in a situation where migrants have severe problems in establishing themselves in the labour market, family formation may further reduce the practical and financial feasibility of work to such an extent that it is more favourable to stop working after a child is born.

Second, migrant origin families are often found to have limited access to family policies such as formal childcare and parental leave that help to reduce the work-family conflict and the financial costs related to this combination (Kil et al. 2015a; Merens et al. 2006; Mussino and Duvander 2014). This is partially due to the unstable labour market position of women of migrant origin in the first place, but limited language skills and lack of institutional knowledge may also play a role (Merens et al. 2006, Kil et al. forthcoming).

Third, social and family networks that take up a part of the caring responsibilities can be crucial for combining a job and children. Women who recently immigrated usually lack extended networks in the destination country (Wall and Jose 2004). Consequently, they have less friends and family to rely on and may therefore withdraw from the labour market (Raijman and Semyonov 1997).

Fourth, for women with a low initial income and limited labour market prospects, family formation might be seen as an alternative to a career (Friedman et al. 1994). Disadvantaged groups may choose full-time parenthood as a strategy to structure their otherwise uncertain life courses (Kreyenfeld 2010).

Fifth, traditional gender norms may give rise to more 'conservative' patterns of behaviour, in which women who are more oriented towards family responsibilities reduce employment after the transition to parenthood (Hakim 2000; de Valk 2008; Khoudja and Fleischmann 2015). Although de Valk (2008) finds little evidence for differences in work and family plans between Turkish, Moroccan, Surinamese, Antillean and Dutch adolescents in the Netherlands, it is unclear whether gender differences in work and family plans would also translate into less emancipated behaviour of women.

Based on these considerations, we expect *a larger rise in inactivity and unemployment following parenthood among women of migrant origin compared to native women (Hypothesis 1)*. For women in unstable labour market positions, family formation may further increase the practical difficulties (e.g. arranging childcare on a short term) and financial costs (e.g. transport and formal childcare) associated with employment. Since women of migrant origin are overrepresented in weak labour market positions, we expect that activity and employment following the transition to parenthood can largely be explained by differential pre-birth positions and job characteristics.

We expect additional barriers to activity and employment for first-generation mothers and mothers of Turkish and Moroccan origin. First-generation migrants may face (1) limited access to social and family networks supporting the combination of work and childcare, and (2) language and social barriers may entail a lack of institutional knowledge of regulations aimed at easing the work-family combination (e.g. subsidized childcare and parental leave). We expect these factors to result in *larger inactivity and unemployment levels for first-generation*

women of all origins following the transition to parenthood than is the case for natives and second-generation women (Hypothesis 2). Linked to selective migration, we expect that traditional norms on gender roles and motherhood may increase the prevalence of inactivity after the transition to parenthood to a larger extent among first-generation Turkish and Moroccan origin mothers than among mothers of other origins and natives (Hypothesis 3). Since part-time employment can result from preferences but could just as well be related to bargaining power and the ability to reconcile a job and children, we do not formulate specific hypotheses on hours worked but just explore differences in our analyses.

4 Data and Methods

4.1 Data

The paper uses data from the Administrative Socio-Demographic panel (ASD Panel) that was constructed using longitudinal microdata from the Belgian social security registers (Crossroads Bank for Social Security) and the National Register. The ASD Panel covers the period 1999–2010 and is representative of the female population aged 15–50 legally residing 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, annual supplementary samples were drawn of women aged 16–50 years who settled in Belgium in the preceding year. Apart from the sampled women, the ASD Panel includes all individuals officially being household members of sampled women on 1 January of each year. The panel thus provides detailed annual information on the household composition of women, as well as detailed information on labour market positions and earnings of all household members on a quarterly basis.

The analysis of maternal employment is based on data for 12,167 women aged 18–50 years who had their first child between 2000 and 2010. We observe these women until (1) a second child is born, or (2) the first child reaches the age of 7, or (3) censoring as a result of death, emigration or reaching the end of the observation period on 31 December 2010. We only selected women for whom the labour market position was known one year before childbirth.

All samples constituting the ASD Panel are disproportionately stratified by nationality (with sampling fractions of 1/40 for Belgian women and 1/20 for foreign women, respectively). In addition, the Crossroads Bank for Social Security provides data on country of birth of both women and their (grand)parents, allowing us to identify women of second and later generations. Our analyses include 9216 women of Belgian origin, 907 of Southern European origin (239 first-generation and 666 second-generation), 315 of Eastern European origin (only first-generation), 517 of Turkish origin (313 first- and 204 second-generation) as well as 1214 of Moroccan origin (831 first- and 383 second-generation).

4.2 Analysis

Hierarchical regression models for binary outcomes were estimated to consider different dimensions of maternal employment, distinguishing (1) the probability of being active in the labour market (i.e. employed or unemployed) versus inactive, (2) the probability of being employed versus unemployed for those being active in the labour market, and finally (3) the probability of working full-time versus part-time for employed women. To distinguish part-time from full-time employment, we consider 80% of the standard number of work hours for a full-time position in the activity sector as a cut-off point. For most sectors, this is equivalent to a work regime of four weekdays out of five. Since previous research has shown that labour force attachment before parenthood is an important determinant of labour force attachment after childbearing (Kil et al. 2015b), the analyses are stratified by work status one year before birth. We consider four groups: women (1) working full-time, (2) working part-time, (3) being unemployed or (4) being inactive one year before the birth of their first child. Since self-employment is rare in our migrant sample, we exclude these from our analyses (Table 1). While 7% of women of Belgian origin are self-employed one year before birth, only 3, 6, 2 and 1% of first-generation women of, respectively, Southern European, Eastern European, Turkish and Moroccan origin and 4, 1 and 1% of second-generation women of, respectively, Southern European, Turkish and Moroccan origin were self-employed one year before giving birth.

The covariates considered in the analysis include origin group, migrant generation and pre-birth job characteristics (salary and activity sector). We also control for duration since first birth, age at first birth (centred around 18 years, quadratic specification), living arrangement and partner characteristics. With respect to *origin*, a woman is considered to be of migrant origin when she herself (first generation) or one of her parents (second generation) was not born in Belgium. When both parents are foreign-born, origin reflects the country of birth of the mother. Pre-birth job characteristics refer to *pre-birth salary* and *pre-birth sector of employment*. Concerning salary, we take into account the salary one year before birth, which is collapsed in quintiles. Pre-birth sector of employment is categorized in 11 categories: (1) agriculture and industry, (2) wholesale and retail, (3) logistics and energy distribution, (4) education, (5) public administration, (6) health services and social care, (7) recreation and other services, (8) finances and estate, (9) administration, support services, technical activities and ICT, (10) hotel and catering and (11) extraterritorial organizations.

We control for *duration since first birth* which measures the number of quarters since the birth of the first child. The three quarters immediately following quarter in which the first child is born, are considered separately, whereas subsequent quarters are grouped into 4-quarter intervals, i.e. quarters 4–7, quarters 8–11 and quarters 12–15. We also control for living arrangement (*LIPRO-position*), which is based on the categories of the LIPRO-typology (Imhoff and Keilman 1991). We distinguish (1) women without a partner (single), (2) women who live with their parents (child), (3) married women, (4) unmarried cohabiting women and (5) other types. Because economic circumstances are subject to regional variation, we control for the three main *regions* of settlement in Belgium: Flanders, Wallonia and Brussels. We

Table 1 Distribution over key independent variables by origin and generation (in %)

	Origin and generation								Total
	BE	SEU1	SEU2	EEU1	TU1	TU2	MO1	MO2	
Age at first birth (mean)	27.80	30.58	28.05	28.96	24.19	24.09	27.48	25.21	27.63
LIPRO-position ^a									
Child	9.96	5.44	12.76	3.49	3.83	14.22	3.49	8.09	9.27
Single	9.30	20.08	12.31	13.97	4.79	8.33	11.07	11.75	9.86
Married	40.81	47.28	43.54	62.22	58.47	64.71	73.29	71.02	45.66
Unmarried	37.01	22.18	28.08	13.97	1.92	2.94	3.61	6.27	30.91
Other	2.92	5.02	3.30	6.35	30.99	9.80	8.54	2.87	4.29
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Region ^a									
Flanders	64.87	19.25	15.77	41.90	48.56	50.98	28.40	37.60	56.69
Wallonia	30.13	25.10	71.02	15.24	27.16	26.47	18.89	10.97	30.38
Brussels	5.00	55.65	13.21	42.86	24.28	22.55	52.71	51.44	12.94
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Pre-birth labour market position									
Full-time employed	63.37	37.66	51.35	22.54	8.31	33.82	12.15	35.77	54.87
Part-time employed	16.06	17.99	19.52	13.02	5.43	14.22	9.39	15.67	15.44
Unemployed	5.95	9.21	13.81	3.17	12.14	35.29	9.15	29.77	7.99
Inactive	8.13	31.80	11.56	55.24	71.88	15.20	68.71	17.75	16.20
Self-employed	6.50	3.35	3.75	6.03	2.24	1.47	0.60	1.04	5.51
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
N	9216	239	666	315	313	204	831	383	12,167

Source: Administrative Socio-Demographic panel, 1999–2010, calculations by authors

BE Belgium, SEU1 Southern European, first generation, SEU2 Southern European, second generation, EEU1 Eastern European, first generation, TU1 Turkey, first generation, TU2 Turkey, second generation, MO1 Morocco, first generation, MO2 Morocco, second generation

^a As LIPRO-position and region are time varying, we looked into them four quarters before first childbirth

furthermore control for a number of partner characteristics (partners' origin and pre-birth labour market position) (Matysiak and Vignoli 2008). Six origin groups are distinguished regarding *partner's origin*: (1) no partner or unknown origin, (2) Belgian origin, (3) first-generation European origin, (4) second-generation European origin, (5) first-generation non-European origin, and (6) second-generation non-European origin. The *partner's pre-birth labour market position* distinguishes five

categories: (1) no partner or unknown position, (2) inactive, (3) unemployed, (4) part-time employed and (5) full-time employed. The distribution of covariates and sample sizes is provided in Tables 1 and 2.

Table 2 Distribution over key independent variables by origin and generation, women that worked before birth (in %, self-employed excluded)

	Origin and generation								
	BE	SEU1	SEU2	EEU1	TU1	TU2	MO1	MO2	Total
Pre-birth salary									
Quintile 1	17.48	31.58	30.43	38.39	34.88	38.78	50.84	32.99	20.09
Quintile 2	19.48	24.81	25.11	16.96	34.88	25.51	27.37	25.89	20.31
Quintile 3	20.85	18.80	18.51	19.64	20.93	20.41	16.20	19.29	20.53
Quintile 4	20.85	7.52	14.68	9.82	4.65	11.22	2.79	12.18	19.38
Quintile 5	21.34	17.29	11.28	15.18	4.65	4.08	2.79	9.64	19.69
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Pre-birth sector of employment									
Agriculture, industry	10.26	9.02	8.72	11.61	11.63	12.24	3.35	4.57	9.93
Wholesale, retail	15.78	20.30	22.55	13.39	11.63	19.39	9.50	17.77	16.13
Logistics, storage, distribution	4.76	0.00	4.89	4.46	2.33	6.12	2.79	3.05	4.61
Education	14.58	5.26	8.09	2.68	4.65	4.08	6.15	5.58	13.36
Public administration	11.78	6.02	10.21	3.57	9.30	13.27	8.38	11.17	11.42
Health services, social care	20.61	8.27	17.66	19.64	16.28	14.29	17.88	18.78	20.05
Art, recreation, other services	3.19	11.28	6.17	4.46	2.33	8.16	4.47	3.55	3.58
Finances, estate	5.31	6.77	4.26	0.89	0.00	0.00	1.68	7.11	5.09
Administration, support services, technical activities and ICT	10.62	18.80	12.34	31.25	32.56	18.37	34.64	23.86	12.13
Hotel, catering	2.79	10.53	4.47	7.14	9.30	4.08	10.61	4.57	3.31
Extraterritorial organizations	0.30	3.76	0.64	0.89	0.00	0.00	0.56	0.00	0.38
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>N</i>	7248	133	470	112	43	98	179	197	8480

Source: Administrative Socio-Demographic panel 1999–2010, calculations by authors

BE Belgium, *SEU1* Southern European, first generation, *SEU2* Southern European, second generation, *EEU1* Eastern European, first generation, *TU1* Turkey, first generation, *TU2* Turkey, second generation, *MO1* Morocco, first generation, *MO2* Morocco, second generation

Three models were estimated to compare maternal employment between native women and women from different origin groups and migrant generations. *Model 1* compares different origin groups and migrant generations to natives only controlling for duration since first birth. *Model 2* additionally controls for age at first birth (quadratic specification), household composition, region of residence, partner's origin, partner's pre-birth labour market position, pre-birth salary and sector of employment. Finally, as a sensitivity analysis, person-quarters were nested in women in *Model 3* (Table 6 in the Online Appendix) to include a (normally distributed) individual-level random disturbance or frailty term, additionally controlling for time-constant covariates that affect maternal employment across women's person-quarters (Wienke 2003; Rabe-Hesketh and Skrondal 2008; Wooldridge 2010). To control for selective entry into pre-birth employment positions—women with childbearing intentions may already adjust their employment position before a child is expected or born—additional sensitivity analyses were performed to control for educational attainment which is available for a subset of the sample (Bass 2014).

All models use a complementary log–log link function which is more appropriate than a logit link to estimate differentials between migrants and natives given the high levels of activity and employment among native women (Hosmer et al. 2013). To facilitate the interpretation of the multivariate analyses, we report average marginal effects which represent the average change in the probability of activity or (full-time) employment associated with a unit change in a covariate averaged across all (combinations of) values of the other covariates included in the models (and in case of Model 3 assuming a value of zero for the random frailty term) (StataCorp 2015). In addition to the average marginal effects, Tables 4 and 5 (in the Online Appendix) report the exponentiated parameter estimates for Model 2 (which can be interpreted as hazard ratios) and provide information on model fit and sample sizes included in the analysis.

5 Results

5.1 Descriptive Analysis

For women having a first child between 2000 and 2010, Figs. 1a–h show the labour market position in the period from two years before up to three years after the birth of their first child by country of origin and migrant generation. We first discuss differentials in initial labour market positions. Subsequently, we address the evolution of labour market attachment following the transition to parenthood.

5.1.1 Differentials in Pre-birth Labour Market Positions

In all origin groups, the labour market position is relatively stable 2–1 years before parenthood, suggesting that women do not anticipate childbirth by reducing their employment during this period. Among the Belgian origin group 92% is active in the labour market one year before the birth of their first child, whereas this percentage is much lower among first-generation migrant women of Southern

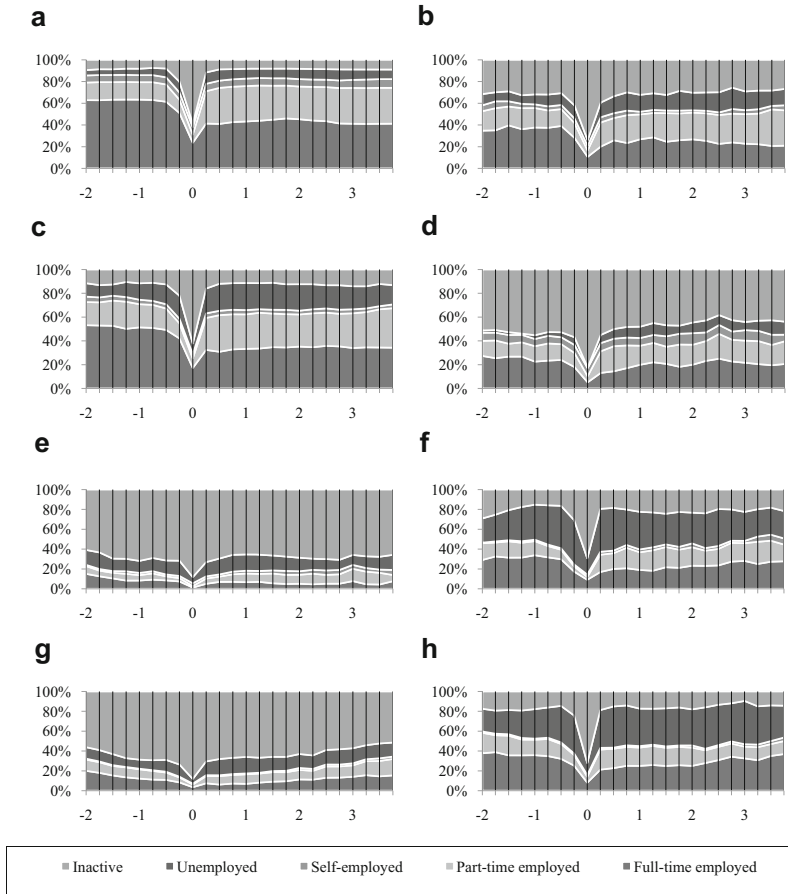


Fig. 1 Labour market position from two years before childbirth until three years after childbirth, for women who had their first child between 2000 and 2010. **a** BE; **b** SEU1; **c** SEU2; **d** EEU1; **e** TU1; **f** TU2; **g** MO1; **h** MO2. *BE* Belgium, *SEU1* Southern European, first generation, *SEU2* Southern European, second generation, *EEU1* Eastern European, first generation, *TU1* Turkey, first generation, *TU2* Turkey, second generation, *MO1* Morocco, first generation, *MO2* Morocco, second generation. *Source*: Administrative Socio-Demographic panel, 1999–2010, calculations by authors

European (68%), Eastern European (45%) and—especially—Turkish (28%) and Moroccan origin (31%). Activity levels of second-generation women approximate those of natives more closely with 88, 85 and 82% of second-generation women of, respectively, Southern European, Turkish and Moroccan origin being active in the labour market one year before parenthood.

Large differences by origin group and migrant generation emerge when comparing unemployment rates among active women. While only 6% of the active women of Belgian origin is unemployed one year before birth, this percentage amounts to 13, 16 and 7% of first- and second-generation Southern European and first-generation Eastern European origin groups, respectively. Unemployment levels are extremely high among active women of Turkish and Moroccan descent, ranging

from 43 to 42% among the Turkish first and second generation, and 29 to 36% among the Moroccan first and second generation, respectively.

With respect to part-time employment, we find that part-time work is more prevalent among women of migrant origin. Being limited to approximately 20% among natives, 32, 37, 40 and 43% of employed first-generation women of Southern European, Eastern European, Turkish and Moroccan origin work part-time, respectively. The level of part-time work among second-generation women approaches that of natives with, respectively, 28, 30 and 30% of employed second-generation women of Southern European, Turkish and Moroccan origin working part-time.

Hence, women of migrant origin show lower attachment to the labour market in terms of activity and employment before parenthood than women of Belgian origin. With respect to inactivity and part-time employment, first-generation women typically have the weakest labour market attachment, while Turkish and Moroccan women show the highest levels of unemployment, irrespective of generation. Given small numbers involved, migrant-native differentials in self-employment are less clear, with first-generation Eastern European and Turkish women showing somewhat higher levels of self-employment.

5.1.2 Differential Change in Labour Market Positions Following Parenthood

Among women of Belgian origin, activity levels decrease during the quarter before birth, but recover to 92% in the second quarter after birth. Although native mothers stay strongly attached to the labour market, the character of their activity changes. Whereas 6% of the women were unemployed one year before birth, this increases to 10% one year after the birth of their first child. The transition to parenthood has the largest effect, however, on full-time versus part-time employment. While 63% of women worked full-time before birth, this proportion decreases to 43% one year after birth. In contrast, part-time participation increases from 16 to 33%.

Migrant origin groups generally show changes in employment around the birth of their first child similar to those observed among native women: activity and self-employment levels do not change substantially, whereas full-time employment decreases, giving rise to increasing unemployment levels and part-time employment. The increase in unemployment levels is slightly larger among the migrant groups considered compared to natives, while the increase in part-time employment levels is generally smaller.

5.2 Multivariate Analysis

As the descriptive findings do not control for confounding factors, hierarchical complementary log–log models are estimated to assess differentials in maternal employment by origin group and migrant generation, controlling for age at first birth, household structure, region, pre-birth job characteristics and partner characteristics. The analyses are performed separately by pre-birth labour market position.

5.2.1 Change in Activity Following the Transition to Parenthood

First, we will discuss the differential change in activity levels following the transition to parenthood (left panel, Table 3). Among *mothers who worked full-time* before the birth of their first child, all migrant origin groups show lower activity levels compared to Belgian mothers (Panel 3a, Model 1). On average, the probability of being active is 10.0, 12.9, 10.6 and 5.8% lower for first-generation women of Southern European, Eastern European, Turkish and Moroccan origin, respectively, compared to women of Belgian origin. Differences between natives and second-generation women of Southern European, Turkish and Moroccan origin are smaller, amounting to 1.0, 6.5 and 1.7%, respectively.

Controlling for socio-demographic characteristics, pre-birth job characteristics and partner characteristics (Model 2), effects diminish and are no longer significantly different from natives for second-generation women of Southern European and Moroccan origin. The differential retreat from the labour market between women of migrant origin and natives is largely explained by age at first birth for second-generation women of Turkish and Moroccan origin and by pre-birth job characteristics for the other origin groups. Differences between natives and first-generation women, however, remain substantial when controlling for socio-demographic, pre-birth job and partner characteristics.

Also for *women who worked part-time* before the birth of their first child, the decline in activity rates after parenthood is more apparent among mothers of migrant origin compared to natives (Model 1, Panel 3b). Controlling for socio-demographic, pre-birth job and partner characteristics (Model 2), differences decrease but remain substantial for second-generation women of Southern European origin and first-generation women of Eastern European, Turkish and Moroccan origin.

Among *mothers who were unemployed* before parenthood activity rates following parenthood are significantly lower compared to natives for first-generation Southern European and Turkish women and second-generation women of Moroccan origin (Panel 3c). Controlling for socio-demographic and partner characteristics (Model 2), differences diminish for most groups, but substantially increase for women of Moroccan origin.

Among *women who were already inactive* before the birth of their first child (Panel 3d), the probability of remaining inactive following parenthood is substantially larger for first-generation women of all origins considered. Probabilities to remain inactive are larger among first-generation mothers of Turkish (ame = -0.427) and Moroccan (-0.455) origin than among first-generation mothers of Southern European (-0.272) and Eastern European (-0.275) origin. For second-generation women of Moroccan origin, the probability of escaping inactivity is larger than for natives. When controlling for socio-demographic and partner characteristics (Model 2), these differences diminish but remain substantial and significant.

Hence, in line with our first hypothesis, a larger increase in inactivity was observed among women of migrant origin in comparison with natives among those who were employed as well as unemployed or inactive before parenthood. In

Table 3 Average marginal effects (ame) of origin group on the probability of being active, employed and full-time employed after the transition to parenthood, hierarchical complementary log-log models, women aged 15–50 having a first child between 2000 and 2010

	Activity (vs. inactivity)						Employment (vs. unemployment)						Full-time employment (vs. part-time employment)					
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2			
	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.		
3a: women that worked full-time before birth (ref. BE)																		
SEU1	-0.100	***	-0.064	***	-0.136	***	-0.059	***	0.037	***	-0.003	***	0.037	***	-0.003	***		
SEU2	-0.010	**	-0.006		-0.046	***	-0.011	**	-0.012	**	-0.035	***	-0.012	**	-0.035	***		
EEU1	-0.129	***	-0.121	***	-0.116	***	-0.091	***	0.095	***	0.064	***	0.095	***	0.064	**		
TU1	-0.106	***	-0.078	***	-0.144	***	-0.057	**	-0.017	**	-0.016	*	-0.017	*	-0.016	*		
TU2	-0.065	***	-0.026	*	-0.149	***	-0.044	***	0.048	***	0.055	***	0.048	***	0.055	***		
MO1	-0.058	***	-0.029	**	-0.253	***	-0.093	***	0.070	***	0.074	***	0.070	***	0.074	***		
MO2	-0.017	*	-0.008		-0.141	***	-0.060	***	0.058	***	0.043	*	0.058	***	0.043	*		
3b: women that worked part-time before birth (ref. BE)																		
SEU1	-0.031	*	-0.013		-0.014	***	0.002		0.067	**	0.102	**	0.067	**	0.102	**		
SEU2	-0.028	***	-0.019	*	-0.111	***	-0.032	***	-0.022	***	0.015	***	-0.022	***	0.015	***		
EEU1	-0.114	***	-0.055	**	-0.017	***	-0.006		0.008	***	0.049	***	0.008	***	0.049	***		
TU1	-0.133	***	-0.071	*	-0.117	**	-0.030	**	-0.123	***	-0.151	***	-0.123	***	-0.151	***		
TU2	-0.073	***	-0.009		-0.273	***	-0.128	***	-0.020	***	-0.092	***	-0.020	***	-0.092	***		
MO1	-0.088	***	-0.053	**	-0.349	***	-0.182	***	-0.017	***	-0.070	**	-0.017	***	-0.070	**		
MO2	-0.029	*	0.007		-0.246	***	-0.127	***	0.086	**	-0.004	**	0.086	**	-0.004	**		
3c: women that were unemployed before birth (ref. BE)																		
SEU1	-0.080	**	-0.058	**	-0.258	***	-0.240	***	-0.354	***	-0.416	***	-0.354	***	-0.416	***		
SEU2	-0.030	*	-0.044	**	-0.150	***	-0.093	***	0.009	***	-0.034	***	0.009	***	-0.034	***		
EEU1	-0.003		-0.013		-0.190	***	-0.175	***	-0.036	***	-0.111	***	-0.036	***	-0.111	***		
TU1	-0.071	**	-0.108	***	-0.308	***	-0.295	***	-0.046	***	-0.054	***	-0.046	***	-0.054	***		

Table 3 continued

	Activity (vs. inactivity)						Employment (vs. unemployment)						Full-time employment (vs. part-time employment)					
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2			
	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.	Ame	Sig.		
TU2	-0.056	***	-0.081	***	-0.138	***	-0.126	***	0.083	***	-0.008	***	0.083	***	-0.008	***		
MO1	-0.010	***	-0.111	***	-0.285	***	-0.253	***	0.002	***	-0.177	***	0.002	***	-0.177	***		
MO2	-0.012	***	-0.083	***	-0.232	***	-0.209	***	0.157	**	0.082	**	0.157	**	0.082	**		
3d: women that were inactive before birth (ref. BE)																		
SEU1	-0.272	***	-0.209	***	0.160	***	0.080	**	-0.030	**	-0.002	**	-0.030	**	-0.002	**		
SEU2	0.019	***	0.025	***	-0.191	***	-0.136	***	-0.136	***	-0.159	***	-0.136	***	-0.159	***		
EEU1	-0.275	***	-0.247	***	0.311	***	0.176	***	-0.048	***	-0.040	***	-0.048	***	-0.040	***		
TU1	-0.427	***	-0.380	***	0.065	*	0.045	*	-0.071	*	0.106	*	-0.071	*	0.106	*		
TU2	0.023	***	0.037	***	-0.167	***	-0.125	***	0.056	***	0.229	***	0.056	***	0.229	***		
MO1	-0.455	***	-0.407	***	0.156	***	0.147	***	-0.059	*	0.038	*	-0.059	*	0.038	*		
MO2	0.112	***	0.139	***	-0.196	***	-0.151	***	0.201	***	0.318	***	0.201	***	0.318	***		

Source: Administrative Socio-Demographic Panel, 1999-2010, calculations by authors

Model 1 controls for duration since first birth. Model 2 additionally controls for age at birth (quadratic specification), LIPRO-position, region, pre-birth salary, pre-birth sector of employment, partner's origin and partner's pre-birth labour market position

BE Belgium, SEU1 Southern Europe, first generation, SEU2 Southern Europe, second generation, EEU1 Eastern Europe, first generation, TU1 Turkey, first generation, TU2 Turkey, second generation, MO1 Morocco, first generation, MO2 Morocco, second generation

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

comparison with natives and second-generation women, first-generation women generally face a larger risk to become or remain inactive after parenthood, which confirms our second hypothesis. While differences between second-generation migrants and natives are largely explained by socio-demographic characteristics and pre-birth salary and sector, differences between first-generation migrants and natives remain substantial and significant. Finally, our results partly confirm the third hypothesis: whereas first-generation women of Turkish and Moroccan origin that were inactive before parenthood have a larger chance to remain inactive following parenthood in comparison with natives and other origin groups, we do not observe this pattern among the other pre-birth labour market positions. However, since approximately 70% of first-generation mothers of Turkish and Moroccan origin is inactive before the transition to parenthood, this disproportionate effect applies to the majority of these women.

5.2.2 Change in Employment Following the Transition to Parenthood

For women who remain active after parenthood, the probability to be employed rather than unemployed differs markedly between migrant origin women and natives. Among *those that were employed full-time* before parenthood, all migrant origin groups show lower employment levels following parenthood. The differentials range from a 4.6% difference for the Southern European second generation to a 25.3% difference for the Moroccan first generation (middle panel, Panel 3a). When controlling for age at first birth, household structure and predominantly pre-birth job characteristics, differences diminish to a large extent but remain substantial. Additionally, controlling for partner characteristics (Model 2) has limited impact on the differentials in most origin groups.

For *women who were employed part-time* before parenthood and remain active following parenthood, the probability of employment is found to be particularly low among mothers of Turkish and Moroccan origin compared to natives (Panel 3b). When taking into account socio-demographic, pre-birth job and partner characteristics differences diminish, but remain substantial and significant.

In all migrant origin groups, *women who were unemployed* before parenthood have a significantly higher chance than natives to remain unemployed following the transition to parenthood, with differentials amounting to 25.8, 15.0, 30.8, 13.8, 28.5 and 23.2% for first- and second-generation women of Southern European, Turkish and Moroccan origin, respectively (Model 1, Panel 3c). It thus seems that natives experience a greater mobility out of unemployment around parenthood compared to mothers of migrant origin. There is some heterogeneity, however, between generations: first-generation women generally perform worse compared to the second generation. Controlling for socio-demographic and pre-birth job characteristics (Model 2) does not substantially change these differences.

Also for *mothers who were inactive* before childbirth but entered the labour market following the birth of their first child, employment chances are significantly lower among second-generation Southern European, Turkish and Moroccan origin mothers (Panel 3d). In contrast, employment chances are significantly higher among

first-generation mothers of Southern European, Eastern European and Moroccan origin that became active following parenthood compared to natives.

Hence, a larger rise in unemployment following the transition to parenthood was found for women of migrant origin compared to natives, confirming our first hypothesis. Among the pre-birth employed as well as the non-employed groups, women of migrant origin have a larger chance to end up in unemployment after the birth of their first child. Particularly among women who were unemployed before parenthood, the lower probability of escaping unemployment compared to natives stands out. The second hypothesis that predicted a larger rise in unemployment for first-generation women in comparison with second-generation women is partially confirmed. In comparison with natives and second-generation women, first-generation women generally face additional barriers to retain employment after parenthood when full-time employed or to gain employment when previously unemployed in comparison with second-generation women and natives. For women who were part-time employed and inactive before parenthood, differences between first- and second-generation women in terms of employment probabilities do not follow the same pattern.

5.2.3 Change in Full-Time Employment Following the Transition to Parenthood

Finally, probabilities of full-time versus part-time employment between natives and women from different origin groups and migrant generations that remain or become employed following parenthood are compared. Results show that first-generation women of Eastern European origin, second-generation women of Turkish origin and women from Moroccan origin of both generations remain *employed full-time* after parenthood to a significantly larger extent than natives (Panel 3a). For women from other origin groups and migrant generations, the probability is similar to natives (Model 1). Differentials in full-time employment persist when controlling for socio-demographic, pre-birth job and partner characteristics (Model 2).

Among *mothers who already worked part-time* before the birth of their first child, first-generation women of Southern European origin have a significantly larger chance of increasing their working hours to full-time employment, while women of Turkish origin and first-generation women of Moroccan origin have a significantly larger chance to remain employed part-time (Panel 3b). For *those unemployed or inactive before parenthood*, the results regarding the probability of full-time versus part-time employment should be interpreted with caution, as only a limited number of observations are included in these groups. After controlling for socio-demographic, socio-economic and partner characteristics, the probability of full-time employment is significantly lower for first-generation women originating from Southern Europe and Morocco that were unemployed before parenthood (Panel 3c). Among those that were inactive before parenthood but started working afterwards, the probability of working full-time is significantly smaller for second-generation women of Southern European origin and significantly larger for second-generation women of Moroccan origin and women of Turkish origin of both generations (Panel 3d).

Hence, differentials in the probability of being full-time rather than part-time employed between migrant mothers and natives are rather unclear as they do not follow a distinctive pattern across generations and origin groups. However, results of the random-effects models indicate that unobserved time-constant characteristics of women account for the largest part of variation in full-time employment (Table 6 in Online Appendix).

5.2.4 Sensitivity Analysis: Educational Level

As information on educational level is available for 71% of the sample, we carried out additional analyses with educational level as a covariate in the multivariate analyses to control for selective entry into pre-birth employment positions. As expected, educational level positively affects women's labour market attachment. However, as the multivariate analyses already control for pre-birth job characteristics, we find that differences between natives and women of migrant origin only decrease slightly when additionally controlling for educational level, and results by and large remain similar to those reported.

6 Discussion and Conclusion

This paper assessed whether the labour market positions of first- and second-generation women of diverse origins are differentially affected by family formation compared to women of Belgian origin. Earlier studies have shown that motherhood and employment are negatively associated in majority populations across Europe (Kil et al. 2015b; Gutierrez-Domenech 2005), but only a limited number of papers have addressed the effect of parenthood on women's employment in migrant populations, frequently based on cross-sectional data. We add to this body of literature by using longitudinal microdata from the Belgian social security registers and adopting a double comparative perspective taking both different origin groups and migrant generations into account. Belgium provides a relevant context to study this issue given its diverse migrant population and the large employment gap between natives and migrants.

To study maternal employment, we consider three indicators of the labour market position: (1) activity (versus inactivity), (2) employment (versus unemployment) and (3) full-time employment (versus part-time employment). Before parenthood, migrant groups are less attached to the labour market in comparison with natives: both inactivity and unemployment are more prevalent among women of migrant origin. First-generation women typically show the highest inactivity levels, while women of Turkish and Moroccan origin show the highest levels of unemployment, irrespective of generation. Former research has identified a lack of country-specific human capital (Heath et al. 2008; Phalet et al. 2007), limited social capital or institutional knowledge (Verhaeghe et al. 2013) as well as discrimination in the labour market (Hermansen 2013; Safi 2010; Capéau et al. 2011) as important explanations for these differentials. As migrants have severe problems in establishing themselves in the labour market, this study performed separate

analyses of maternal employment for those that were employed full-time, employed part-time, unemployed and inactive before parenthood.

Looking into the parenthood effect on *activity*, we find that women of migrant origin who were active on the labour market prior to the birth of their first child have a lower probability than natives to continue labour market participation after parenthood. For second-generation mothers, the larger increase in inactivity after parenthood can be mainly accounted for in terms of socio-demographic, pre-birth job and partner characteristics. This suggests that differences in activity levels between second-generation mothers and mothers of Belgian origin primarily reflect the socio-demographic profile and early career disadvantages of second-generation women. These results corroborate earlier findings of Holland and de Valk (2017) who reached similar conclusions for the Turkish second-generation based on cross-sectional data.

In contrast to the second-generation, activity levels of first-generation women remain lower after parenthood than those of natives when controlling for socio-demographic, pre-birth job and partner characteristics. This indicates that the labour market position of the first generation is differentially affected by parenthood compared to natives and second-generation women. Especially among Turkish and Moroccan first-generation women that already were inactive before parenthood, probabilities to remain inactive are large in comparison with natives and other origin groups with similar pre-birth profiles. This may be linked to patterns of marriage migration. In the Moroccan and Turkish groups, 'imported brides' have been shown to hold relatively traditional views on gender roles, stipulating that women assume the care responsibility for the household and children (Huschek et al. 2011b; Goldscheider et al. 2011; Bernhardt et al. 2007; Timmerman 2006; Lievens 1999). In contrast, imported grooms often hold more progressive views on female employment and family formation compared to second-generation Turkish and Moroccan men, which may favourably impact the labour market participation of Turkish and Moroccan second-generation women. In our study, we are unable, however, to further distinguish between different migration motives of women, specific (e.g. rural) origins or gender roles in the couple.

The strong link between migration and family formation found among women of Turkish and Moroccan origin is largely absent among women of Southern and Eastern European origin who enjoy legal residence across Europe regardless of partner choice and marital status. Nevertheless, parenthood also disproportionately affects activity levels of first-generation women of Southern and Eastern European origin in comparison with natives and second-generation women. This could similarly hint to patterns of tied family migration that are associated with low activity and employment for female partners (Cooke 2008; Boyle et al. 2003). In addition, for first-generation women having limited prospects in the labour market due to language barriers or discrimination, being a full-time mother may be a more rewarding role (Friedman et al. 1994).

As a next indicator, *(un)employment levels* were considered. Women of migrant origin are more likely to end up in unemployment after the transition to parenthood, and differentials with natives are larger among the first generation than is the case for the second generation. Moreover, the higher increase in unemployment among

migrant women persists when controlling for socio-demographic, previous job and partner characteristics. Other mechanisms related to the combination of a job and children may be responsible for these patterns. First, uptake of family policies (e.g. subsidized childcare, parental leave) in Belgium is subject to a strong gradient in terms of household income. This reflects a lower demand for, but also a lower access to family policies among low-income households as eligibility criteria and services fail to match the unstable employment positions and irregular working hours of this group (Ghysels and Van Lancker 2011; Cantillon et al. 2010; Ghysels and Van Lancker 2009; Kil et al. forthcoming). This may encourage them to quit their job and search for employment that allows combining work and family. Second, in similar vein, particularly first-generation women lack social and family networks capable of assuming part of the care responsibilities to allow the combination of work and family (Raijman and Semyonov 1997; Wall and Jose 2004). Third, a precarious labour market position in terms of job security and work schedules may lead to more unemployment spells in general and may create an unemployment trap where unemployment is more advantageous than continued labour force participation.

Finally, the third indicator considers *full-time versus part-time employment*. Overall, results indicate that the impact of parenthood on full-time versus part-time employment is rather similar among women from different origin groups and migrant generations compared to natives, suggesting that differences between origin groups are mainly driven by the choice to stay in the labour market or not rather than by the choice to reduce working hours.

Although the Belgian social security registers provide unique longitudinal microdata on the labour market position of women with and without migration background, data limitations remain. First and foremost, we could not fully control for endogeneity of childbearing decisions and employment trajectories. Taking different pre-birth positions into account and controlling for unobserved time-constant characteristics, we attempt to adjust for this issue, but it may not fully address the fact that women may opt into particular labour market positions because they anticipate having children (Bass 2014). However, two elements may indicate that bias is limited. First, descriptive analyses show that the labour market position is relatively stable 2–1 year before childbearing, suggesting that women do not anticipate childbirth by reducing their employment hours during this period. Second, additionally controlling for educational level for a subset of the sample—which may be assumed to capture selective entry into pre-birth employment positions—did not substantially affect our results. A second limitation concerns the lack of information on data of immigration which is particularly relevant for first-generation women as labour market positions improve with duration of residence (Kil et al. 2014). The labour market position of first-generation women with a long duration of residence is likely to increasingly resemble that of second-generation women. Third, register data do not provide information on gender role attitudes, informal networks and temporary employment contracts. Although socio-demographic characteristics and pre-birth salary and sector can explain the differential impact of parenthood on the employment position of migrant women compared to natives to a considerable extent, information on these three factors is likely to

explain additional variation in the differential link between motherhood and employment among migrant women and natives. Finally, the scope of this study was limited to first births and employment positions up to four years following the birth of the first child. However, migrant-native differences in the effect of higher-order births on maternal employment may differ from the migrant-native differences in the effect of first births. Also long-term effects of family formation on maternal employment may differ between origin groups. As a result, longitudinal analyses considering pre-birth job characteristics as well as employment trajectories and family formation over an extended part of the life course, in tandem with information on time since migration, gender role attitudes, informal networks and temporary employment contracts, may provide a worthwhile strategy to fully explain the employment rate gap between migrant women and natives.

Despite these limitations, our longitudinal analyses of the link between parenthood and employment among women of diverse origins and generations in Belgium clearly show that parenthood disproportionately affects inactivity and unemployment levels of women of migrant origin. For Belgium, characterized by one of the largest employment rate gaps between migrants and natives in Europe, the results firmly draw attention to the importance of labour market entry and early career positions. Future longitudinal research should attempt to pinpoint these factors more precisely in order to unravel the sources of cumulative disadvantage in the employment trajectories of migrant women.

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