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# Parental leave policies, work (re) entry, and second birth: Do differences between migrants and non-migrants in Germany increase?

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## Abstract

The paper investigates migrant–nonmigrant differentials over time among women in Germany after their first childbirth; we look at the transitions to paid work or to a second child. Our observation period covers almost 30 years, in which family policies changed substantially. Most notably, the year 2007 marked a shift in (West) Germany’s parental leave policy from a conservative family model to a policy directed toward fostering work and family reconciliation. Across these policy periods, we investigate whether population subgroups, i.e., first-generation migrants and migrant descendants, show different patterns in their transitions after the first childbirth compared to the non-migrant majority population. We use data of the German Socio-economic Panel Study (GSOEP). Our sample consists of 3555 mothers of one child, about 13% of whom are first-generation migrants and 16% are migrant descendants. We estimate event-history models: using competing risks analyses, we study transitions following the first birth, specifically, (re)entering work and having a second child. We find that the transition (back) to work increased significantly from one policy period to the next among non-migrants. Increases among migrants varied between the migrant generations, were smaller and occurred later. Hence, we find an increasing gap between first-generation migrants and non-migrants across policy periods, with migrant descendants in between. To some extent, the migrant–non-migrant gap traces back to different compositional and institutional effects and varies across origin groups. By contrast, the transition rates to a second child decreased among non-migrants, but hardly varied across periods among migrants. Thus, our results demonstrate increasing differentials between societal groups in their work–family reconciliation behavior, to which the modern parental leave policies may have contributed. We discuss the implications of these results for researchers, society and policymakers.

**Keywords:** Migrant fertility, Female labor force participation, Maternal employment, Work–family reconciliation, Stratified reproduction, SOEP



## Introduction

This paper studies life course transitions among one-child mothers by comparing immigrants and non-migrants. We look at the transition to (re)entry to paid labor versus having a second child. In so doing, we aim to bridge two ongoing societal changes throughout Europe. First, after more than 60 years continuing immigration to western Europe, the migrant populations are diverse with respect to their origins, legal status, socio-economic, and cultural characteristics (Vertovec, 2007). The share of migrant and ethnic minority groups within the residence populations in Europe is increasing. Hence, the question of social rights and equal participation of the new residents is becoming quantitatively ever more important (Morrissens & Sainsbury, 2005). Second, demographic aging and social changes in many Western welfare states put the reconciliation of family life and paid labor center stage in political, public, and private debates on gender equality. Yet, research on possible effects of family policies largely concentrates on European majority populations and thus on questions of gender (in)equality rather than on class and social (in)equalities of migrants. Because of this, the question remains under-researched whether modernization processes toward gender equality affect each population group equally, or whether modern policies rather reinforce social inequalities between old and new residents or certain segments within the populations based on class (Milewski & Adserà, 2023).

Policies facilitating work–family reconciliation, such as parental leave and allowances as well as access to childcare, are designed to support employment-oriented mothers' (re)entry into the labor market and to strengthen their continuity in employment across their life course. Such policies may also incentivize women with little or no work orientation to take up paid labor (Blum & Dobrotic, 2021). Many empirical studies on European countries demonstrate the increase in female labor force participation rates in recent decades, also with respect to maternal employment. Previous research has labeled these developments as reflections of a “gender revolution” that marks a turnaround of (female) gender roles and family norms from gender complementary to egalitarian (labor) arrangements (Goldscheider et al., 2015). The old policies were often labeled as “universal”, but eligibility was de facto conditioned on gender (and thus not universal), as, e.g., the term *maternity* leave implies (Blum & Dobrotic, 2021). Few authors have pointed out possible ‘side effects’—intended or not—of this turnaround and the modern *parental* leave policies that both reflect and propel this development. Specifically, they argue that the modern ideal of “having it all”—i.e., employment and children, paid labor market activity and unpaid caregiving—may simply put women under a different kind of normative pressure (Menke, 2017; Milewski & Carnein, 2011). Furthermore, the shift towards income-contingent parental leave allowances may contribute to increasing social inequalities, as certain groups, i.e., work-oriented, higher educated women, may benefit disproportionately from the reduction of opportunity costs of childbearing and child caring (Brehm, 2020; Bujard & Passet-Wittig, 2013; Dobrotic & Blum, 2019).

Migrants' reaction to family policies has only been researched sporadically, and only in few countries, suggesting migrant disadvantages (Andersson et al., 2006; Mussino & Duvander, 2016; Mussino et al., 2019). Our paper addresses this research gap in an exploratory manner. We pose the following research questions: What are the patterns of (re)entry to paid labor and to a second child of migrants across several

parental leave policy periods as compared to non-migrants? And how did any differences between migrants and non-migrants develop across policy periods? What role do socio-demographic and socio-economic individual characteristics as well as contextual factors play in shaping such differences (if any)? By analyzing the events of (re)-entry to labor and the conception of a second child simultaneously, we draw attention to the interplay between these two transitions. Parental leave policies set incentives (or not) for maternal employment after childbirth; this in turn affects not only the quantum, but also the timing of a potential subsequent child birth decision and thus the birth spacing (Andersson et al., 2006; Neyer & Andersson, 2008). Previous literature on migrants' fertility (Kulu et al., 2019) and migrant women's employment patterns (Holland & de Valk, 2017) has analyzed these processes separately and has used the number of children or the employment status as independent determinants of employment or fertility analyses, respectively (Andersson & Scott, 2005, 2007).

To address our research questions, we draw on the case of Germany. Germany makes a good case study for such an analysis due to the evolution of its family policies. In the over 30 years following German unification in 1990, the societal and legislative climate toward work–family reconciliation changed substantially. Most notably, the year 2007 marked a paradigm change in (West) Germany's family policy legislation from a conservative family model to a parental leave policy (also) directed at fostering maternal employment. Furthermore, (West) Germany has been the leading migrant destination in Europe for several decades. The country has accommodated immigrants who came for various reasons and from a variety of regions of origin ever since the end of World War II in 1945. The proportion of immigrants, including subsequent generations, has been rising steadily and today makes up more than one-quarter of the population (BiB 2022).

## **Background**

### **Maternal employment and fertility among immigrants**

Previous research studied immigrant employment and immigrant fertility in Germany and in other European countries mainly from the assimilation perspective, i.e., comparing immigrants over generations to non-migrants at destination (Adserà & Ferrer, 2015; Kulu et al., 2019). With respect to female labor force participation in general and to maternal employment in particular, disadvantages of migrant women as compared to non-migrants are well documented. For Germany (Salikutluk et al., 2020; Samper Mejia, 2021) and other European countries (Adserà & Ferrer, 2014; Holland & de Valk, 2017; Lee et al., 2020), research has studied several labor market indicators such as the amount of working hours, the type of contract and occupational class. From a life course perspective, the migrant–nonmigrant gap in maternal employment is caused by gaps already apparent before motherhood, and the gap widens after having children (Maes et al., 2021; Samper Mejia, 2021; Sánchez-Domínguez & Guirola Abenza, 2021; Vidal-Coso, 2019) or in vulnerable groups such as lone mothers (Milewski et al., 2018). Comparing migrant generations, the (maternal) employment gaps are on average smaller among migrant descendants than in the first migrant generation compared to non-migrants, with considerable variation across (parental) countries of origin. In addition to structural disadvantages or discrimination as often seen in migrant, ethnic, or

religious minority groups (Bean & Tienda, 1990; Foner & Alba, 2008), cultural perceptions of gender roles with respect to childcare, but also to old-age care contribute to within-migrant differentials (de Valk & Schans, 2008; Milewski, 2013; Norris & Inglehart, 2012). Moreover, first-generation migrants from non-EU countries often face special regulations toward paid work that vary across countries. Marriage migrants from non-EU countries in Germany, for example, do not receive a work permit immediately after moving; employment rates of marriage migrant women are thus lower than those of other migrant and non-migrant women (Samper & Kreyenfeld, 2021).

Regarding their fertility patterns, comparing women from different regions of origin revealed the importance of the socialization context, as women from countries with higher fertility levels also have higher fertility than non-migrants at European low(er) fertility destinations. This is seen both in behavior as well as in attitudes. Women in the biggest migrant groups in Germany show greater support for having children as an ideal for women (Haug & Milewski, 2018). To some extent, fertility differentials have also been found in the generation of migrant descendants. Selection and socio-demographic compositional differences, disruption, and adaptation processes were discussed as possible mechanisms of fertility change (Adserà & Ferrer, 2015; Kulu & Milewski, 2007; Kulu et al., 2019). More recent research indicates, however, that there is much heterogeneity within migrant populations, with education and regional factors at destination being important determinants for fertility differentials (Milewski & Adserà, 2023). For immigrants of the first generation in Germany, literature reports a common pattern of rather high birth transition rates shortly after immigration (Milewski, 2007). This pattern holds across various migrant types (exceptions were shown for certain refugee groups; Saarela & Wilson, 2022), countries of origin and destination (Alderotti et al., 2022; Andersson & Scott, 2005; Kraus, 2019). As compared to non-migrants, childlessness is rather low among immigrants in Germany. In the first generation, this can largely be explained with the interrelation of life course events, i.e., marriage or union formation and migration, resulting in family formation. In addition, work policies play a role in Germany (see above), e.g., first-birth fertility appears elevated in non-work phases among marriage migrants (Milewski, 2007). By contrast, migrant mothers to Sweden established themselves first in the labor market—like non-migrant Swedes—before having children (Andersson & Scott, 2005). In Italy, fertility patterns were also found to vary across migrant types; women who migrated for work had lower fertility than women who moved for family reasons (Mussino & Strozza, 2012).

Variation among immigrants in Germany increases in the subsequent birth transitions. With respect to second birth behavior, the socialization context, e.g., differences across countries of origin, gain importance in within-migrant comparisons. For example, women from Turkey and Turkish descendants in Germany have higher transition rates to a second child as compared to immigrants from Mediterranean countries, where fertility has been on a lowest-low level for many years (Krapf & Wolf, 2015; Milewski, 2010).

Recent studies on migrant fertility also demonstrated variation across cohorts and periods (Erman, 2022). As immigration to Western Europe is continuing, Germany and other migrant destinations host several migrant generations from the same country of origin, many of them arriving under different legal conditions of entry or with different

knowledge of the host country language. The period and cohort perspective in migrant fertility research also becomes important because both countries of destination and origin are undergoing social and demographic changes (Baykara-Krumme & Milewski, 2017; van Landschoot et al., 2014). Previous research also highlighted cross-country fertility variation among second-generation migrants; this was attributed to a general societal climate or the institutional contexts, of which family policies are a crucial ingredient (Milewski, 2011). Nonetheless, previous research fell short in looking into the role of how a changing welfare state context can influence adaptation processes of immigrants. Family policies interact with social and demographic changes and may thus also contribute to variation over time within migrants. These may be affected by various policy areas, such as migrant integration policies, labor market regulations toward immigrants as well as immigration policies as such (Bonjour & Kraler, 2016). Beyond that, we focus on the role of national family policies in these adaptation processes.

### **The German parental leave policy context**

A core element of work–family reconciliation policies is regulations concerning parental leave, which reflect and influence the perceived gender role ideal in a society. At present, the number of welfare states which grant universal eligibility to parental leave is decreasing because more and more European welfare states base eligibility to transfer payments during parental leave (also) on labor market activity prior to childbearing (Blum & Dobrotic, 2021; Dobrotic & Blum, 2020; EIGE, 2020). Such legislation aims at reducing opportunity costs of childbearing and thereby may also affect (subsequent) fertility.

Since the early 1990s, there have been considerable advances in Germany's legislation toward work–family reconciliation. In 1992, a 3-year parental leave with a 2-year fixed allowance set a norm for a prolonged caregiving period and a subsequent return to work among mothers. Up to then, reconciliation behaviors of West German mothers were quite heterogeneous (Brehm, 2020; Konietzka & Kreyenfeld, 2010), while East German mothers' reconciliation patterns had been relatively homogeneously employment-oriented (Falk & Schaeper, 2001).<sup>1</sup> In 1996, parental leave was reinforced by an entitlement to external part-time childcare for 3-year-olds at least. While this marked gradual overcoming of the West German history of not providing public childcare, East Germany could build upon a wide net of full-time childcare institutions. In 2001, parental leave was flexibilized and parental allowance could be requested for 1 year at a higher rate instead of the previous 2-year payment. In 2007, a (capped) income-contingent allowance was introduced. It replaced 67% of the caregiving parent's net income for 1 year and allowed for another 2 months if both parents took leave. The reform marked a paradigm shift in (West) Germany's legislation from a conservative reconciliation model to a more social-democratic 'Scandinavian-style' family policy (Geisler, 2013; Ostner, 2006; Trappe, 2009). In 2013, the entitlement to external childcare was extended to 1- and 2-year-olds. In 2015, parental leave and allowances were adjusted to encourage both parents to converge in their working hours and engagement in childcare.

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<sup>1</sup> Germany has considerable spatiotemporal heterogeneity in family policies as well as social practices of work–family reconciliation. The variety is rooted in its federalism and particularly its two-country history of a relatively conservative West and an occupationally quite egalitarian East Germany until 1990. The two Germanies differed in terms of fertility, and women's reconciliation of family and employment (Kreyenfeld, 2004).

Accordingly, previous empirical research on policy periods in Germany has provided ample evidence for considerable changes in labor-market return patterns in the majority population (Bergemann & Riphahn, 2011; Brehm, 2020; Chirkova, 2019; Geyer et al., 2015; Kluge & Tamm, 2013; Ziefle & Gangl, 2014). Blum & Dobrotic (2021) suggested that the currently dominant model may not be gender-conditioned, but rather selective in terms of social strata, as the eligibility to parental leave benefits depends on gainful employment.<sup>2</sup> Similarly, Bujard & Passet-Wittig (2013) pointed out that the recent parental leave policies may contribute to inequality between social groups in the same life course stage. They called this a conflict of goals between—currently—reducing inequalities over the individual life course and between genders and—previously—reducing inequalities between social groups (Bujard & Passet-Wittig, 2013). Furthermore, given the (still) insufficient supply of public childcare, eligibility for childcare is often based on parental employment, thus further increasing the selection effect based on labor market activity.

### **Social participation of immigrants in family policy measures**

To date, research on immigrants' response to policy changes and/or usage of family policy measures is relatively scarce. The little existing research focuses on Nordic countries. It indicates migrant–nonmigrant gaps and dissimilar responses to policy changes, while at the same time finding signs of adaptation processes and socialization effects. Regarding parental leave, research found different leave patterns for migrant and non-migrant mothers in Sweden. These, however, were partially a result of different labor market activities and decreased the longer migrant mothers lived in the destination country (Mussino & Duvander, 2016). Among fathers, research has found lower leave take-up rates among immigrant than among native-born men in Sweden and Finland. Though migrant fathers made increased use of leave with time spent in the destination country or with a younger age at migration, non-migrant fathers expanded their lead by even greater increases in leave take-up over time (Duvander et al., 2010; Mussino & Duvander, 2016; Mussino et al., 2018, 2019). Beyond Scandinavia, Kil et al. (2017) found lower parental leave usage among migrant mothers in Belgium because they were less likely to meet the eligibility criteria based on prior employment.

Regarding other family policy measures, Andersson et al. (2006) found migrant–non-migrant differentials in the response to the so-called Swedish speed-premium, i.e., the incentive for close birth spacings to avoid reduced leave allowances. More specifically, they only found those differentials among non-Nordic migrants and argued that their findings resulted from social learning and social influence on the diffusion of fertility changes within a population (as suggested by Montgomery & Casterline, 1996). Findings on Sweden suggest that migrant–nonmigrant differentials in the response to policy changes might result from information not reaching migrant communities to the same extent as the non-migrant population. Furthermore, differences in labor

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<sup>2</sup> Note: In the policy typology suggested by Blum & Dobrotic (2021), Germany is a “mixed type”. On one hand, the current policies specifically lend more support to working—i.e. gainfully employed—parents, and their income replacement is higher when their earnings were higher. On the other hand, compared to some other welfare states, e.g. Sweden, mothers in Germany still get a comparatively high flat rate during parental leave if they were not gainfully employed prior to a birth.

market conditions and attachment might reinforce these group differentials by reducing migrants' returns to utilizing policy measures (Andersson et al., 2006; Duvander et al., 2010).

Public childcare is another—if not the crucial—factor for work–family reconciliation. Lower take-up rates of immigrants were also found for public childcare across the European countries where public childcare is not universally available (van Lancker & Pavolini, 2023). This migrant disadvantage persists also in the second migrant generation and is driven both from the demand and the supply side. The demand may be lower among immigrants due to different gender role ideals and work–family reconciliation models, lower labor force attachment among women, and/or preference for informal childcare (Biegel et al., 2021). The main causes, however, were identified on the supply side when formal childcare is not universally available (Maes et al., 2021; Pavolini & Van Lancker, 2018). Migrants' access to and usage of childcare might be diminished for reasons of eligibility when based on parents' employment, unaffordable costs, and job-incompatible opening hours (Vandenbroeck & Lazzari, 2014; Vandenbroeck et al., 2008; Wall & José, 2004). In Germany, the childcare rates are in general relatively low in European comparison, in particular for children below age three as well as for those in full-time care (Chirkova, 2019; Bertelsmann Stiftung, 2020). Access is based on need, with parents' employment situation representing a crucial base for decision-making. Germany is no exception, as migrant children living here participate less in childcare than non-migrants (Schober & Spieß 2013; Zoch & Schober, 2018).

### **Working hypotheses**

We conclude the background section by formulating working hypotheses guiding our empirical analysis on what transition occurs first among one-child mothers in Germany. First, we explore variation across family policies within migrants and non-migrant groups. Previous findings on migrants' uptake of parental leave suggested that migrants may have lower access to information (Andersson et al., 2006), lower childcare utilization rates (see above), and lower labor market attachment (see above). Thus, we expect that non-migrants show increasing labor (re)entry rates in the more recent periods, while their transitions to second children directly out of parental leave may become less frequent. Migrants may show smaller differences between the policy periods than non-migrants (H1 on different policy responses).

Our second hypothesis follows up on the first hypothesis. If migrant mothers show smaller period changes than non-migrants, our working hypotheses postulate that the migrant–nonmigrant gaps may increase in more recent policy periods, with migrants being more likely to have a second child first and less likely to (re)enter paid work directly after having the first child than non-migrants (H2 on a migrant–nonmigrant gap).

Third, we investigate the role of the socio-economic and demographic structures as well as institutional factors of the groupings in our study. Previous research has provided ample evidence that migrant–nonmigrant differentials as well as differences between migrant generations trace back, at least partially, to compositional differences, especially with respect to education (Adserà, 2017; Kulu et al., 2019; Milewski & Adserà, 2023), which is a determinant of fertility as well as of maternal employment. Thus, controlling

for socio-economic and socio-demographic as well as contextual factors may reduce such differentials between migrants and non-migrants as well as between policy periods (H3 on compositional effects).

## Data, variables, and method

### Data and study population

We use the German Socio-economic Panel (GSOEP). The GSOEP is a representative longitudinal study conducted in (West) Germany annually since 1984 (Wagner et al., 2007). Since its start, the sample has repeatedly been supplemented by refresher samples as well as by oversampled subpopulations, such as immigrants and refugees (Kroh et al., 2018; Wagner, 2009). In addition to the annual surveys, it also contains biographical data on births and employment. This enables us to include life course information from before the actual survey period. For the following analyses, we use the waves from 1992 to 2020, covering the time post German reunification, and respondents in both West and East Germany. We used the samples on the majority population as well as the migration and recent refugee samples of the survey.<sup>3</sup> We restricted our analytical sample to women who gave birth to at least one child in Germany during that period ( $N=3555$ ). To ensure a continuous observation period, we excluded left-censored observations, i.e., women whose observation time in the panel starts only after their first childbirth. Among first-generation migrants, we included only the mothers who had their first childbirth after migrating, to ensure that they experienced their exposure time in Germany. We used data on one-child mothers until the conception leading to their second live-born child (852 events in total) or their (re)entry to the labor market (1789 events in total)—whichever event occurred first—or until their last interview if none of these events occurred (right-censoring; for 914 individuals, neither of the two events was recorded).

With respect to migrant status, we grouped respondents as *migrants* if they or their parents were born abroad, and as *non-migrants* if they were born in Germany to German-born parents. As the cut-off point to differentiate between the immigrant generations, we used age 15: immigrants of 15 years or older when moving to Germany were considered *first migrant generation*. Those who moved prior to age 15 (the so-called generation 1.5) or who were born in Germany (second generation) to at least one immigrant parent were grouped as *migrant descendants*.<sup>4</sup>

### Dependent variables, method, and modeling strategy

We use event-history methods with a competing risk set-up to understand the transitions of one-child mothers from parental leave/unpaid caregiving to (a) a *(re)entry to paid labor market activity* (including self-employment) or (b) a *second conception leading to a live birth*. Note: Usually, competing risks would be used for alternate events in one transition, say from marriage to union dissolution, i.e., divorce or widowhood. In our case, the events are not mutually exclusive. As we are interested in the question which of the events occurs *first* (because this is crucial for parental leave allowances), we

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<sup>3</sup> Institutional households and cases of twin-first births were excluded.

<sup>4</sup> About 80% of our study population was drawn from the GSOEP samples of the majority population. About 18% was derived from the migration samples, and 2% of our analytical sample was collected in the refugee samples of the GSOEP. The cases drawn from the refugee sample were almost exclusively persons defined as first-generation migrants.



consider our approach justified. The process time, i.e., the baseline, is the age of the first child in months; it ends after 72 months because most children are about to start primary school in Germany at the age of 6 years. Cases in which the last interview occurred before that cut-off point were censored if no transition occurred. Overall, our analyses are based on 72,956 observation months, of which the first migrant generation contributed about 12% and migrant descendants about 16% (which corresponds well with their respective shares of individuals in the sample).

Following descriptive Kaplan–Meier estimations, we calculate piecewise-constant competing risks models for our multivariable analyses. To do so, we split the observation time into six time intervals of 12 months each and run multinomial logit models, clustered by mothers and with robust standard errors. We present the results using average marginal effects.

Our modeling strategy is as follows: first, to set the stage for the multivariable analyses, we explore if there is any migrant–nonmigrant gap in post-first birth transitions over the whole time period under study. Second, we calculate the multivariable models separately for the two migrant generations and non-migrants to test our hypothesis whether migrants respond differently than non-migrants over policy periods (H1). Third, we estimate the models separately by policy period, but use all three groups together in order to better understand potential migrant–nonmigrant differences over time (H2). The analyses are all carried out in a stepwise fashion and we present the results in sets, starting with our variables of interest, i.e., parental leave policy periods and (non-)migrant generation, respectively, as well as the baseline, i.e., months since first birth (Models 1). To test our hypothesis on compositional effects (H3), we add indicators of the woman's socio-economics in Models 2 and socio-demographic and economic control variables of the household in Models 3. In Models 4, childcare rates are added as macro-institutional indicators.

After the main analyses, we look at two aspects of the analyses in more detail. In order to understand the specific nature of transitions to (re)entering work or having a second birth across groups, we estimate the interval-specific predicted probabilities based on interactions between the main explanatory variables and the baseline. Then, we account for further variation within migrant generations by including their country-groups of origin. On one hand, this allows a better understanding of whether the socio-demographic, socio-economic, and institutional factors account for within-migrant differences or whether there is a cultural, or other, explanation of some kind. On the other hand, the immigration flows to Germany changed across time with respect to legal status and countries of origin, which were also—with a time lag—reflected in the sample composition of the GSOEP. Thus, additional controlling for country of origin takes into account that the risk population in our sample differs across the almost 30 years of observation time.

### **Independent variables**

The main explanatory variable we are interested in is *parental leave policy cohort*. To capture possible period trends, we grouped our respondents by the year in which their

first childbirth occurred: 1992 to 1995, 1996 to 2000, 2001 to 2006, 2007 to 2012 and 2013 to 2020. As we are mainly interested in the question whether time trends coincide with phases in parental leave policies, our grouping captures the main phases in the parental leave legislations.<sup>56</sup>

In order to explore variation within migrants further than the migrant generation, we used their (parental) *country of origin*. We grouped their or their parents' countries of birth according to cultural and legislative contexts as well as cell size as follows: West, South, and North Europe; East Europe; Turkey and other countries with a Muslim tradition; Asia; the Americas, Africa, and other/unknown countries.

We used a number of socio-demographic, socio-economic and institutional control variables which are known to be associated with maternal employment and fertility. While we do not focus closely on their effects, we report them in Appendix 1, separately for each (non-)migrant group. These control variables are operationalized as follows.

*Education* (time-varying) We defined education according to the CASMIN classification, condensed into four groups: no or lower secondary qualification, middle secondary qualification, upper secondary qualification, and tertiary qualification.

*Employment before first birth* We assessed mothers' employment situation in the year prior to their first childbirth by distinguishing full-time employment (more than 30 h), part-time employment (up to and including 30 h), and non-employment (including unemployment and other states without employment).

*Age at first birth* We grouped the respondents' age at first birth in four categories, i.e., under 25 years, 25 to 29 years, 30 to 34 years, and 35 + years.

*Union status* (time-varying) We controlled for the respondents' union status, combining marital status and living arrangement with a partner: married, non-married cohabiting, single (i.e., lone motherhood).

*Equivalent household income* (time-varying) As fertility and employment decisions are probably based on the economic situation of the household, we also control for the equivalent household income, which takes into account the partner's employment situation.

*Regional childcare provision* Changes in parental leave policies were accompanied by an expansion in public childcare. Therefore, we used two macro-indicators as institutional controls, which also account for regional variation within Germany. We controlled for yearly childcare rates for infants (below three years) and kindergarten-age children (3 to 6 years) for Germany's 16 federal states, using publicly available macro-data (Destatis, 2019, 2022a, b). Prior to 2006, our data relied on quadrennial public data, in between which we employ linear interpolation.

<sup>5</sup> Note: This grouping reflects the family policies that are in effect at the birth of women's first child, which does not necessarily correspond fully to the policies that were in place in each specific year. Hence, our variable is, strictly speaking, a cohort variable.

<sup>6</sup> Note: In preliminary analyses, we had used calendar year as a continuous variable. It produced an increasing trend of (re)entry to work across all three groups in our study. As we are interested not in the average trend across 30 years and not in the average gap between migrants and non-migrants across time, we constructed a categorical variable for the year.

**Table 1** Descriptive overview of the sample—by migrant status

	Non-migrants	First-generation migrants	Migrant descendants	Total	Non-migrants	First-generation migrants	Migrant descendants	Total	
	Observations				in percent				
Event (outcome)									
Work (re) entry	1386	145	258	1789	54.6	31.9	45.7	50.3	
Second child (conception)	568	130	154	852	22.4	28.6	27.3	24.0	
Parental-leave policy cohort at first birth									
1992–1995	289	53	57	399	11.4	11.7	10.1	11.2	
1996–2000	427	57	83	567	16.8	12.6	14.7	15.9	
2001–2006	559	45	104	708	22.0	9.9	18.4	19.9	
2007–2012	781	81	147	1009	30.8	17.8	26.1	28.4	
2013–2020	481	218	173	872	19.0	48.0	30.7	24.5	
Country of origin group									
Germany	2537			2537	100.0			71.4	
West, South and North Europe		52	112	164		11.5	19.9	4.6	
East Europe		200	138	338		44.1	24.5	9.5	
Turkey, Muslim countries		121	117	238		26.7	20.7	6.7	
Asia		42	44	86		9.3	7.8	2.4	
the Americas, Africa, other, unknown		39	153	192		8.6	27.1	5.4	
Employment before first birth**									
Full-time (> 30 h) employment	1916	261	381	2,558	75.5	57.5	67.6	72.0	
Part-time (≤ 30 h) employment	358	81	94	533	14.1	17.8	16.7	15.0	
Non-employment	263	112	89	464	10.4	24.7	15.8	13.1	
Age at first birth**									
< 25 years	536	134	212	882	21.1	29.5	37.6	24.8	
25 to < 30 years	870	126	180	1,176	34.3	27.8	31.9	33.1	
30 to < 35 years	770	124	134	1,028	30.4	27.3	23.8	28.9	
> 35 years	361	70	38	469	14.2	15.4	6.7	13.2	
Persons (N)	2537	454	564	3,555	71.4	12.8	15.9	100	

**Table 1** (continued)

	Non-migrants	First-generation migrants	Migrant descendants	Total	Non-migrants	First-generation migrants	Migrant descendants	Total
	Observations				in percent			
<i>Time-varying covariates</i>								
<i>Education**</i>								
No or lower secondary	9350	3690	4,674	17,714	17.9	40.8	40.0	24.3
Middle secondary	22,165	357	3,312	25,834	42.4	3.9	28.4	35.4
Upper secondary	9201	2294	1,541	13,036	17.6	25.4	13.2	17.9
Tertiary	10,042	2389	1,207	13,638	19.2	26.4	10.3	18.7
mv	1481	311	942	2,734	2.8	3.4	8.1	3.7
<i>Union status**</i>								
Married	32,119	7357	8,084	47,560	61.5	81.4	69.2	65.2
Cohabitation	14,946	873	2,188	18,007	28.6	9.7	18.7	24.7
Single	4769	588	1,173	6,530	9.1	6.5	10.0	9.0
mv	405	223	231	859	0.8	2.5	2.0	1.2
<i>Equivalent household income**</i>								
Valid	47,822	7686	10,857	66,365	91.5	85.0	93.0	91.0
mv	4417	1355	819	6,591	8.5	15.0	7.0	9.0
<i>Regional childcare provision 0- &lt; 3 years</i>								
0-5%	15,060	3,304	4,251	22,615	28.8	36.5	36.4	31.0
6-15%	6860	1,066	2,224	10,150	13.1	11.8	19.0	13.9
16-30%	13,947	3,349	3,767	21,063	26.7	37.0	32.3	28.9
30+%	14,889	1,195	1,124	17,208	28.5	13.2	9.6	23.6
mv	1483	127	310	1,920	2.8	1.4	2.7	2.6
<i>Regional childcare provision 3-6 years</i>								
0-70%	1704	356	411	2,471	3.3	3.9	3.5	3.4
71-80%	3287	624	784	4,695	6.3	6.9	6.7	6.4
81-90%	11,911	1,725	2,833	16,469	22.8	19.1	24.3	22.6
91-95%	23,397	4,504	4,602	32,503	44.8	49.8	39.4	44.6
96+%	11,940	1,832	3,046	16,818	22.9	20.3	26.1	23.1
<i>Continuous covariate</i>								
Equivalent household income (mean)	19,369	17,210	15,971	18,563				
<i>Person months (n)</i>	<i>52,239</i>	<i>9,041</i>	<i>11,676</i>	<i>72,956</i>	<i>71.6</i>	<i>12.4</i>	<i>16.0</i>	<i>100</i>

*Italic values indicate sample size and exposure time*

*Source* calculations based on GSOEP, wave 37 (1992-2020)

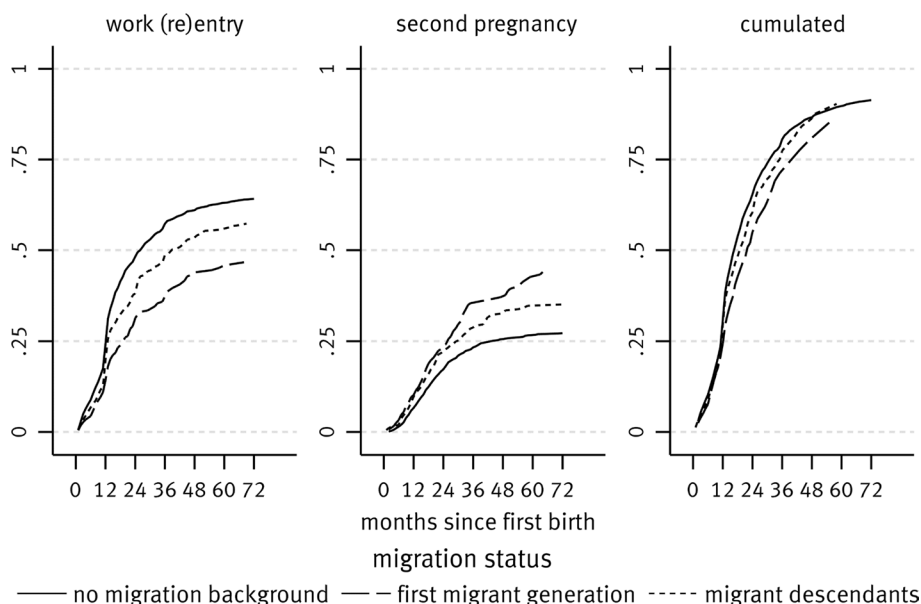
*Note* mv = missing values. Results of chi<sup>2</sup>- or piecewise t-test for group differences by migrant status in dependent variable significant, \*\**p* < .01

**Description of the sample**

Table 1 gives a descriptive overview of our sample by migrant status. Our sample consists of 13% migrants of the first generation, 16% are migrant descendants, and 71% are non-migrants. The largest percentage of first-generation migrants comes from East European countries (about 44%), thus reflecting the more recent phase of immigration to Germany. About 27% of the first generation moved from Turkey and other countries

with a Muslim tradition to Germany. About 12% of the first generation are from countries in West, South, or North Europe. Among migrant descendants, large origin groups are those from East Europe (24%), Turkey and other Muslim countries (21%), or South Europe (18%, grouped with 2% from West and North Europe) as their parental origins, which reflects the immigration waves of labor recruitment as well as of movements of ethnic Germans and other immigration from East Europe.

Immigrant women in our sample were on average younger when they had their first child and they were more likely to be married than non-migrants. Migrants' household income was significantly lower than that of non-migrants. Note that the educational composition of the migrant generations reflects recent changes in the immigration composition. The first generation contains 31% of women who have completed tertiary education and 22% who hold an upper secondary qualification. This corresponds to 7pp (percentage points) and 5pp less, respectively, among non-migrants. Among migrant descendants, we found the oft-reported migrant–nonmigrant gap whereby migrant descendants are lower educated on average compared to non-migrants: e.g., the share of tertiary education was only about 15% in this group. Note also, that both migrant groupings were found to have a lower labor-market attachment prior to motherhood as compared to non-migrants—despite the above-average educational attainment observed in the first migrant generation. Only about 10% of non-migrants were not working prior to becoming mothers, in contrast to about 25% in the first migrant generation and about 16% among migrant descendants. These patterns are in line with previous research on maternal employment and fertility of immigrants in Germany as well as in other European countries (Kulu et al., 2019; Milewski & Adserà, 2023).



**Fig. 1** Cumulative incidence of work (re)entry and second child risks. *Source* calculations based on GSOEP, wave v37 (1992–2020)

## **Empirical results**

### **Descriptive overview of post-first birth transitions**

We start by displaying the cumulated incidence estimates of (re)entry to paid labor or a second pregnancy in order to detect whether there is any migrant–nonmigrant gap in post-first birth transitions over the whole time period under study (Fig. 1).

We found the largest gap in labor (re)entry between women in the first migrant generation and non-migrants. Given that they had not had a second pregnancy (yet), half of non-migrant mothers had (re)entered work within 26 months of their first childbirth. Among first-generation migrants, the share of mothers (re)entering the labor market remained just short of half of mothers throughout the observation period of 72 months. Women of migrant descent were in between the other two groupings, at 39 months. Upon the sixth birthday of the first child (i.e., 72 months after childbirth), the migrant–nonmigrant gap in labor market (re)entry was at about 17.5% between the first generation and non-migrants. The share of mothers who had (re)entered the labor market after having one child varied between 46.7% among first-generation migrants and 64.2% of non-migrants, and the migrant descendants' share was in between at 57.4%.

We found the opposite pattern in the transition to a second child. Given that mothers had not (re)entered the labor market prior to a second pregnancy, the first quintile (i.e., 20%) in the transition to a second child was at about 28 months for non-migrants, 20 months for first-generation migrants and 22 months for migrant descendants. When the first child turned 6 years, 44.0% of first-generation migrants had a second child without labor market activity as compared to 35.1% among the descendants and 27.2% among non-migrants.

These tempo and quantum differences are in most parts significant and support our background assumption of migrant–nonmigrant gaps in both transitions, with the exception of second child risks among first-generation migrants and migrant descendants. Overall, both the (re)entry to paid labor and the transition to a second pregnancy follow the widely known pattern of differences occurring mainly between the first migrant generation and non-migrants. The migrant descendants display an 'in-between' pattern, which is indicative of assimilation processes.

In sum, when the first child turned 6 years, the majority of the mothers in all three groupings had experienced one of these two events. Only about 8 to 9% in each group were not gainfully employed after having only one child. In additional analyses (not shown here), we explored the number of working hours upon (re)entry to paid work. We found that about 26% of the mothers in our sample worked immediately in full-time and about 74% in part-time arrangements, without significant differences between the three groupings in our study with respect to the amount of working hours. Moreover, we explored whether the groupings differed in their working hours across the various parental leave policy periods, but we generally found similar patterns across both migrant groups and non-migrants across policy periods.

### **Within-group variation by parental leave policy cohort**

In this section, we are going to test our hypothesis on different policy responses (H1) according to which post-first birth transitions changed across different policy periods in each group. Table 2 displays the results of multivariable models separately for the three

**Table 2** Results of multivariable intensity regression with competing risks of (re)entry to work or second child—by migrant status (AME)

	Ref: 1992–1995			First-generation migrants			Migrant descendants		
	Non-migrants (Re)entry to work	Second pregnancy	(Re)entry to work	(Re)entry to work	Second pregnancy	(Re)entry to work	(Re)entry to work	Second pregnancy	
Model A1	1996–2000 0.003	—0.001	0.002	0.007	◦	0.004	—0.001		
	2001–2006 0.007	—0.002	0.005	0.000		0.006	0.000		
	2007–2012 0.012	—0.003	0.008	◦		0.020	**		
	2013–2020 0.021	—0.004	0.015	**		0.014	**		
Model A2	1996–2000 0.002	—0.001	0.001	0.007	◦	0.003	—0.001		
	2001–2006 0.005	—0.002	0.002	0.000		0.005	0.000		
	2007–2012 0.011	—0.003	0.003	0.009	*	0.020	**		
	2013–2020 0.018	—0.005	0.010	0.006	◦	0.010	*		
Model A3	1996–2000 0.002	0.000	0.000	0.007	*	0.003	—0.001		
	2001–2006 0.006	0.001	0.001	—0.001		0.005	0.000		
	2007–2012 0.013	0.000	0.002	0.014	**	0.021	**		
	2013–2020 0.018	—0.003	0.008	0.011	**	0.010	*		
Model A4	1996–2000 0.001	0.001	—0.004	0.010	◦	0.003	—0.002		
	2001–2006 0.001	0.003	—0.008	—0.001		—0.003	0.002		
	2007–2012 0.007	0.002	—0.007	0.014		0.008	—0.001		
	2013–2020 0.012	—0.001	—0.002	0.012		—0.004	—0.003		
Observations	52,239		9041			11,676			

Source calculations based on GSOEP, wave v37 (1992–2020)

Note ◦ p < 0.1, \* p < 0.05, \*\* p < 0.01. Model A1 controlled for age of the first child (baseline); Model A2 additionally controlled for education, employment prior to first birth; Model A3 additionally controlled for union status, equivalent household income, age at first birth; Model A4 additionally controlled for regional childcare rates

main groupings of interest. When interpreting the results, we should bear in mind that these subsamples consist of relatively low numbers of  $n$ , therefore the confidence intervals are rather large. Note also that our process time is measured in months; therefore, the coefficients appear of relatively small size.

The patterns for non-migrants are in line with what we know from previous research. In Model A1, which only controls for the baseline (age of the first child), the effect of the policy period among non-migrants shows a significant continuous positive trend to (re)enter work over time. Compared to the reference period, i.e., 1992–1995, the probabilities of working were higher in each subsequent period. Meanwhile, the transition to a second conception decreased slightly, but significantly across periods. In Model A2 and A3, we added the variables education, employment prior to motherhood; and age at motherhood, union status, household income, respectively. Despite small changes in effect size and strength, the overall pattern of period differences in (re)entry to work remained largely the same as in Model A1. Model A4, which additionally controlled for the regional childcare rates, reduced the coefficients as of 2001 by approximately 0.6%p per month, rendering only the period effects as of 2007 significant. Thus, the expansion of childcare partially explained the labor market (re)entry probabilities, but an additional policy effect remained for non-migrants as of 2007. Meanwhile, the small transition risks to a second child leveled out almost completely across the models. These findings suggest that both the family policies themselves and the childcare expansion, with their intention to facilitate work (re)entries, reached non-migrants as the majority population, especially those with better socio-economic conditions.

For the two migrant generations, in contrast, the estimated effects across policy periods differed from those for non-migrants mainly in effect size and strength. For first-generation migrants, we also found a positive work (re)entry trend in all periods compared to the mid-1990s in Model A1. Controlling for the women's socio-economics and, to a lesser extent, household socio-demographics (Models A2 and A3), however, reduced the period effect and rendered it insignificant. Thus, changes in first-generation migrants (re)entry behavior across policies were merely the result of their changing composition over time. Furthermore, across models A1 to A4, a previously suppressed positive risk of having a second child as of 2007 emerged, supplementing another small, but positive risk in 1996–2000. Thus, for first-generation migrants with similar socio-economic-demographic conditions, the second child probability increased across policies.

Among migrant descendants, we found a period pattern more similar to that of non-migrants. The risks of (re)entry to paid work increased across periods, most notably after 2007 (Model A1). Models A2 and A3 suggest that, in contrast to first-generation migrants, the effect of policy period was not caused by the socio-economic-demographic composition. The period pattern retained both its strength and significance. Therein, the much-debated reform of 2007 shows a stronger impact than more recent reforms as of 2013. Unlike non-migrants, however, all policy period effects among migrant descendants were explained by regional childcare rates in Model A4. This suggests that the expansion of childcare may have contributed most to the period pattern among migrant descendants' (re)entry to paid work, and less the parental leave and allowance policies. With respect to a second child, migrant descendants' transitions varied scarcely and not significantly across periods.



Overall, our results demonstrate that post-first birth transitions changed across different policy periods in each group, especially for the (re)entry to paid labor, and to a small extent also for a second child. Most importantly, the results support our working hypothesis H1 that post-first birth transitions changed *differently* across different policy periods across the groups under study. Immigrants responded less or later to policy changes than non-migrants, with a smaller gap among migrant descendants. However, both among first-generation migrants and migrant descendants, this effect is largely due to institutional and compositional effects in line with our working hypothesis H3. Still, policies affected migrants and non-migrants differently, i.e., the policy changes impacted non-migrants across all social groups, whereas migrants were selectively affected by policy changes.

We should note that these analyses (Table 2) indicate only the change across policy periods within the non-migrant and migrant groupings. To quantify existing and/or emerging migrant–nonmigrant gaps across policy periods, we take a closer look at this in the next section.

#### **Migrant–nonmigrant differentials across parental leave policy cohorts**

In the second step of our analyses, we test our working hypothesis H2, according to which the migrant–nonmigrant differentials increased across policy periods. Table 3 displays the results for the main groupings under study separately by the policy during which the women became mothers.

Already the first period, 1992–1995, shows a medium-sized but significant migrant–nonmigrant gap for (re)entering paid work in Model B1 (controlling for the baseline), with migrant descendants ranging in between non-migrants and first-generation migrants. After controlling for socio-economic and socio-demographic characteristics in Models B2 and B3, this gap in the early period proved to be of merely compositional nature because the effect sizes shrank markedly and lost statistical significance. As of period 1996–2000, in contrast, between non-migrants and first-generation migrants we found increasingly strong and consistently significant differentials regarding work (re)entries which largely withstand controls for compositional and institutional effects. Among migrant descendants, any small gaps to non-migrants proved to be of compositional nature up until policy period 2013–2020, when a mid-sized effect of -0.008 withstood compositional and institutional controls in B4. Thus, we found a persistent migrant–nonmigrant gap regarding transitions to (re)entry to work that generally increased in more recent policy periods. In the most recent policy period of 2013–2020, on the one hand, we found potential for a halt to the previously continuing divergence of first-generation migrants—given that they converge to non-migrants in their composition—while, on the other hand, we also found a persistent migrant–nonmigrant gap for migrant descendants for the first time.

With regard to the transition to a second child, we found tendencies for a lower probability among first-generation migrants for the period 2001–2006 and a higher probability for all migrants as of 2007. Though neither effect is consistently strong or significant, they reflect a tendency among migrants to have a second pregnancy first instead of (re) entering work in light of recent policies that encourage rather quick labor market (re) entries.

**Table 3** Results of multivariable intensity regression with competing risks of (re)entry to work or second child—by policy cohort (AME)

	1992–1995		1996–2000		2001–2006		2007–2012		2013–2020	
	(re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy	(re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy
Model B1	First generation -0.009 **	-0.002	-0.011 **	0.006 °	-0.012 **	-0.001	-0.014 **	0.007 *	-0.017 **	0.005 *
	Migrant descendants -0.005	0.000	-0.004	0.001	-0.007 *	0.002	0.000	0.003	-0.014 **	0.004 °
Model B2	First generation -0.006 °	-0.001	-0.008 *	0.004	-0.012 **	-0.002	-0.014 **	0.006 °	-0.014 **	0.004 °
	Migrant descendants -0.002	0.000	-0.002	-0.001	-0.004	0.003	0.004	0.004	-0.009 *	0.004 °
Model B3	First generation -0.006	-0.003	-0.009 *	0.000	-0.012 **	-0.005 *	-0.014 **	0.005 °	-0.013 **	0.003
	Migrant descendants -0.001	-0.002	-0.002	-0.003	-0.003	0.000	0.004	0.001	-0.009 *	0.003
Model B4	First generation -0.004	-0.004	-0.008 *	0.000	-0.011 *	-0.005 *	-0.014 **	0.005	-0.012 **	0.002
	Migrant descendants 0.000	-0.002	-0.001	-0.003	-0.001	0.000	0.005	0.000	-0.008 *	0.003
Observations	10,753		13,722		16,318		19,025		13,138	

Source calculations based on GSOEP, wave v37 (1992–2020)

Note °p < 0.1, \*p < 0.05, \*\*p < 0.01. Model B1 controlled for age of the first child (baseline); Model B2 additionally controlled for education, employment prior to first birth; Model B3 additionally controlled for union status, equivalent household income, age at first birth; Model B4 additionally controlled for regional childcare rates

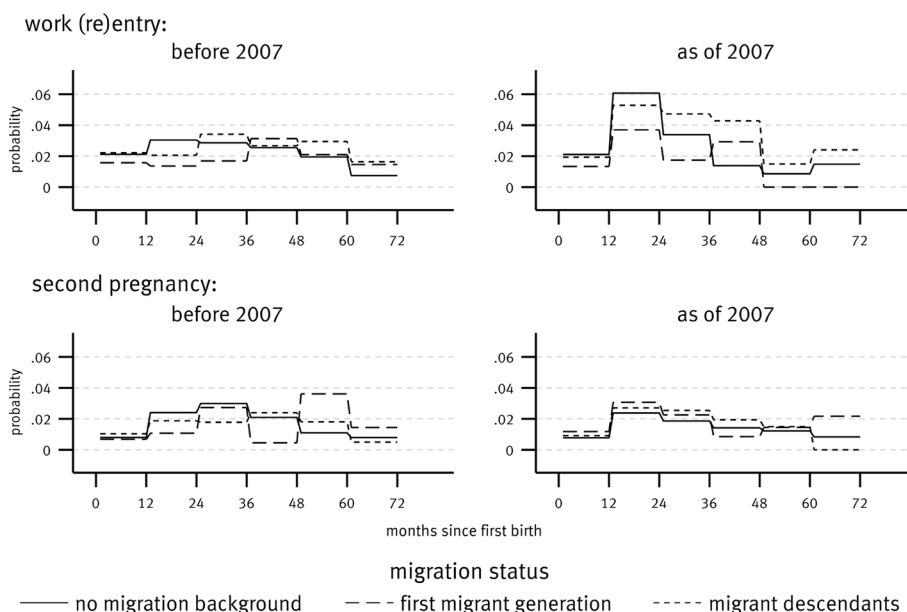
Overall, these findings support our working hypothesis H2; the migrant–nonmigrant gap has indeed widened across parental leave policy periods, particularly with regard to transitions to (re)employment. Migrants (re)enter the labor market less often than non-migrants and adapt to the policies at a slower pace. In fact, in the mid-1990s we found no gap beyond one caused by compositional differences between first-generation migrants and non-migrants in line with our hypothesis H3. In the most recent policy period, by contrast, the migrant–nonmigrant gap was substantial and resistant to controls, especially for first-generation migrants, but also for migrant descendants. Thus, the results of the migrant–nonmigrant gap over time support only partially our hypothesis on compositional effects; a group difference remains, which is indicative of a migrant disadvantage.

While these as well as the previous results are based on relative probabilities, we quantify the absolute predicted probabilities in the next section.

### Timing and quantum of migrant–nonmigrant differentials

In order to understand the transition patterns of (re)entering work or having a second child across groups, we graph the interval-specific predicted probabilities in Fig. 2, holding the compositional and institutional variables constant. This allows us to estimate the timing and quantum of transitioning trends. In an effort to reduce the model’s complexity, we estimate probabilities before and after the watershed reform of 2007.

With regard to work (re)entries, we see that prior to the 2007 reform, transitions were low and evenly distributed across the first four to five years after a first birth, with few notable differences between non-migrants and the two migrant generations. As of 2007, the pattern changed. Among non-migrants, especially between the first child’s first and



**Fig. 2** Predicted probability of work re(entry) and second child: Interval-specific interaction of policy periods and (non-)migrant generation. *Source* calculations based on GSOEP, wave v37 (1992–2020). Based on model that controlled for education, employment prior to first birth, union status, equivalent household income, age at first birth, regional childcare rates

second birthday, and to a lesser degree between its second and third birthday, work (re) entries had strongly gained relevance. This suggests that the incentive to (re)enter paid work sooner after childbirth has provided a code of behavior for non-migrants. For first-generation migrants, we also found a greater probability of a transition between the first child’s first and second birthday, but the (re)entry pattern was non-uniform over the years after birth. Among migrant descendants, work (re)entries between the first child’s first and fourth birthday gained relevance, though the timing was not as accelerated as among non-migrants.

Regarding the transition to a second pregnancy, before 2007 the probability for non-migrants was highest between the first child’s second and third birthday. Among the migrant groupings, the first child was slightly older at their sibling’s conception. As of 2007, the transition to a second child seemed somewhat more accelerated, especially for first-generation migrants and migrant descendants, leading to a conversion of the three groupings.

Overall, the graphs support our findings that migrant–nonmigrant gaps regarding work (re)entries increased in recent times, driven by a considerably higher transition probability in both quantum and timing among non-migrants. For transitions to second children, in contrast, we found that the migrant–nonmigrant gap in timing was reduced.

As migrants vary greatly in terms of their countries of origin, we assess the effects of their origin group on these findings in the next section.

**Variation by migrants’ country of origin**

We know from previous research that mothers from different origins differ in their behaviors regarding (re)entering work or having a second child. In light of this, findings might be more or less influenced by migrants from some origins than from others. Thus,

**Table 4** Results of multivariable intensity regression with competing risks of (re)entry to work or second child—by migrant origin groups (AME)

Ref: Non-migrants	Before 2007		As of 2007	
	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy
f: West, South and North Europe	0.004	−0.006 °	−0.005	0.005
f: East Europe	−0.002	−0.003	−0.009 **	0.001
f: Turkey, Muslim countries	−0.016 **	−0.002	−0.021 **	0.010 *
f: Asia	<b>−0.011</b> °	<b>−0.002</b>	−0.017 **	0.003
f: the Americas, Africa, other, unknown	<b>−0.017</b> **	<b>−0.010</b> *	−0.008	0.005
d: West, South & North Europe	−0.001	−0.002	0.003	0.005
d: East Europe	0.002	−0.003	0.003	0.000
d: Turkey, Muslim countries	−0.002	0.001	−0.012 *	0.001
d: Asia	<b>0.002</b>	<b>0.002</b>	0.001	0.002
d: the Americas, Africa, other, unknown	−0.005	−0.002	0.001	0.002
Observations	40,793		32,163	

Source calculations based on GSOEP, wave 37 (1992–2020)

Note °p < 0.1, \*p < 0.05, \*\*p < 0.01; Bold font: n < 20; f: first migrant generation, d: migrant descendants

we assess underlying origin differences in Table 4, which controls for all compositional and institutional variables. Again, to reduce the model's complexity, we estimate effects before and after the 2007 reform.

Prior to that reform, we found that the negative first-generation effects regarding work (re)entries were especially driven by migrants from Turkey and other countries with a Muslim tradition and to a lesser extent by the few observable cases from Asia, the Americas, Africa and other countries (in gray font because of small *n*). After the 2007 reform, these effects increased substantially for migrants from Turkey and Muslim countries. Further, we detected a solid negative effect for first-generation migrants from Asia as well as a newly emerged medium-sized negative effect for migrants from East Europe, despite the high levels of both female education and employment in their countries of origin. Among migrant descendants, we found no considerable migrant–nonmigrant differentials regarding work (re)entries in any origin group prior to the 2007 reform. As of 2007, however, we did find significant differentials, namely for migrant descendants from Turkey and other Muslim countries.

Regarding second child transitions, we did not find substantial and significant effects for transitions before the 2007 reform. After the reform, however, we found a positive effect for first-generation migrants from Turkey and other Muslim countries, suggesting that those were the main drivers behind most previous effects regarding higher second pregnancy risks.

Overall, the results suggest that the previous effects on different policy responses (H1) and the migrant–nonmigrant gap over time (H2) result to a large extent from differentials between non-migrants and specific origin groups. Particularly, this refers to migrants from Turkey and other Muslim countries, and, to a lesser extent, to first-generation migrants from East Europe. These groups carry much empirical weight in terms of both observations and effect size. Our findings of lower work (re)entry and higher second child probabilities among women from Turkey and Muslim countries as compared to non-migrants, as well as of assimilation processes across the migrant generations are in line with previous research (Milewski & Adserà, 2023).

### Effects of controls

With regard to the controls (Appendix), the results of our analyses are in line with previous research. We confirmed the importance of educational attainment, with differences between those mothers with tertiary education and mothers with lower levels of education. Highly educated mothers were more likely to either (re)enter paid labor or have a second child than others. The smaller the labor force participation was before the first birth, the less likely the mothers were to return to their jobs or to have a second child. Mothers living in non-marital cohabitation were—similar to lone mothers—less likely than married mothers to have a second child. Single-living first-generation migrants were less likely to (re)enter the workforce. The equivalent household income as a proxy for the economic necessity to earn an income had a negligible effect. The later the women became mothers, the less likely they were to have a second child or to return to work. The higher the regional childcare rates were, the more likely the mothers were to transition to employment.

## Conclusions

Our paper addressed the research question whether there are differences in life course transitions following the first birth among migrant and non-migrant mothers in Germany across the parental leave policy periods since German unification. In the context of rising “super diversity” of European countries (Vertovec, 2007) with respect to migration and the heterogeneity of the migrant population, the question of social participation of immigrants in European welfare states is gaining in importance (Dobrotic & Blum, 2019; Morrissens & Sainsbury, 2005). The percentage of immigrants and their descendants is rising, while European destination countries are generally characterized by population shrinkage and aging. Non-migrant majority populations are declining, the work force is decreasing. These demographic changes are accompanied by social changes toward gender equality, the so-called gender revolution, which aim to reconcile work and family for all genders. In our study, Germany served as a case to investigate potential behavioral responses to changing family policies, mainly with respect to parental leave regulations. Parental leave regulations are cause and effect of a society’s gender ideology and thus have the potential to reinforce or change existing gender role behaviors. Previous research on the majority population in Germany had already demonstrated that the modern incentives to (re)enter work (earlier or at all) were effective. Yet, previous research had not investigated how—if at all—different migrant subgroups reacted to these policy changes. We investigated the patterns and determinants of (re)entry to paid labor and of having a second child of two generations of migrants as compared to non-migrants, and found that post-first birth transitions changed across different policy periods in each group, especially regarding the (re)entry to paid labor.

As usual, our study could not investigate all the facets of the topic that would have been desirable. For example, we only focused our analyses on the perspective of the women. We took into account their union and marital status, but the sample did not allow us to account, e.g., for partners’ migrant background, their educational level and their employment situation. Future research may also want to take a closer look at migrant fathers’ work–family reconciliation behaviors (Kvande & Brandt, 2017) as well as at regional variation among German federal states, as studies show that the context of reception largely influences migrants’ fertility and employment behaviors (Milewski & Adserà, 2023).

We conclude our paper by highlighting central findings and deriving conclusions for policymaking and future research.

First, our study demonstrates that, while modern parental leave policies decreased gender selectivity, they simultaneously increased migrant selectivity. Such conflicting goals were previously discussed mainly in terms of education (McDonald, 2013). Our results on maternal employment revealed that the labor market activity of migrant and non-migrant groups changed differently across policy periods, with migrants responding less and later to policy changes than non-migrants. Consequently, the gap between migrants and non-migrants increased across policies, with smaller differentials towards migrant descendants. As usual in research on migrant disadvantages, some part of the migrant–nonmigrant gaps could be explained by institutional and compositional effects both among first-generation migrants and migrant descendants. This adds another dimension to the policies’ migrant selectivity. While the policy changes largely affected

non-migrants uniformly across social groups, different migrant social groups—e.g., as defined by socio-economic conditions or country of origin—were selectively affected by policy changes. The implications of this finding are manifold. On the individual level, relative disadvantages may cumulate in migrant mothers if they are left behind by the policies. In addition to adverse conditions on the labor market and lower earnings before motherhood, the employment gap may increase after the first child and further until retirement, manifesting in larger gaps in old-age pension. The children of migrant mothers also grow up in households with a lower relative maternal income and generally lower household income. On the macro level, social inequalities may increase between migrant minority groups and the majority population, an effect that may be amplified by rising shares of migrants. This may pose a challenge to social cohesion. Especially in times of demographic aging and skilled worker shortage, it would appear desirable to reach all segments of a population. For research on the effects of family and other policies on the population, it is important to recognize that there is heterogeneity within countries, and to investigate both its consequences and causes. It may well be that different policy segments contradict or undermine each other within one country. For example, many marriage migrants from non-EU countries as well as refugees are not allowed to work—at least for a certain time span. This way, work policies for migrants, reinforced by earnings-related (family) policies, may foster the continuation of social inequalities between the Global North and South that stem from globalization processes (Mills, 2009), also within Germany.

Second, our results highlight the role of public childcare. Maternal employment forms the basis for parental leave benefits and is an important access criterion for public childcare when places are scarce, as is the case in Germany for full-day childcare below age three. Public childcare was expanded in the 30 years of our study period. Among non-migrants, the expansion of childcare made a large contribution to the maternal employment increase; yet, our empirical results yielded an additional policy period effect, suggesting that non-migrants responded to both childcare and parental leave incentives. Among migrants, the response to childcare was different. While first-generation migrants' employment transitions were hardly affected by public childcare at all, migrant descendants seem to have reacted primarily to the increasing supply of childcare, less to parental leave incentives. Future research should pay more attention to the causes of migrants' under-usage of childcare, such as potential discrimination processes among suppliers or adverse attitudes toward public childcare among migrants. More knowledge is needed to understand the differences in migrants' ability to utilize public childcare in a way that facilitates their work (re)entry. A mismatch between childcare service and working mothers' requirements may play a role here. For example, migrants are more likely to work irregular hours, night shifts and/or on weekends—times that public childcare does not usually cover. Moreover, public childcare is more than just a facilitator of parental employment. High-quality childcare also fosters early education, and underprivileged population groups would benefit from this in the long run, no matter whether they have immigrated or not.

A third finding in our study is well-established in research on migrant disadvantages. We found smaller gaps in employment between migrant descendants and non-migrants compared to the first migrant generation, indicating assimilation processes over generations.

Our findings suggest that, especially in most recent policy periods, migrant–nonmigrant differentials would decrease if the socio-economic background of migrants was equal to that of non-migrants. While educational expansion is well on the way, especially for female migrant descendants, and while Germany has increasingly been attempting to attract skilled workers, we could interpret our results as a foreboding of further assimilation problems in the future. The crucial point is investing in young migrants’ and migrant children’s education and the equalization of their labor market opportunities and returns. At the same time, tackling remaining differences and their causes should not be overlooked.

Fourth, we want to highlight the question of pluralism. Our findings display differences between non-migrants and migrants, as well as differences within the migrant population. Gender role ideals, employment attachment and the perceived value of children may vary across migrant, ethnic or religious groups—as they also do across different non-migrant German groups, e.g., between East and West Germans (Arránz Becker et al., 2010). At the same time, pluralism is not static but subject to value changes that may vary considerably in both direction and pace across social groups. The strategies of policies aimed at meeting the requirements of pluralism may be manifold. They may refrain from intervening at all, they may satisfy needs from long-established values, they may accommodate ongoing value changes, and they may initiate new ones—though such strategies are rarely uniform or free from other factors, e.g., market forces, in their impact. In light of that, the increasing pluralism poses a challenge to both policymaking and research on policies, and the nature of the debates on the reconciliation of family and employment exemplifies this challenge. Within research, the question of *whether* states should influence their populations in their work–family reconciliation, which was still being debated among European demographers about a decade ago (Neyer, 2011; Oláh, 2011; Philipov, 2011; Toulemon, 2011), seems outdated. The present debate focusses on *whom* states address with their policies. More and more welfare states like Germany are changing their previous model of universal, but gender-based, eligibility to parental leave allowances into a mixture of both lower universal payments and earnings-related payments that rely on labor-market activity prior to childbearing (EIGE 2020; Blum & Dobrotic 2021). This combination, perhaps ambivalence, allows for pluralism as a natural reality of today’s society. Our research suggests, however, that it may also increase pluralism with the aforementioned risks. Some decades ago, Colen (1986) coined the term *stratified reproduction* to describe how reproduction is structured across social and cultural boundaries in the US. What she meant is that policies and structures empower privileged—White, non-migrant women belonging to the majority group—and disempower less privileged—migrant—women throughout their life courses, such as toward labor activity. Research on gender equality as well as on migrants’ participation may benefit from critical reflection on the selective role of policies in population segments. Supporting desired behavior and preventing undesired behavior are two sides of the logics of selection (Sear 2021). One of our anonymous reviewers wrote: “There is no neutral starting point ... present policy, or no policy, or directed policy, all are normative and all include a pressure on behavior”. While we tend to agree, the question is: How can we achieve gender equality without increasing class inequality? The appropriate way to solve this conundrum of accommodating pluralism while also securing social cohesion may be the greatest challenge policymakers and policy researchers face today and in the future.



**Appendix**  
See Table 5.

**Table 5** Results of multivariable intensity regression with competing risks of (re)entry to work or second child, by migrant status (AME)

Model A4	Non-migrants		First-generation migrants		Migrant descendants	
	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy
Policy period at first birth						
1992–1995	0.000	0.000	0.000	0.000	0.000	0.000
1996–2000	0.001	0.001	−0.004	0.010	0.003	−0.002
2001–2006	0.001	0.003	−0.008	−0.001	−0.003	0.002
2007–2012	0.007	0.002	−0.007	0.014	0.008	−0.001
2013–2020	0.012	−0.001	−0.002	0.012	−0.004	−0.003
Age of first child						
Up to 12 ms	0.000	0.000	0.000	0.000	0.000	0.000
13–24 ms	0.019	0.012	0.012	0.012	0.015	0.010
25–36 ms	0.011	0.013	0.007	0.019	0.018	0.010
37–48 ms	0.002	0.010	0.015	−0.003	0.013	0.012
49–60 ms	−0.007	0.004	0.001	0.021	0.007	0.008
61–72 ms	−0.017	0.001	−0.006	0.012	−0.002	−0.010
Education						
No or lower secondary degree	−0.005	0.002	−0.006	−0.010	−0.007	−0.001
Middle secondary degree	0.000	0.000	0.000	0.000	0.000	0.000
Upper secondary degree	0.000	0.002	0.000	−0.016	−0.002	0.004
Tertiary degree	0.010	0.006	0.000	−0.010	0.016	0.016
Employment before first birth						
Full-time (> 30 h) employed at b1	0.000	0.000	0.000	0.000	0.000	0.000
Part-time (≤ 30 h) employed at b1	−0.007	−0.002	−0.002	−0.008	−0.002	−0.002
Not employed/mv at b1	−0.008	−0.002	−0.005	0.000	−0.007	−0.002
Union status						

**Table 5** (continued)

Model A4	Non-migrants		First-generation migrants		Migrant descendants	
	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy	(Re)entry to work	Second pregnancy
Married	0.000	0.000	0.000	0.000	0.000	0.000
Cohabitation	0.003	-0.006	0.001	-0.009	-0.001	-0.007
Single	-0.004	-0.010	-0.013	-0.013	0.001	-0.012
Equivalent household income	0.000	0.000	0.000	0.000	0.000	0.000
Age at first birth						
<25 years	0.000	0.000	0.000	0.000	0.000	0.000
25 to < 30 years	0.008	-0.002	0.004	-0.006	0.008	-0.008
30 to < 35 years	0.006	-0.005	0.016	-0.008	0.004	-0.001
> 35 years	0.000	-0.010	0.012	-0.011	0.003	-0.006
Regional childcare 0- < 3 years						
0 to 5	-0.010	0.005	-0.007	-0.007	-0.017	0.003
> 5 to 15	-0.001	0.002	-0.001	-0.002	-0.008	-0.001
> 15 to 30	-0.006	0.003	0.003	0.001	-0.010	0.007
> 30	0.000	0.000	0.000	0.000	0.000	0.000
Regional childcare 3-6 years						
0 to 70	-0.003	-0.001	-0.003	0.021	-0.009	-0.007
> 70 to 80	-0.005	0.001	-0.017	0.005	0.003	-0.003
> 80 to 90	-0.002	-0.002	0.000	0.005	-0.003	-0.003
> 90 to 95	0.001	0.000	-0.008	-0.003	0.006	-0.003
> 95	0.000	0.000	0.000	0.000	0.000	0.000
Observations		52,239		9041		11,676

Source calculations based on GSOEP, wave v37 (1992-2020)

Note <sup>a</sup>p < 0.1, \*p < 0.05, \*\*p < 0.01; missing values not displayed

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### Author contributions

NM wrote the literature review and the theoretical deliberations. UB analyzed and interpreted the data. Both authors discussed the modeling strategy, the results and their implications, and read and approved the final manuscript.

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### Availability of data and materials

The data that were used to generate and/or analyze the dataset for the current study are available via [https://www.diw.de/en/diw\\_01.c.601584.en/data\\_access.html](https://www.diw.de/en/diw_01.c.601584.en/data_access.html).

### Declarations

#### Competing interests

The authors declare that they have no competing interests.

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