

From “guest workers” to EU migrants: A gendered view on the labour market integration of different arrival cohorts in Germany

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Abstract

Objective: This paper draws on data from the Microcensus to provide a long-term overview of the labour market performance of different arrival cohorts of non-German women and men who immigrated to (western) Germany.

Background: While there is a large body of research on the labour market outcomes of migrants to Germany, a long-term and gender-specific overview is missing.

Method: We provide descriptive analyses of the employment rates, working hours, and occupational status levels of different arrival cohorts by gender, calendar year, and duration of stay. The data cover the time period 1976-2015.

Results: With the exception of the earliest cohort, migrant women and men were consistently less likely to be employed than their German counterparts. While the average working hours of migrant women of earlier cohorts were longer than those of German women, this pattern reversed due to a considerable decline in the average working hours of migrant women across subsequent cohorts. The occupational status levels of female and male migrants increased across the arrival cohorts, corresponding to higher levels of education. Analyses by duration of stay indicate that the occupational status of the arrival cohorts tended to decline during their initial years of residence, and to stagnate thereafter. This pattern seems to be due in part to selective outmigration.

Conclusion: Our results clearly show that the labour market performance of immigrants varied greatly by arrival cohort, reflecting the conditions and policy contexts during which they entered Germany. This conclusion applied especially to migrant women.

Key words: immigration, integration, labour market, women, arrival cohorts, Germany



1. Introduction

Germany has become one of the world's leading immigration countries. In 2018, 16 per cent of the resident population in Germany (13.5 million people) were born outside the boundaries of the Federal Republic of Germany (Destatis 2019a). However, the composition of the people who migrate to Germany has changed substantially over time, reflecting the varying economic conditions and policy contexts during which they entered the country. So-called guest workers and their family members from the major recruitment countries, particularly Turkey, made up the largest shares of migrants to Germany in the 1970s and 1980s. In the 1990s, inflows were dominated by refugees and ethnic German migrants (*Aussiedler*) from the successor states of the Soviet Union and other Central and Eastern European countries. Since the 2000s, growing shares of immigrants have come from other EU countries, in particular from the new member states in Central and Eastern Europe. Thus, in recent decades, migration flows have become more diverse in terms of country of origin, reasons for migration, and skill levels (BAMF 2020).

The changing contexts and the heterogeneity of migrant populations over time call for an arrival-cohort-specific perspective on their labour market integration in Germany. While numerous previous studies have examined the employment outcomes of migrants in Germany, these analyses either have been based on a limited number of cases, or the time period they covered was too short to enable researchers to systematically compare the integration profiles of various arrival cohorts. In this paper, we exploit data from the German Microcensus between 1976 and 2015 to provide a comprehensive and nuanced picture of the employment patterns of different “arrival cohorts” of non-German immigrants (i.e., excluding ethnic Germans) who have moved to Germany in specific time periods. We investigate the employment rates, working hours, and occupational status levels of these first-generation migrants. In doing so, we pay special attention to gender differences in labour market behaviour that have long been neglected in research on labour market integration. We conduct all analyses over time and discuss the emerging patterns against the backdrop of compositional changes in migrants' levels of education. This approach allows us to elucidate how migrants' integration patterns are stratified along key dimensions of social inequality. We generate simple and accessible summary indicators, and refrain from applying any complex modelling strategies. Thus, this paper is a descriptive contribution that supplements and integrates prior research by providing a fundamental overview of the employment outcomes of migrants in Germany, which, in turn, lays the groundwork for more theory-driven analyses. To the extent possible, we also provide insight into the selectivity of naturalisation. While our findings are indirect and tentative, they shed some additional light on the role of outmigration in, for example, shaping changes in the occupational status of first-generation migrants by the duration of stay in the country.

2. Previous studies on the labour market integration of migrants in Germany

There is a large body of literature on the labour market performance of migrants. Many of these early studies focused on the earnings of migrants, and examined to what extent their earnings are determined by their human capital endowment and duration of stay in the host country (Borjas 1994; Chiswick 1999). Subsequently, a large number of studies investigated different dimensions of migrants' labour market integration, such as their wage mobility, employment, unemployment, or occupational status in Europe, including in Germany (e.g., Fleischmann & Dronkers 2010; Fleischmann & Höhne 2013; Ballarino & Panichella 2018; Koopmans 2016; Algan et al. 2010; Kalter & Granato 2002; Luthra 2013; Granato & Kalter 2001).

When seeking to explain migrants' employment patterns, three general points should be taken into account. *First*, migrants' resources influence their process of labour market integration. These resources include not just their human capital, but also their social contacts and networks and their proficiency in the language of the receiving country (see also Bilecen and Seibel in this Special Issue). The resource endowments of newly arrived immigrants are strongly determined by migration policies that allow some migrants into the destination country, while keeping others out. *Second*, migrants' motivations shape their labour market behaviour, including their intentions to stay in the country. Even if these intentions are not fixed and change over time, they determine whether migrants are eager to quickly find a "good enough" job, or pursue a strategy of increasing their long-run earnings, which often means investing in the acquisition of language skills and retraining. Levels of actual return (or onward) migration need to be taken into account when analysing labour market trajectories over time, because outmigration is selective, and often in a way that is systematically related to the selectivity of immigration (Dustmann & Görlach 2015). In addition, the cultural orientations of migrants should be considered, especially when analysing the labour market behaviour of female immigrants (see Schieckoff and Diehl, and Tsolak et al. in this Special Issue). While men generally assume that they will be in full-time employment, some women may perceive taking care of the home and children as an alternative to joining the labour force. *Third*, opportunities and institutional constraints influence whether and, if so, how migrants enter and remain active in the labour market. Migrants' levels of labour market participation are affected by factors such as the overall or sector-specific unemployment rates, and group-specific forms of discrimination (Quillian et al. 2019). The employment patterns of female migrants in particular are often interrupted by having children, as they are subject to institutional constraints, such as the options for combining work and family (see Samper and Kreyenfeld, Sánchez-Domínguez, Guirola Abenza, and Biegel et al. in this Special Issue).

Previous studies have reported robust findings for immigrants in Germany that touch on all three of these points. Most importantly, these studies found evidence of negative selectivity in terms of the human capital endowments of immigrants from the earlier labour recruitment period and the later family reunification channels. They also illustrated the difficulties immigrants have encountered in transferring their educational credentials across borders to the highly credentialist German labour market (Basilio et al. 2017;

Aldashev et al. 2016; Kreyenfeld & Konietzka 2002; Granato & Kalter 2001). However, for more recent cohorts, these patterns seem to have shifted. While recent migrant cohorts still face challenges in the German labour market, because they are better educated than their predecessors, they are more likely to integrate into the labour market and to advance in their careers (Kogan 2011a). Additionally, migrants' ethnic networks and their contacts to members of the native population have been found to affect their likelihood of entering the labour market, and of realising returns appropriate to their human capital. It has been shown that especially among low-skilled migrants, ethnic networks do little to enhance the transition into the "regular labour market" (see, however, Martén et al. 2019), which would provide more scope for upward mobility than jobs in the ethnic economy. There is, moreover, ample evidence that migrants are more likely to be integrated into the labour market if they have access to inter-ethnic networks (Kalter & Kogan 2014; Lancee & Hartung 2012; Heizmann & Böhnke 2016; Kanas et al. 2011). Scholars have also explored an array of further determinants of migrants' labour market behaviour, such as proficiency in the majority language (Dustmann 1994; Schuss 2018; Schmaus 2020).

Migrants' individual employment strategies are also shaped by their motivations, which reflect their intentions to return as well as cultural factors. For example, the low labour market participation and employment rates of some female migrants may reflect origin-specific cultural norms about the appropriateness of women engaging in economic activities outside the household (Koopmans 2016; Krieger 2020). There is also evidence that religious affiliation and individual religiosity can affect women's labour market integration. However, whether these are genuine effects that would persist net of many possible correlates has been disputed (Koopmans 2016; Koopmans 2010; Koenig et al. 2016; Connor & Koenig 2015; Knize Estrada 2018). In their contribution to this Special Issue, Guveli and Spierings argued that it is important to disentangle the effects of religious denomination, religiosity, and gender role attitudes.

When we look at migrants' opportunities, we can see that the state of the economy is an important determinant of the labour market success of migrants and natives alike, but that migrants suffer more than natives from economic downturns (Dustmann et al. 2010). Moreover, migrants may face limited access to or queuing on the labour market. Migrants' opportunities may be restricted by migrant-specific institutional barriers that are based on their legal status; i.e., by residence and work permits and citizenship regulations (Ballarino & Panichella 2018; Gathmann & Keller 2018; Kogan 2006; Kogan 2011b; Kogan et al. 2011). Even in the absence of institutional barriers, ethnic discrimination may hamper migrants' labour market integration. This problem is more severe for groups who are visibly distinct because of their skin colour, or – as is more relevant in Germany – because of their ethnic markers, such as a headscarf (Quillian et al. 2019; Kaas & Manger 2012; Weichselbaumer 2020; see also Salikutluk and Menke in this Special Issue).

All of the abovementioned studies provide important and often theoretically well-grounded insights into specific determinants of the labour market integration of certain subgroups of immigrants in Germany. However, a literature review revealed that out of the 49 quantitative studies on immigrant labour market integration in Germany published since 2000, many did not differentiate by gender, and only six focused solely on the outcomes of female migrants, while 12 focused exclusively on males (see Schieckoff and

Diehl in this Special Issue). Moreover, the temporal scope of many of these previous studies was (necessarily) limited, and only a few compared the behaviour of different arrival cohorts. An even smaller number of studies investigated the labour market outcomes of first-generation migrants over time while also focusing on gender. The study that is closest to our own is the analysis by Kogan (2011a). She used the Microcensuses for 1996, 2000, and 2005 to examine gender-specific differences in levels of unemployment risk and occupational status between immigrant cohorts who arrived in Germany before and after 1990. She found that, in general, recent female and male migrants were able to reach higher occupational levels than their earlier counterparts (corresponding to their higher average levels of education); but also that recent migrants were more likely to be overqualified and to experience unemployment, which reflected different returns to education for immigration cohorts (with particularly low returns for ethnic German women). Granato (2014) has shown that across the 1998-2000, 2003-2005, and 2007-2009 arrival cohorts, employment rates during the first 2 years of residence increased (as did the migrants' educational levels), whereas the risk of working in low-status jobs decreased. However, she did not differentiate these findings by gender. Höhne (2016) examined the employment rates of male and female migrants and native-born individuals with and without a migration background between 2005 and 2013. Although comparing different arrival cohorts was not in the focus of her study, she found that the economic upturn over this period resulted in higher employment rates for most migrant women and men. However, her results also showed that although the employment rate increases experienced by migrants from North-western and Southern Europe were similar to those enjoyed by natives, female migrants from Eastern Europe, as well as female and male migrants from Turkey and other countries, benefited much less or not at all from the economic recovery. Diehl and Granato (2018) compared the employment patterns of first- and second-generation migrant women and men from Turkey and Yugoslavia based on Microcensus data for the 2000-2012 period. Their results suggested that for the first generation, the migrant-native gaps in occupational status increased rather than decreased over time. Herwig and Konietzka (2012) investigated trends in the occupational status of employed female and male migrants using Microcensus data from 1976 and 2008. They found that migrants were less likely than natives to reach the higher "service classes", but also that the share of low-skilled migrants in the lowest class positions declined substantially over time. While male migrants became more likely to work as skilled workers, a significant fraction of female migrants had reached the position of qualified employee.

This necessarily brief sketch of previous research shows that while numerous studies have identified a wide range of individual-, group-, and context-level factors that help to explain the employment outcomes of migrants, only a few of these studies analysed how migrants' labour market trajectories vary between different arrival cohorts, and between women and men. In order to lay the groundwork for and to stimulate future research on the specific challenges that female migrants face on the labour market, we seek to complement previous research in the following ways. First, we describe the labour market integration patterns of different arrival cohorts, separately for *female and male first-generation immigrants* to Germany, using 40 years of data (1976-2015) from the Microcensus. We argue that taking such a *long view* is necessary to determine the extent to

which female migrants in particular have caught up with natives in terms of their employment outcomes, or have even fallen behind. Our aim is also to provide insights into the important question of whether immigrants to Germany have become less negatively selected compared to the host population with respect to educational attainment over time, and how these patterns differ by gender.

3. Data and analytic strategy

3.1 Data and sample

We base our empirical analyses on data from the German Microcensus spanning the years 1976 to 2015 (DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0). The Microcensus is an annual representative survey of one per cent of the resident population in Germany based on an area sample. Participation is obligatory for a large portion of the questionnaire. One-quarter of the sample is substituted every year, making the Microcensus a rotating panel. We use the factually anonymised 70 per cent subsamples of the original Microcensus provided as Scientific Use Files (SUF) for the years 1976, 1978, 1980, 1982, 1985, 1987, 1989, 1991, 1993; and for all years from 1995 to 2015.

Because the Microcensus has a large sample, an extensive observation period, and mandatory participation, it is the only dataset available for Germany that can provide a comprehensive overview of the labour market integration of immigrant women and men over a longer time span. However, the dataset has some important limitations. The most crucial limitation is that information on the respondents' country of birth was not collected until 2005. Before that time, respondents were only asked to report their citizenship, and, if non-German, their year of arrival. *Consequently, our immigrant sample does not include all first-generation migrants, but only those with non-German citizenship.* We compare these migrants to all German citizens, regardless of whether they were born in Germany. Following this definition, *Aussiedler* (ethnic German migrants), who migrated to Germany in large numbers in the 1990s, and who were granted German citizenship upon arrival, are subsumed into the German reference category. Moreover, information on naturalisation is not consistently available in the Microcensus. Thus, we also include in the German reference category all individuals who acquired German citizenship through a process of naturalisation. Second- (or third-) generation migrants with non-German citizenship are not included in the analysis.

We restrict our sample to individuals living in private households who were interviewed at their main residence in the federal states of Western Germany (the former Federal Republic of Germany, including Berlin).¹ To maintain consistency for the full analysis period, we exclude individuals living in Eastern Germany (with the exception of

1 Our time-series is not entirely consistent. We include Berlin in our analytical sample because of its considerable share of foreign-born individuals. Ideally, we would have excluded East Berlin from the sample, as East Berlin was not included in the Microcensus data before reunification, but this was not possible when using the Microcensus data.

Berlin), as these states were first included in the sample in 1991 following German reunification. Although the number of immigrants in Eastern Germany increased after reunification, the large majority of the non-German immigrant population reside in Western Germany (93.6 per cent as of 2018, including Berlin, Destatis 2019b). Furthermore, we restrict our sample to individuals of prime working ages (25-54) to minimise the potential bias introduced by differences in educational trajectories, as well as in the likelihood of taking (early) retirement. We also exclude immigrants who entered the country at age 17 or younger to avoid conflating the effects on the labour market outcomes of having a German vs. a foreign school degree. As we provide some descriptive statistics on educational levels (measured as ISCED-97) in Section 4, we drop all observations for which the level of education is missing.² Finally, we are left with a sample of $n=4,641,760$ observations, consisting of $n=4,357,995$ Germans and $n=283,765$ first-generation migrants with non-German citizenship.

Another limitation of the Microcensus SUFs is that the level of detail in the citizenship information varies across waves, primarily because citizenship groups with small numbers of individuals are aggregated for data protection reasons. Furthermore, as the aggregation patterns changed several times during our observation period, a consistent identification is possible for just a few countries of origin. We therefore use additional information from the German registration offices (Destatis 2020a) to describe the composition of the arrival cohorts with respect to citizenship, and to show how it has changed over time.³

3.2 Analytic strategy

Our analytic strategy is simple. We provide descriptive statistics on the development of various standard indicators over time that measure the integration of arrival cohorts into the German labour market. These indicators include an individual's (1) employment status, (2) weekly working hours, and (3) occupational status, which together offer a nuanced perspective on the extensive and intensive margins of, as well as the returns to, employment. For each year between 1976 and 2015, we examine the employment indicators by arrival cohort and gender. This approach allows us to evaluate the labour market patterns of the women and men of each arrival cohort relative to each other, and, to a limited extent, relative to the population with German citizenship at a specific point in time. We provide summary measures for all of the abovementioned indicators. We only

2 We use an adapted ISCED-97 classification according to the German Microdata Lab (Schroedter et al. 2006) for the 1976-2013 Microcensus waves, and recode the ISCED-2011 information provided in the Microcensus for the years 2014-2015. The proportion of missing values for this variable in our analysis sample is similar for non-German migrants (1.9 per cent) and Germans (2.0 per cent).

3 The data from the municipality registers and the data from the Microcensus are not fully comparable. The Microcensus provides information on migrants currently living in Germany, which we break down by arrival cohort. The official migration statistics are based on the municipality registers (Einwohnermeldestatistik). These data measure inflows of migrants. Individuals may be recorded several times a year in these data if they are engaged in circular migration. Moreover, the displayed registry data only provide annual totals for Germany as a whole that was not disaggregated to conform to the above sample restrictions (e.g., ages 25-54), except by gender.

report values if every combination of arrival cohort and period leaves a minimum of 100 observations for the respective indicator. We use population weights on the household level provided by the Microcensus throughout the analysis.⁴

Our main indicators of labour market integration are measured as follows. *Employment status* is a dummy with a value of one for individuals who reported that they are self-employed, a working family member, an employee or worker in the public or private sector, or in vocational training; and a value of zero for those who indicated that they are unemployed or non-employed. *Weekly working hours* denote the actual weekly working hours of an individual, capped at 80 hours per week.⁵ *Occupational status* is measured based on the classification of the International Socio-Economic Index of Occupational Status (ISEI-88, Ganzeboom et al. 1992)⁶ for individuals in employment, in which an individual's score reflects the average levels of education and earnings associated with the occupation she holds. The theoretically possible scores range between 16 (e.g., cleaners) and 90 (e.g., judges).

We distinguish five arrival cohorts by arrival year, roughly corresponding to distinct periods of immigration to Germany: (1) 1964-1973, late phase of German foreign labour recruitment; (2) 1974-1983, phase of family reunion; (3) 1984-1993, phase of refugee and ethnic German influx; (4) 1994-2003, phase of EU enlargement; (5) 2004-2010, within-EU free movement (see detailed cohort descriptions in Section 4).

Based on all our available cross-sections, we “follow” the different arrival cohorts over time. In pursuing this analytic strategy, three challenges arise. The *first challenge* results from grouping the data into arrival cohorts. During the arrival interval for each cohort, the cohort's composition changes every year with new inflows. To avoid having these compositional changes drive our estimates, we start the analysis period for each of our arrival cohorts in the year *after* all members of that particular cohort group have migrated to Germany. For example, we begin examining the 1994-2003 arrival cohort in calendar year 2004. In the respective starting year for each cohort group, the migrants have been in

4 The provided weights differ between the Microcensus waves. To keep the weighting scheme consistent, we used household-level weights only. If no household weights were available, we calculated them as the mean person-level weight in the household. However, as was noted by GESIS (2018a), the individual-level results have been found to be very similar, regardless of the weights applied in analyses by the German statistical office. We thank Bernhard Schimpl-Neimanns for helping us with the varying weighting procedures in the Microcensus over time.

5 We use “actual” working hours instead of “contractual” working hours, in part because individuals who are on parental leave provide ambiguous responses regarding their contractual working hours, and these respondents cannot be consistently identified in all survey years. We recoded values between 80 and 95 hours to 80 hours; and higher values to missing.

6 Information on occupations in the Microcensus is provided based on the Klassifikation der Berufe (KldB) of the Federal Employment Agency (Bundesagentur für Arbeit 2020). Obtaining harmonised ISEI-88 scores based on the KldB codes involved several conversion steps using the International Standard Classification of Occupations (ISCO-88, International Labor Organization 2020) as an intermediary. Our conversion procedure follows routines developed and provided by GESIS (2018b). We provide a detailed description of the conversion procedure in Section 1.4 of the online appendix.

Germany between one and 10 years (seven years for the 2004-2010 arrival cohort).⁷ After each arrival interval has concluded, we observe the cohort group over a maximum of 30 years (e.g., the 1974-1983 arrival cohort until 2013).

The *second challenge* pertains to a well-known issue in empirical research on immigrant integration: i.e., that as a result of naturalisation and outmigration, the remaining members of a particular arrival cohort may become more and more selective with increasing duration of stay. Essentially, our labour market indicator estimates apply only to those migrants of a particular arrival cohort who, at a given point in time, are still in Germany (Dustmann & Görlach 2015). As annual outflows are substantial in Germany (Destatis 2020a), any observed time trends in cohort outcomes might be due to selective outmigration, rather than to actual developments in the outcomes for those migrants who stayed. Research for Germany on selectivity in outmigration has been inconclusive, and has provided no guidance in terms of the direction of bias to expect (Diehl & Liebau 2016; Kuhlenskasper & Steinhardt 2017; Constant & Massey 2003; Dustmann & Görlach 2015). In addition, although naturalisation rates are lower in Germany than in other European countries (Thränhardt 2017), many migrants have naturalised in recent decades (4.7 million between 1981 and 2015, Destatis 2020b), in particular those with higher educational levels (Worbs 2008; Steinhardt 2007; Diehl & Blohm 2008). Such a positive selection into naturalisation would correspond to an underestimation of the labour market outcomes of arrival cohorts over time, as more and more individuals adopt German citizenship.⁸ In supplementary analyses, we take a closer look at the possible selectivity in outmigration and naturalisation. We examine the educational levels of migrants by duration of stay, and, using data available since 2007, their educational levels as well as their labour market outcomes by naturalisation status. Overall, our results suggest that female and male migrants who leave Germany or naturalise are positively selected in terms of education, but also in terms of employment rates, working hours, and, in part, occupational status (see also Section 5.4 and online appendix Sections 2.2.4-2.2.5).⁹ However, as the results on selectivity in naturalisation are based on data from 2007 onwards, they are not necessarily generalisable to prior years.

The *third challenge* relates to the difficulty of separating different dimensions of time in our investigation. In a seminal work, Borjas (1994) demonstrated the importance in migration research of distinguishing between age, period, and cohort effects based on cross-sectional data (see also Altman 2015). While adopting a regression approach to separate these effects would be possible, it would exceed the scope of this descriptive

7 Depending on the cohort and the available Microcensus waves, the interval limits might be slightly different. For example, as we start observing the 1964-1973 arrival cohort in 1976, the possible values for the duration of stay range between three and 12 years.

8 Moreover, these individuals would now be counted as Germans, and are part of the reference group.

9 Please note that the time period 2007-2015 does not permit us to obtain reliable estimates for the labour market outcomes of the 1963-74 and 2004-10 arrival cohorts. Most of the 1963-74 cohort members dropped out of our sample by crossing the age threshold of 54. For the 2004-2010 cohort, only a small fraction of immigrants were able to cross the threshold of eight years of residence as a precondition to naturalisation. Still, as the selectivity in terms of education (unrestricted by age) seems comparable for the 1964-73 and 1974-1983 cohorts, we might expect to observe similar selectivity regarding employment indicators. In any case, the possibility of extrapolation from 2007-2015 to other periods is naturally limited for all arrival cohorts.

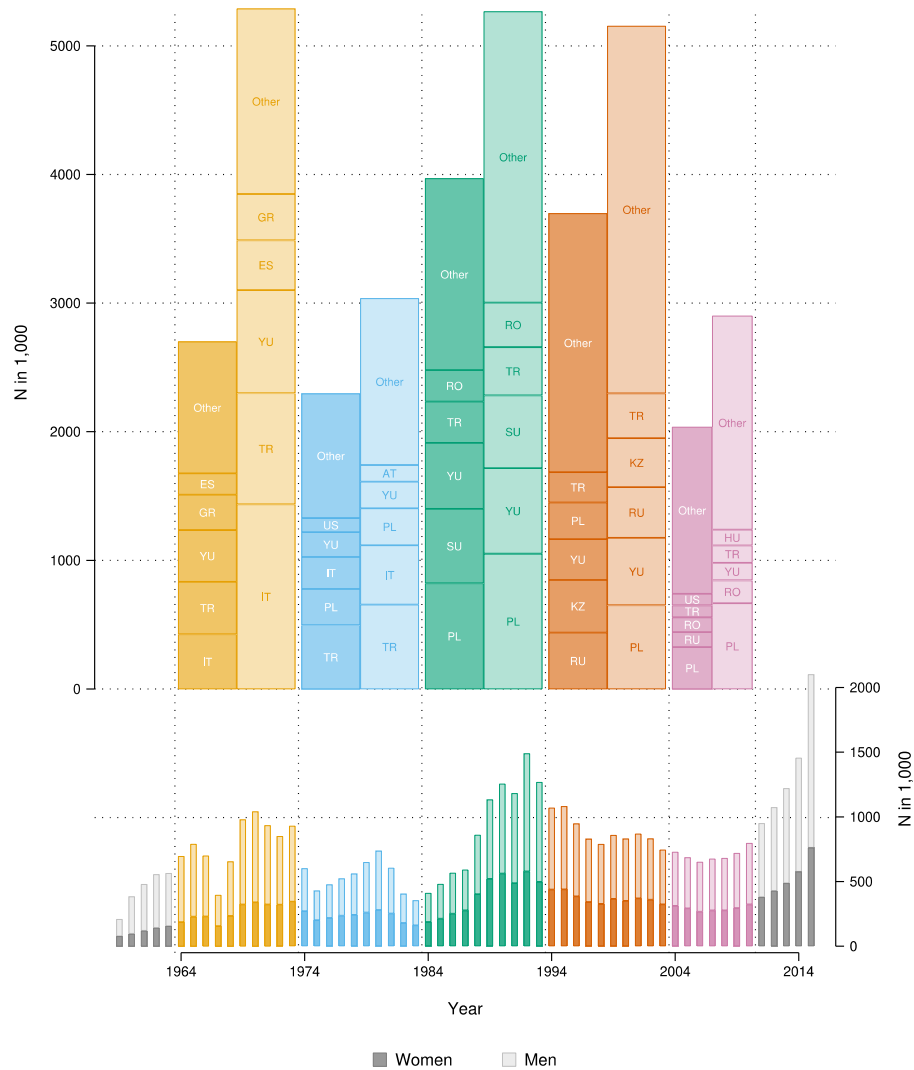
work. Instead, we focus on different layers of time by examining the employment outcomes of various arrival cohorts by calendar year and duration of stay, thus fixing either the period effect (which applies to the whole population at a given point in time) or the age effect (which applies to a particular age group). By using this approach, we move beyond prior research. However, even when the period effect is fixed, the cohort effects might still be conflated with the age effects, or vice versa. Therefore, it is important to bear in mind the limited comparability of these effects.

Additional issues of comparability between cohorts arise from several changes to the Microcensus between 1976 and 2015, two of which are particularly relevant in the present context. First, in 2005, the survey fielding phase was extended. Until 2004, the survey reference week was (typically) the last week in April. The subsequent introduction of a moving reference week allows us to cover the full year beginning in 2005. This change might lead to differences in labour market-related measures that are affected by seasonality; e.g., employment rates. Second, also starting in 2005, answering the question regarding the arrival year was no longer voluntary. The non-response rates for this item (in our restricted sample) dropped from a maximum of about 28 per cent in 2004 to about three per cent in 2006 and the following years (see Figure 3 in the online appendix). If prior non-response was related to labour market outcomes, this kind of selectivity might pose a problem. However, we observe no periodic spikes in our results, except for some small changes around 2005 in the occupational status measures (which are also consistent across genders and arrival cohorts). Thus, we are confident that our general interpretation of the results is unaffected by the changes in measurement.

4. Description of arrival cohorts

We distinguish five arrival cohorts in our analyses in order to describe how the composition of immigrants to Germany changed over time, not only in terms of the migrants' countries of origin/citizenship, but also with respect to their gender composition and levels of education. Whereas such a grouping is always somewhat arbitrary, these arrival cohorts correspond to important historic periods of immigration to Germany that were shaped by distinct political and economic conditions. The lower panel of Figure 1 displays the annual inflows by gender, with the different arrival cohorts coded by colour. The upper panel of Figure 1 shows the citizenship composition by gender of these cohorts. For the reasons outlined above, Figure 1 is based on municipal register data, whereas Table 1 provides statistics on the ages and the educational levels of the arrival cohorts based on the Microcensus data.

Figure 1: Immigrant inflows into Germany by year and gender (lower panel). Citizenship composition of arrival cohorts by gender (upper panel).



Note: Numbers include inflows into Eastern Germany since 1991. Citizenship shares plotted for countries of origin with consistently available information for the full arrival period. For the Soviet Union, the Czech Republic, and Yugoslavia, both aggregated and disaggregated data are provided by the municipalities in some years. In these cases, we distributed the aggregated numbers among the constituting countries corresponding to their respective disaggregated shares.

Source: German municipality registers (Destatis 2020a).

Table 1: Education and age composition by selected year, arrival cohort and gender

Table 1. Education and age composition by selected years, arrival cohort and gender

	Women				Men				All
	% ISCED-97			Ø Age	% ISCED-97			Ø Age	% Women
	0-2	3-4	5-6		0-2	3-4	5-6		
Year: 1976									
Germans	48.5	45.7	5.8	40.1	20.3	60.0	19.7	39.5	51.0
Arrival cohort 1964-73	71.0	23.3	5.7	33.7	55.9	35.0	9.1	34.6	43.0
Year: 1985									
Germans	34.8	54.8	10.5	39.7	14.6	58.9	26.6	39.6	50.1
Arrival cohort 1974-83	58.0	25.5	16.5	34.7	35.8	37.2	27.0	34.0	52.2
Year: 1995									
Germans	18.9	64.3	16.8	38.9	9.2	59.2	31.6	38.8	50.0
Arrival cohort 1984-93	48.8	30.6	20.6	34.6	36.0	40.2	23.8	34.1	48.8
Year: 2004									
Germans	14.4	63.4	22.2	40.4	9.4	58.2	32.4	40.4	50.4
Arrival cohort 1994-03	39.5	32.8	27.7	34.3	31.4	37.9	30.8	34.9	53.4
Year: 2011									
Germans	10.8	61.6	27.6	41.1	8.1	57.3	34.7	41.1	50.0
Arrival cohort 2004-10	28.5	31.1	40.4	34.3	24.4	34.9	40.6	34.8	52.5

Note: Statistics are reported for each immigration cohort in the first observed year after the end of the respective arrival period. ISCED values sum to 100 per cent per row and gender. Sample is restricted to Western Germany, including Berlin.

Source: Microcensus Scientific Use Files, DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0, own calculations.

Our *earliest cohort* (1964-1973) arrived in Germany during the late phase of the recruitment of foreign labour. This arrival cohort is by far the most homogeneous in terms of sex composition, region of origin, and education. The majority of the migrants in this cohort were male. According to the register data, the five largest origin groups were from Italy, Turkey, Yugoslavia, Greece, and Spain. During the recruitment period that officially ended in 1973, Germany deliberately recruited low-skilled labour, a strategy that is clearly visible in the Microcensus data: more than two-thirds of the women and more than half of the men who arrived between 1964 and 1973 had low levels of education (ISCED 0-2) in 1974.

After the recruitment stop in 1973, migration flows to (West) Germany radically changed, and the share of migrants who entered on family reunification grounds increased in tandem with the share of female migrants. The migrants of the *second cohort* (1974-1983) included many family members of workers who arrived in the recruitment period. Nevertheless, the largest origin groups were not just Turks, Italians, and

individuals from Yugoslavia, but Poles who arrived either as non-German family members of ethnic Germans (note that ethnic Germans are not included in our analysis) or as asylum seekers, and US American women and Austrian men (see Figure 1). Microcensus data show that the share of individuals with some form of tertiary education (ISCED 5-6) was three times higher in this arrival cohort than in the previous arrival cohort (see Table 1), which reflects both changes in the migration source countries and educational expansion in Southern Europe and Turkey.

After this period, which was characterised by moderate levels of immigration and family reunification, immigration figures surged and then peaked in 1992, when 1.5 million foreign nationals arrived in Germany. Our *third arrival cohort* entered between 1984 and 1993, and still included significant numbers of both female and male family migrants from Turkey. Moreover, this cohort included large numbers of migrants from the disintegrating nations of the Soviet Union and Yugoslavia, and, later, from their successor states. Many immigrants from this region were refugees from the Yugoslav wars that started in 1991. During this time span, large numbers of ethnic Germans and their non-German family members from Poland and Romania came to Germany. In addition, after the fall of the Iron Curtain, significant numbers of people migrated from Eastern to Western Europe for work or education. When we look at the skills composition of this cohort, we see that the migrant men had educational levels similar to those of the previous cohort, but the migrant women were more likely than their predecessors to have secondary and tertiary education. It should, however, be noted that in our analyses, the generally well-educated ethnic German women and men with German citizenship are subsumed into the reference category of Germans (see online appendix Tables 23-24).

After reaching a peak in the mid-1990s, immigration figures started to decline until around 2005. This was partly due to the “asylum compromise” of the German government, which discouraged individuals from so-called “safe origin countries” from applying for asylum. In the decade when our fourth arrival cohort immigrated – i.e., between 1994 and 2003 – the origin countries of the asylum seekers (the former Yugoslavia), the ethnic Germans and their family members (e.g., Russia and Kazakhstan), and the spouses of former guest workers (Turkey) were still among the most important source populations (see Figure 1). In addition, migration from Eastern Europe was playing a more important role. Although Germany did not grant full freedom of movement to immigrants from Poland until 2011 (and to immigrants from Romania and Bulgaria until 2014), seasonal workers were already permitted to enter the country temporarily, and the numbers of Polish migrants in particular increased after the early 1990s (Dietz & Kaczmarczyk 2008). Poland was the largest source country among men, although the share of female migrants from Poland was (still) smaller. Turning to the Microcensus data in Table 1, we can see that the educational levels of the migrants in this arrival cohort (measured in 2004) were higher than those of any previous cohort. Only around one-third of all migrants in this cohort had lower levels of education, while more than one-quarter had some form of tertiary education. In addition, the gender gap in levels of education that was quite pronounced in the earlier arrival cohorts began to close, as the women in this cohort were only slightly less qualified than the men.

Our *last cohort* includes migrants who arrived in Germany between 2006 and 2010. Poland was again the most important source country (see Figure 1), followed by Russia,

Romania, and Turkey; the US for women; and Romania, former Yugoslavia, Turkey, and Hungary for men. The composition of this arrival cohort was more heterogeneous compared to the previous cohorts, most likely because a large share of these individuals were migrating for work, rather than on other grounds. According to the Microcensus, the share of migrants with higher levels of education increased again in this cohort (see Table 1). In 2011, about 40 per cent of both female and male migrants had some form of tertiary education, and only about one-quarter had low levels of education. In addition, for the first time, the share of male migrants with some form of tertiary education was considerably higher than the share of German men (41 per cent versus 35 per cent), whereas a similar pattern had already been observed for female migrants of earlier arrival cohorts. However, while the share of individuals with tertiary education was higher among migrants than among Germans, the share of individuals with low levels of education was also higher among migrants. This distribution partly reflects the absence of a vocational training system in most of the source countries.

In sum, this brief characterisation of the arrival cohorts shows that over time, three trends can be observed. First, the main origin countries of the migrants shifted from the former recruitment countries to Central and Eastern Europe. Second, the inflows included more women than was the case during the period of labour recruitment, even though the share of women was highest around the mid-1980s.¹⁰ Third, the migrants' levels of education increased almost steadily over time. When the shares of both female and male migrants with some form of tertiary education are considered, this holds true not only in absolute terms, but also relative to the (comparatively older) population with German citizenship. While the share of migrants with low levels of education also declined substantially over time, in our most recent arrival cohort, it was still about three times higher than it was among Germans. This ratio remained rather stable over time, especially among men.

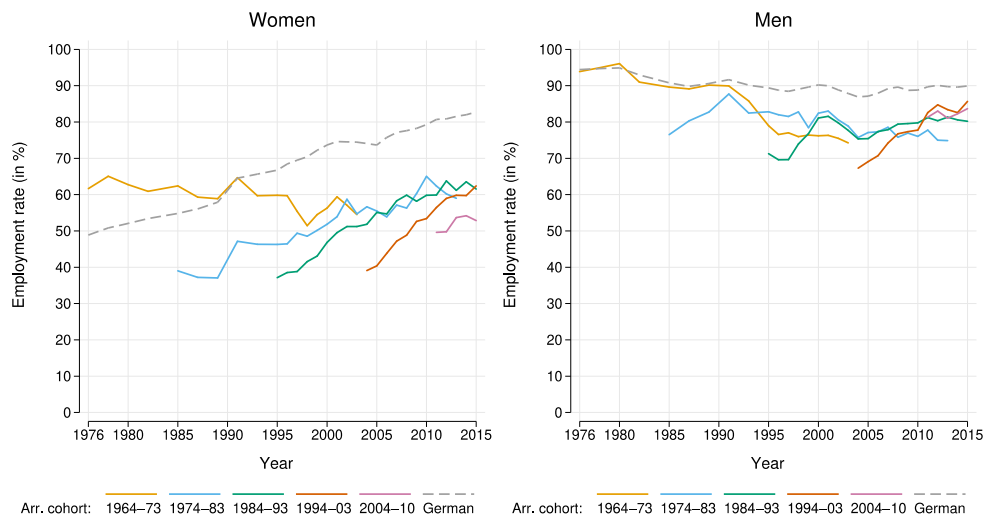
5. Results

5.1 Employment

Figure 2 maps the employment rates by arrival cohort, gender, and time period. The employment rates are calculated as the ratio of the employed to the working-age population (in this case, it is limited to individuals between 25 and 54 years of age). The figure illustrates five important trends:

10 We see that the share of women is generally higher in the Microcensus data than in register inflow data. In the Microcensus data, we measure the shares after each respective arrival period is concluded. Since short-term stayers are more likely to be included in the register data than in the Microcensus sample, and short-term migration is much more common among men than among women, the shares of men and women differ between samples. Generally, the higher shares of immigrant women during the 1980s were also partly the result of the presence of higher numbers of accompanying children with a fairly even gender composition.

Figure 2: Employment rates by period and arrival cohort.



Note: Every plotted data point is based on a minimum of 100 observations. Sample is restricted to Western Germany, including Berlin.

Source: Microcensus Scientific Use Files, DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0, own calculations.

First, the employment rates of West German women increased steadily from about 50 per cent in the mid-1970s to more than 80 per cent in 2015. This trend towards rising female employment was also mirrored in the employment rates of female migrants (with the exception of the first arrival cohort, see below): both within and across the arrival cohorts, the employment rates increased over time. For example, while only about 40 per cent of women of the 1974-83 arrival cohort were employed in the late 1980s, this share had risen to almost 60 per cent by the 2000s. Moreover, the employment rates of the most recent cohort appeared to be higher than those of the earlier cohorts, at least if we consider comparable cohort-period combinations (e.g., an employment rate of about 50 per cent for the 2004-10 cohort in the mid-2010s compared to an employment rate of less than 40 per cent among women of the earlier cohorts in the mid-1980s, mid-1990s, and mid-2000s, respectively).

Second, although levels of employment had been rising among both migrant and German women, the gap in female employment levels between Germans and migrants was large and rather stable over time, at about 20 percentage points or higher (depending on the period and the cohort with whom the comparison is made). Even if we take into account that the employment levels of female migrants tended to increase with years of residence, we would expect to find that the levels of the more recent cohorts did not fully catch up with those of German women. Thus, it is likely that substantial employment gaps between migrant and German women will be observable for some time to come.

Third, a notable exception to the trends just mentioned is found in the first arrival cohort; i.e., those who arrived during the recruitment period. The employment rates of migrant women of this cohort were higher (around 60 per cent) in the mid-1970s and the early 1980s than those of German women at that time (around 50 per cent). However, while the employment rates of these migrant women initially stagnated at around 60 per cent and ultimately dropped to 50-55 per cent, employment rates rose among German women. Thus, these results clearly show that the first arrival cohort had very different employment patterns over the life course than the subsequent cohorts.

Fourth, we see a different and less dynamic picture for men (migrants and Germans). As we noted above, men are less likely than women to grapple with the question of whether to enter the labour market and search for employment, which is reflected in their generally high employment rates. Among the German men in our sample, the employment rates declined slightly (from about 95 to 90 per cent), which is probably attributable to both higher unemployment and more people first entering the labour market in their late twenties (due to the educational expansion). Among the migrant men, the employment rates ranged between 70 and 80 per cent (with the exception of the first immigrant cohort). Thus, the German-migrant employment gap was much smaller among men than among women. Moreover, compared to women, we see no clear trend in the employment patterns of migrant men, as their employment rates seem to have fluctuated between 70 and 85 per cent. As in the case of the women, the men of the first arrival cohort displayed distinct employment patterns. Until the 1990s, the men of this arrival cohort had the same employment levels as German men. However, within a very short period of five years, their employment rates diverged from those of German men and fell sharply, by about 15 percentage points. The most likely explanation for this shift is that these predominantly low-skilled men (see Table 1) were particularly affected by the high unemployment during the economic downturn that began a few years after German reunification. Based on our data, the unemployment rates for men of the 1964-73 arrival cohort doubled between 1991 and 1996 (from 5.6 to 12.2 per cent, see online appendix Table 44). Moreover, our data show that the share of male pensioners (within the age range 25-54) increased substantially over the same period, which suggests that early retirement was also common in this arrival cohort (see online appendix Table 45).

Fifth, with respect to gender gaps in employment, we find that among Germans, there was a strong convergence in male and female employment rates. While the male-female gender gap in employment among Germans was 45 percentage points in the mid-1970s, it had decreased to eight percentage points by 2015. In contrast, the gender gap in employment among migrants remained at between 20 and 40 percentage points over the study period. Remarkably, even within the most recent arrival cohort, there was a substantial gap between the employment rates of men and women, even though the men and women of this cohort had very similar levels of education (see Table 1). Thus, a closing of the (migrant) gender employment gap in the near future is not anticipated, as gender differences in the motivations and opportunities to join the labour market are expected to remain relevant.

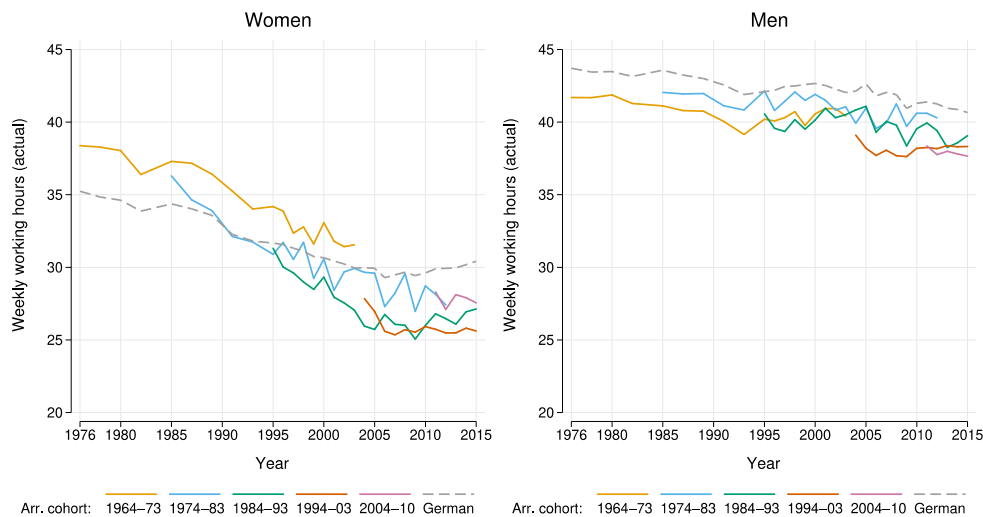
Additional estimations for the 2007-2015 period suggest that we have underestimated the employment rates of immigrants due to selective naturalisation, particularly for women (see online appendix Section 2.2.5.1). Extending the immigrant sample to those

holding German citizenship (including ethnic Germans) increases the estimated employment rates by up to 10 percentage points for women and by up to 5 percentage points for men (with some heterogeneity across arrival cohorts). However, although the migrant-German gaps shrink along with the gender gaps among migrants, both remain substantial for all arrival cohorts.

5.2 Weekly working hours

To get an impression of migrant-German as well as male-female gaps in work intensity, we now turn to Figure 3, which displays average actual working hours for people aged 25–54 who reported being employed.

Figure 3: Weekly working hours by period and arrival cohort.



Note: Every plotted data point is based on a minimum of 100 observations. Sample is restricted to Western Germany, including Berlin.

Source: Microcensus Scientific Use Files, DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0, own calculations.

For both migrant and German women, average working hours declined sharply over the observational period. For example, in the late 1970s and the early 1980s, employed German women were working an average of 35 hours a week. By 2006, this figure had declined to 30 hours a week. Among migrant women, the average number of working hours declined even more drastically. From 2006 onwards, female work intensity stagnated at around 30 hours per week among German women and at around 27 hours a week among migrant women. These results reflect evidence indicating that the increase in women's employment rates (see above) was accompanied by a decline in the share of

women in full-time employment and an increase in the share of women in part-time and marginal employment (see online appendix Figure 10 for results on full-time, part-time, and marginal employment by gender).

Moreover, while the most recent cohorts of migrant women were working fewer hours per week on average than German women, this was not the case for the first arrival cohort. Up to the mid-1990s, the employed women of this cohort were working a couple of hours more per week on average than the German women. However, the working hours of these two groups were clearly converging over time. While the German-migrant gap was about three hours in the mid-1970s, it steadily narrowed in the following decades. This development was driven by a strong increase in part-time and marginal employment among German women and a corresponding decrease in full-time employment among migrant women of the first arrival cohort: i.e., until the 1990s, 80 per cent of female migrant workers were full-time employed, whereas from the 1990s onwards, this share had declined to about 60 per cent.

In our study period, working hours also decreased among men, albeit to a much lesser extent than among women. Moreover, the average working hours of male migrants were always lower than those of German men. The migrant-German gaps in working hours among men were largest for the two most recent cohorts (about three hours' difference) and smallest for the 1974-83 cohort. Even men who belonged to the first arrival cohort clearly worked (on average) fewer hours than their German counterparts. Furthermore, there was a large and widening gap in working hours between men and women. In 2015, this gap was as large as 10 hours among both Germans and migrant workers. The main drivers of this phenomenon were the much larger shares of women than of men in part-time and marginal employment.

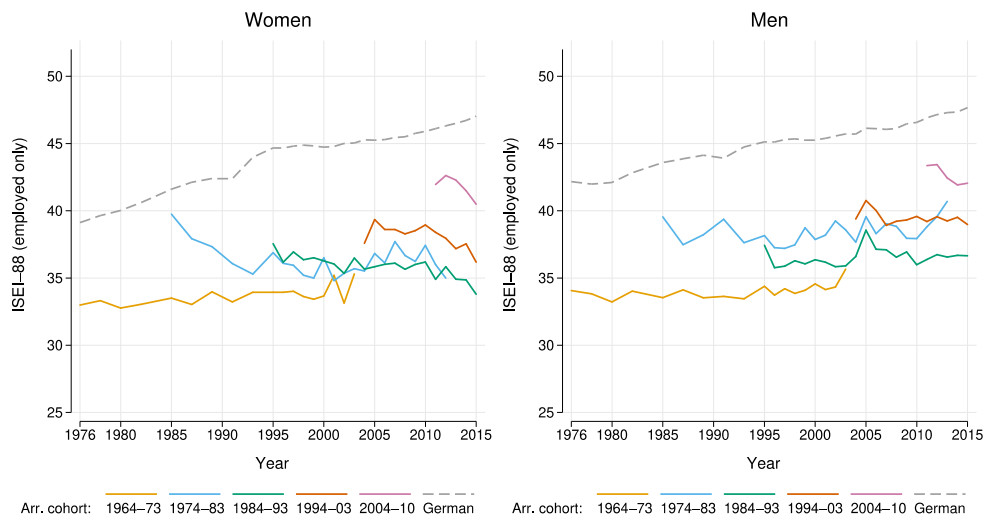
Compared to the employment rate estimates, our results for the working hours of migrants seem to be less affected by positive selection into naturalisation. For the 2007-2015 period, we additionally estimated the weekly working hours for a sample of immigrants, which included those with German citizenship (comprising ethnic Germans). Restricting our sample to non-German immigrants resulted in an underestimation of the weekly working hours across the arrival cohorts by a maximum of about two hours for women and about one hour for men (see online appendix Section 2.2.5.2). Thus, the observed patterns were largely unchanged after accounting for selective naturalisation.

5.3 *Occupational status by period*

We conclude our empirical investigation by presenting results on the occupational status (measured as ISEI-88) of migrant and German women and men. Figure 4 shows that the occupational status of employed German women was increasing steadily and substantially over the observation period. This trend towards higher occupational status was also visible across the arrival cohorts, whereas there was little change within the cohorts over time. With the exception of the 1984-93 cohort, the average occupational status of migrants increased with every new arrival cohort. This development most likely reflects changes in migrants' resource endowments, most importantly the continuously improving educational levels of the arrival cohorts that we described above (see Table 1). However,

the figure also indicates that the status scores of migrant women were generally lower than those of German women. The respective gaps varied considerably over the observation period, as well as over the arrival cohorts.

Figure 4: Occupational status scores by period and arrival cohort.



Note: Every plotted data point is based on a minimum of 100 observations. Sample is restricted to Western Germany, including Berlin.

Source: Microcensus Scientific Use Files, DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0, own calculations.

The results for men are very similar to the results for women: i.e., the average occupational status of German men increased substantially over the observation period, while the occupational status of migrant men followed patterns similar to those of migrant women, with a positive trend being observed across, but not within, cohorts. The migrant-German gaps in occupational status were larger for men than for women until the mid-1990s, but converged thereafter.

Generally, the gender gaps within the migrant population seem to be quite small. However, for the 1974-83 cohort, the average occupational status was substantially higher for men than for women. The potential reasons for this gap include that this period was dominated by family reunification migration; i.e., by large inflows of women with low levels of education from the former recruitment countries. At the same time, the termination of the foreign labour recruitment schemes in 1973 did not put an end to labour migration in general, as entry was still possible for labour immigrants from several Western countries (Berlinghoff 2018). As a result, the skills composition improved more rapidly across the arrival cohorts for men than for women (see Table 1). This more favourable skills composition for the male immigrants may partly explain the larger gender gaps in occupational status found for this cohort. Such composition effects might

also explain why immigrants from the 1984-1993 arrival cohort, many of whom came as refugees, fared rather poorly in terms of occupational status. However, migration to Germany in the early 1990s was heavily dominated by better educated ethnic Germans migrants from Central and Eastern Europe. Thus, our results do not provide a good estimate for the occupational scores of *all* migrants to Germany of this arrival cohort (Luthra 2013, see also online appendix Table 23).

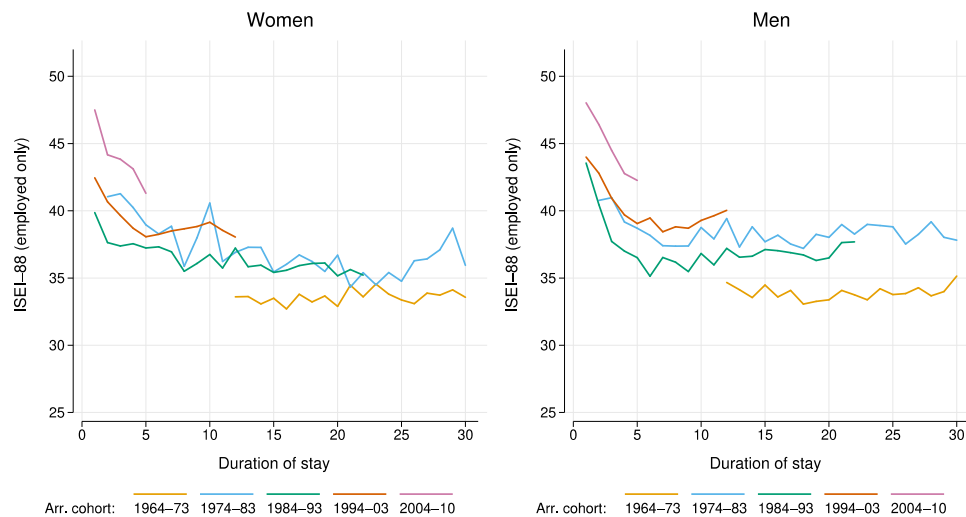
We conducted additional analyses for the 2007-2015 period in order to better understand to what extent naturalisation contributes to this picture. As we have shown above, the naturalised immigrants seem to be positively selected in terms of their employment rates and (less so) working hours. However, when we look at their occupational status, we find that the picture is more mixed (see online appendix Section 2.2.5.3). By excluding immigrants with German citizenship, we underestimate the occupational status scores of immigrant women and men by about three points for the 1974-83 arrival cohort and about two points for the 1984-93 arrival cohort; but we overestimate the scores by 1-2 points for the 1994-03 arrival cohort. Still, the migrant-native gaps as well as the gender gaps among the cohorts were only slightly affected by this kind of selection.

5.4 Occupational status by duration of stay

In a final step, we take a closer look at the integration profiles of different arrival cohorts by examining the occupational status of migrant women and men by their duration of stay.¹¹ Taking this perspective also allows us to gain some tentative insights into the selective nature of outmigration, naturalisation, and employment uptake.

11 We only provide descriptive statistics for combinations of arrival cohorts and durations of stay for which we have full support in our data. For example, for the 1964-1973 cohort, we only provide statistics for 12 or more years of residence because our observation period starts in 1976. Similarly, for the 2004-2010 cohort, we provide statistics for a maximum of five years of residence, as our last observed year is 2015. The minimum number of observations for each plotted data point must again exceed 100.

Figure 5: Occupational status by duration of stay and arrival cohort.



Note: Every plotted data point is based on a minimum of 100 observations. Sample is restricted to Western Germany, including Berlin.

Source: Microcensus Scientific Use Files, DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0, own calculations.

Figure 6 again shows that the average occupational status increased with every new cohort, but that no cohort experienced appreciable upward mobility after their arrival in Germany. Indeed, the plots by duration of stay indicate that for all cohorts, the average occupational status dropped considerably in the first five to seven years of residence. After this initial decline, the scores remained rather stable. This pattern may seem puzzling, as we would expect to observe that the migrants' occupational status increased rather than decreased over time, both because their individual resources, such as their language skills, should have improved; and because the long-term returns to their initial investments based on individual motivation should have been realised. However, given that we observe an initial decline for all arrival cohorts, it is unlikely that structural changes in migrants' labour market opportunities account for this change. From a theoretical standpoint, we expect this pattern to reflect selective outmigration. Unlike naturalisation, outmigration is most likely to occur in the early years after migration, whereas the likelihood of settlement increases with the duration of stay in the country. Supplementary analyses (see online appendix Sections 2.2.4-2.2.5 and 3.3 for a detailed account) suggested that the initial decline in average occupational status reflected the short-term outmigration of higher-skilled migrants, but also delays in employment for lower-skilled migrants who often

needed more time to find a job.¹² In turn, our failure to observe any occupational mobility for the arrival cohorts with ongoing residence in Germany appears to be related to the selective naturalisation of migrants with higher occupational status, which may have offset possible integration processes over time. In general, these processes affected women and men of all arrival cohorts, although there was some heterogeneity by cohort and gender. For example, it appears that employment delays for lower-skilled migrants and selective outmigration mattered more for men than for women. However, as these processes can explain only part of these trends, more research is needed to identify and disentangle all of the processes that are at play.

6. Discussion

This paper has provided a descriptive overview of the employment patterns of first-generation non-German immigrants who moved to West Germany between 1964 and 2010. The large sample sizes of the Microcensus enabled us to cast a nuanced light on the employment profiles of men and women who belonged to different arrival cohorts. Our findings support the view that migration policies – and, thus, the practices and regulations that define entry into a country – shaped the composition of the migrant population in terms of their resource endowments and thus their labour market success.

Before the recruitment stop in 1973, recruitment policies governed the flow of migrants to Germany. Both women and men, mostly with low levels of education, were recruited to work in the booming German industrial economy. As a consequence, the employment rates among migrants in this early arrival cohort were high for both genders. In our findings, the high labour force participation rates of migrant women stand out, as West German society of the 1970s was still characterised by strongly gendered employment patterns. Moreover, most of the migrant women who were working were employed full-time (around 35 hours per weeks, on average), and thus had rates of full-time employment similar to those of their male counterparts. Thus, it appears that the immigrant women of this cohort were better integrated into the labour market than West German women, even though most of them were working in low-skilled occupations. The high employment rates of the first-generation female migrants of the early migration cohorts have largely been overlooked in the literature, in part because the 1970s were seldom included in previous investigations, as the available survey data did not include this time period (but see Mattes 2005). Taking this time period into account is, however, of central importance, as it illustrates how closely female migrants' labour market participation is tied to the conditions under which they migrate.

Women in the subsequent arrival cohorts displayed different employment patterns. This shift was mainly related to the channels for migration that existed after the recruitment stop. Family reunification became the predominant legal grounds for migration for people from non-European countries such as Turkey, which was one of the

12 Additionally, the initial decline is also due in part to migrants who arrive at ages 18-23 having lower skills than older arrivals. As these young migrants "grow into" our analysis sample of migrants aged 25-54 with longer durations of stay, the average educational levels of cohorts decrease in their first years of residence.

main countries of origin for the 1974-1983 arrival cohort. The employment rates of the women of this cohort were not only far below those of the women of the “recruitment cohort”, they were also below the employment rates of the West German women. Thus, within a short period of time, the differences in the employment rates of migrant women and German women had completely reversed.

This pattern remained mostly unchanged for the following arrival cohorts. However, there was a sizeable shift in the employment rates among the more recent cohorts who migrated in the 1994-2003 and 2004-2010 periods. Many of these migrants came from the new EU member states of Central and Eastern Europe, and the women and men of these recent cohorts were more highly educated than those of the prior cohorts. This trend did not necessarily lead to higher employment rates for women, and during our observation period, neither female nor male migrants had reached parity with Germans in terms of their occupational status. However, the gap narrowed substantially for those who migrated between 2004 and 2010. Furthermore, the migrant women and men of the more recent cohorts differed little from Germans in terms of their occupational status. While these findings suggest that immigrant women have been achieving labour market success in Germany, a more nuanced examination of their employment patterns by duration of stay indicates that the average occupational status levels of these women declined substantially during their first years of residence, and stagnated thereafter. Selective outmigration as well as delays in the uptake of employment by low-skilled workers, seem to explain some of the patterns we observed. Unfortunately, we cannot fully separate these effects.

Overall, our results resonate well with prior findings for Germany, which have shown that the educational levels of migrants have been increasing in recent years, but that migrant women continue to underperform on the German labour market (Herwig & Konietzka 2012; Höhne 2016; Kogan 2011a). While these prior findings were often limited to selected time periods or compared to selected survey years only, our study provided a “long view”. This long view suggests that the integration of migrants into the labour market of the host society should be discussed in conjunction with the migration policies, venues, and networks that shape migration flows in a given era – and, thus, migrants’ selectivity. While this point has been emphasised before in the literature (Kogan 2011a; Cangiano 2014), our contribution has been to specifically highlight that there is a strong gender component that must be factored in as well when examining the employment outcomes of migrants. Our analyses have also suggested that to fully understand the integration trajectories of different arrival cohorts, outmigration, as well as naturalisation, must be taken into account. With the rising mobility within the European Union, the importance of circular or return migration is growing.

The strength of our approach is that it has provided an overview of a long time period. We were, for example, able to provide insights into the exceptional behavioural patterns of the women from our early migration cohort. The large sample size of the Microcensus also enabled us to produce more fine-grained results along key socio-demographic dimensions. Nevertheless, the use of such a descriptive approach comes at a cost. We were not able to address the many dimensions beyond education that shape the labour market success of female and male migrants. For example, for women in particular, the births of children, and how these births are timed with respect to migration, play an important role in their employment trajectories.

In addition, the data have a number of limitations. In particular, information on naturalisation and the arrival year is missing for migrants with German citizenship. As a result, we were unable to identify ethnic German migrants, who dominated migration to Germany in the early 1990s. More recent Microcensus data include this important information, which we employed for additional sensitivity analyses. However, we could not make use of this information in the main analysis as consistent definitions over a long time span were needed. Since the Microcensus is a cross-sectional survey, we were also unable to thoroughly study outmigration patterns with our data, and thus had to infer educational selectivity from changes in the educational composition of the arrival cohorts over time. Finally, our investigation did not include migrants of the very recent cohorts who moved to Germany as refugees and asylum seekers. Even though they have made substantial progress in integrating into the German labour market, many of these women and men face particular challenges, such as an interrupted educational career or a history of trauma (Brücker et al. 2019).

From a policy perspective, our analyses show that Germany has increasingly attracted migrants with higher levels of education. Based on our data, we cannot judge to what extent this development reflects educational expansion in the countries of origin (e.g., Turkey), changes in the composition of the immigrant population (e.g., more migrants from Eastern EU countries), and efforts that have been made to attract skilled individuals. However, our analyses of both the migrants' levels of education over time and their labour market integration patterns suggest that Germany has come a long way since the recruitment period. The experiences of countries like Canada, which deliberately seeks to attract highly skilled migrants, suggest that first-generation migrants still face barriers to integrating into the labour market, as they may, for example, lack transferable educational credentials or relevant language skills (Reitz 2013). Identifying and removing the specific obstacles that prevent immigrants from living up to their potential and from reaching labour market parity with natives remain significant challenges for both researchers and policy-makers.

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Microcensus data (DOI: 10.21242/12211.1976.00.00.3.1.0 to 10.21242/12211.2015.00.00.3.1.0) used in this project were made available by the Research Data Centre of the Federal Statistical Office and the Research Data Centre of the Statistical Offices of the Federal States, Germany.

Supplementary materials

Additional data and the code used to produce the results of this study are openly available as Zenodo repository at <http://doi.org/10.5281/zenodo.4362483>. An online appendix is available at <https://pages.cms.hu-berlin.de/sprenmax/a-long-view/>.

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Information in German

Deutscher Titel

Von „Gastarbeitern“ zu EU-Migranten: Eine geschlechtsspezifische Betrachtung der Arbeitsmarktintegration verschiedener Zuwanderungskohorten in Deutschland

Zusammenfassung

Fragestellung: Dieser Artikel bietet auf Basis des Mikrozensus einen langfristigen Überblick über den Arbeitsmarkterfolg verschiedener Zuwanderungskohorten nicht-deutscher Migrantinnen und Migranten in (West-)Deutschland.

Hintergrund: Obwohl der Arbeitsmarkterfolg von Migranten und Migrantinnen in Deutschland häufig Forschungsgegenstand ist, fehlt eine geschlechtsspezifische Betrachtung über einen langen Zeitraum.

Methode: Wir präsentieren deskriptive Analysen für Erwerbsquoten, Arbeitsstunden und beruflichen Status verschiedener Zuwanderungskohorten nach Geschlecht, Kalenderjahr und Aufenthaltsdauer. Die Daten beziehen sich auf den Zeitraum 1976-2015.

Ergebnisse: Mit Ausnahme der ersten Zuwanderungskohorte zeigten Migrantinnen und Migranten eine durchgehend geringere Wahrscheinlichkeit erwerbstätig zu sein als ihre deutschen Pendants. Während die durchschnittlichen Arbeitsstunden von Migrantinnen früher Zuwanderungskohorten jene deutscher Frauen überstiegen, nehmen sie über die Folgekohorten hinweg ab und das Bild kehrt sich um. Der berufliche Status von Migrantinnen und Migranten hat sich mit jeder Zuwanderungskohorte verbessert, was im Einklang mit dem gestiegenen Bildungsniveau steht. Analysen nach Aufenthaltsdauer legen nahe, dass sich der durchschnittliche berufliche Status der Zuwanderungskohorten über die ersten Jahre verringert und danach stagniert, was wir zum Teil auf selektive Re-Migration zurückführen.

Schlussfolgerung: Unsere Ergebnisse zeigen deutlich, dass der Arbeitsmarkterfolg der verschiedenen Zuwanderungskohorten stark variiert und die allgemeinen politischen und wirtschaftlichen Rahmenbedingungen widerspiegeln, die zur Zeit der Einreise bestanden. Diese Schlussfolgerung gilt insbesondere für Migrantinnen.

Schlagwörter: Migration, Integration, Arbeitsmarkt, Frauen, Zuwanderungskohorten, Deutschland

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