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The Situation of Female Immigrants on the German Labour Market: A Multi-Perspective Approach

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While general ethnic disadvantages are well documented, much less is known about coinciding disadvantages of ethnic origin and gender. Based on theoretical arguments of human capital theory, sociocultural approaches, labour market segmentation theory, and discrimination mechanisms, we investigate whether immigrant women experience more difficulties on the labour market than immigrant men, non-immigrant men and women. Using data from the German Socio-economic Panel from 2013 and 2015 we deal with interaction patterns of ethnic origin and gender regarding various labour market outcomes for immigrants from Turkey and the former Soviet Union. We analyse the impact of individual resources like education, language proficiency, and job characteristics on ethnic and gender gaps. We find evidence of additional disadvantages of immigrant women on each outcome variable that largely seem to be attributable to differences in qualifications and language proficiency. However, for women from the former Soviet Union and second-generation Turkish women specific disadvantages are apparent that cannot be explained by individual and job characteristics.

Keywords: Labour market, Integration, Migration, Gender, Gender disparities

Introduction

The persistence of immigrants' and their descendants' manifold disadvantages on the labour market of Western countries has been demonstrated repeatedly (for an overview of European countries, see: Heath and Cheung 2007; for a comparison of the US and European countries, see: Alba and Foner 2015). In Germany like in many other European countries, immigrants are at a higher risk of being unemployed (e.g., Kogan 2004), earn less than natives (e.g., Büchel and Frick 2004) and are positioned at lower segments of the labour market (e.g., Constant and Massey 2003). A growing body of studies considers a second dimension of inequality, namely gender, and deals with gender differences among immigrant groups (e.g., Antecol 2000, Blau and Kahn 2015, Fernández and Fogli 2009, Fleischmann and Höhne 2013, van Tubergen et al. 2004). Bringing both inequality dimensions together reveals that, overall, immigrant women are less integrated in the labour market compared to non-immigrant women and immigrant men. But there is strong variation by country of origin. Several studies find a link between female labour force supply in the country of origin and labour market attachment of female immigrants in the US, Canada and Europe (e.g., Antecol 2000, Blau and Kahn 2015, Frank and Hou 2015, Polavieja 2015). This applies to the German context as well: Women originating from South-eastern European countries and from the Middle East and North Africa have low levels of labour supply, whereas women from post-Soviet countries have high rates of labour market participation (Fleischmann and Höhne 2013). Moreover, although children of immigrants tend to assimilate towards the native population, for some groups second-generation women mirror the labour market participation of first-generation women (e.g., Antecol 2000).

The majority of existing studies engaged in investigating ethnic and gender disparities simultaneously are often limited to exploring (descriptive) differences in labour force participation (e.g., Antecol 2000, Fleischmann and Höhne 2013, Stone and McQuillan 2007). Other indicators are examined less often, particularly in the European context, although several arguments stress the importance of broadening the analyses of labour market integration (for

exceptions, see for example: Fleischmann and Höhne 2013, Ala-Mantila and Fleischmann 2018). First, as argued by Luthra (2013), immigrants can be more disadvantaged in accessing the German labour market than with regard to wages and occupational status after entering the labour market. Second, there is evidence from correspondence studies demonstrating lower call back rates from potential employers among immigrant men than among immigrant women when they are not differentiated by their country of origin (e.g. Dahl and Krog 2018, Koopmans et al. 2018). The direction of the gender gap among immigrant groups thus can vary across different labour market outcomes. Third, while ethnic differences in female labour market supply are usually explained by group differences in choices and preferences, other dimensions of labour market integration, like wages and occupational prestige, can be influenced by other mechanisms as for example by discrimination. Overall considering more indicators of labour market integration can help to pinpoint sources of ethnic and gender penalties on the labour market.

Fleischmann and Höhne (2013) point out that most studies analyse immigrants and non-immigrants by gender separately (e.g., Blau and Kahn 2015, Koopmans 2016, van Tubergen et al. 2004) or solely focus on women (e.g., Khoudja and Fleischmann 2015, Khattab and Hussein 2018, Blommaert and Spierings 2019, Maes et al. 2019) and thus fail to carve out possible reinforcing effects of ethnic origin and gender. To capture immigrant women's potential disadvantage on both dimensions, it is necessary to apply a multi-perspective approach. Comparing them to non-immigrant women only covers their disadvantage on the labour market because of their ethnic origin. Immigrant women can also experience disadvantages because of their gender, which can be figured out by comparing them to immigrant men of the same origin. Finally, by being disadvantaged on both dimensions, immigrant women might also be prone to an additional disadvantage on the labour market that can be reflected in the gap between them and non-immigrant men. To arrive at a comprehensive picture of the position of immigrant women and the other subgroups, we depict their labour market situation in comparison to non-

immigrant men, men of the same country of origin and non-immigrant women in Germany. Furthermore, little is known about possible gender differences in resources that are relevant for labour market outcomes among immigrant groups. Thus, we want to add to the literature by focusing on group differences in employment, occupational status and wages and by testing explanations for the observed differences by ethnic origin and gender that are usually based either on ethnic or gender specific disparities. More precisely, we investigate which characteristics and mechanisms account for patterns of labour market integration by country of origin and gender.

We focus on immigrants from Turkey and from countries of the former Soviet Union (FSU), who constitute the two largest immigrant groups in Germany (Bundesamt für Migration und Flüchtlinge 2016). Considering both groups in the analyses provides the opportunity to compare the situation of two immigrant groups that vary largely at least on two dimensions that are relevant for the labour market integration: the general level of qualification and the female labour force participation in the countries of origin. Turkish immigrants have, on average, low educational credentials and low levels of female labour force participation, whereas the reverse is true for immigrants from the FSU. They are highly qualified on average and have high levels of female labour supply in their home countries. Hence, we can analyse how men and women of two differently endowed groups fare on Germany's labour market.

The paper is organised as follows. We discuss theoretical arguments based on human capital theory, sociocultural resources, labour market segmentation theory and discrimination and how they are linked to ethnic and gender specific disparities in the German labour market. After elaborating on the theoretical arguments, we present the *German Socio-Economic Panel* and the methods we use. We test our theoretical assumptions on immigrant women's specific disadvantages on labour market outcomes and discuss our results in the last section.

Theoretical arguments

From a theoretical perspective ethnic and gender disparities on the labour market can be based on different mechanisms. We refer to four types of theoretical approaches, three of which will be directly addressed by the empirical analyses. We start by drawing on explanations focusing on *human capital explanations*. Lower levels of educational and vocational qualifications are considered as the most important mechanism leading to less profitable labour market positions of immigrants. Besides general qualifications other resources like language skills and social networks that are relevant for labour market outcomes are subsumed as *sociocultural explanations*. The *labour market segmentation* including differences in job characteristics between natives and immigrants, but also between men and women, comprise another type of explanation. Finally, different forms of *discrimination* by employers are a possible source of ethnic and gender inequality on the labour market. We will discuss these approaches with regard to the labour market indicators that we use in our analyses (employment, occupational status and wages). However, it should be noted that not all theoretical arguments apply to all indicators. As we are particularly interested in immigrant women's situation, we will emphasise arguments and hypotheses referring to them.

Human capital explanations: Educational and vocational qualifications

At least two arguments can be derived from human capital theory to explain why immigrants in general should have difficulties in accessing the host country's labour market and perform worse than non-immigrants. First of all, first-generation immigrants who acquired their education and labour market experience in their country of origin can experience devaluation thereof after migrating to the country of residence (Borjas 1994, Chiswick 1978). Lacking necessary information and specific skills required on the host country's labour market, immigrants adopt an unfavourable position on the labour market upon arrival (Friedberg 2000).

The longer they reside in the host country, the smaller does the gap between immigrants and non-immigrants become (Chiswick 1978).

Secondly, regardless where immigrants acquired their qualifications, the overall qualification structure between immigrants and the native population can differ on average. Immigrants can be negatively selected regarding their level of qualification (Kalter and Granato 2002). During the 1960s so-called *guest workers* were recruited in Germany and other European countries to meet labour shortage. In that period demand for unqualified employees who could work predominantly in the industrial sector was high. The migration of guest workers was regulated through contracts between the home and the host country through which a high flow of immigrants from Turkey, Italy, Spain, Portugal and Yugoslavia to Germany was constituted. Being selected to fill in job positions in the lower segment of the labour market, the overall qualification level among guest workers was low, which has long-term negative consequences for their labour market trajectories (Kalter and Granato 2007). However, immigrants can also be positively selected. In Germany this was the case for German repatriates, so-called *(Spät-) Aussiedler*, who possess higher educational credentials on average than other immigrant groups (Konietzka and Kreyenfeld 2001). Based on their German heritage, they were naturalized in Germany and were supported by the German government in their integration process for instance by access to and financing of language courses as well as by recognition of qualifications attained in the home country (cf. Haberfeld et al. 2011). Despite being highly educated and receiving support, immigrants from the FSU seem to struggle in the German labour market nonetheless (e.g., Kogan 2004, Söhn 2011).

While the devaluation argument should hold for both, male and female immigrants, it is plausible to assume gender differences regarding the composition of the qualification structure at least for some immigrant groups. The qualification level of women who migrated from countries in which women have lower educational attainment on average is likely to be lower than male immigrants' level of education of the same origin (cf. Fleischmann and Kristen

2014). Turkey is one of the exceptional countries in the *Organisation for Economic Co-operation and Development* (OECD) in which the gender gap continues to be in favour of men. Consequently we can expect compositional differences in educational and vocational qualifications between first-generation Turkish men and women. The combination of gender disadvantage in educational attainment in Turkey and ethnic disadvantage in Germany, should result in an *additional disadvantage* on labour market outcomes among first-generation Turkish women. Hence, *we assume that first-generation Turkish women's relatively worse labour market outcomes in terms of employment chances, occupational status and wages can be explained by their educational and vocational qualifications.*

A different situation can be expected for female immigrants from the FSU where women attain at least the same qualification level as men (e.g., Gerber 2003). *For both genders we expect ethnic disadvantages on all indicators, because of devaluation of their qualifications. But no gender specific disadvantages should be apparent among FSU immigrants.*

Through the strong linkage between socioeconomic background and educational outcomes in Germany, the non-beneficial composition of the first-generation can lead to disadvantages in the educational system for the second-generation that have negative consequences for the labour market positioning of them (Kristen and Granato 2007). But as the second-generation attends school in the host country these disparities should be less pronounced.[1] *For second-generation Turkish women and men we expect the ethnic gap on labour market outcomes to be smaller as the gap between Germans and first-generation immigrants in qualifications decrease.* Moreover, Turkish girls outperform Turkish boys in the German educational system (e.g., Fleischmann and Kristen 2014). Converging educational

[1] As German repatriates migrated in the 1990s, the second-generation is still predominantly in the educational system and yet not observable on the German labour market, which is why we have to limit our hypotheses to the second-generation of Turkish immigrants.

attainment should translate into similar patterns in labour market outcomes. *From a human capital perspective, second-generation Turkish women should experience no additional disadvantage compared to men of the same group due to lower educational and vocational attainment.* Other mechanisms that are discussed in the following section could lead to persisting disadvantages for Turkish women nevertheless.

Sociocultural resources: Language proficiency and social networks

To explain remaining ethnic disparities after considering (formal) qualifications, other resources that are relevant for the labour market can be put forward. As previous research emphasises, language skills are crucial for the labour market integration of immigrants for several reasons (e.g. Dustmann and Fabbri 2003, Dustmann and Soest 2002). Being fluent in the language of the host country does not only allow immigrants to make use of their overall human capital, but it can be also seen as a part of their productivity and be used by employers as signal to assess potential employees. Language skills are also necessary for the job search, i.e. to gather information about open positions or for writing applications. A part of the FSU immigrants could speak German before arrival and were granted access to language training after migrating to Germany. Lacking language abilities are therefore a more plausible explanation for Turkish immigrants' disadvantages on the labour market than for FSU immigrants. Language proficiency is rarely discussed as possible resource of gender differences among immigrant groups. Lindley (2002) shows that female Muslim immigrants in Britain are less proficient in English than their male counterparts, which seems to contribute to the gender wage gap between them. *In our case, this could apply to first-generation Turkish women as well; additional disadvantages on the labour market might occur as a result of worse German proficiency compared to first-generation Turkish men.* We do not expect any gender gap in language skills and disadvantages on the labour market that are associated with that among second-generation Turkish immigrants or FSU immigrants.

Gender imbalances in language proficiency can be linked to male and female immigrants' social capital. In the US, the network composition of immigrant men and women deviate in relevant aspects from each other. Immigrant men's networks are more related to work and include more persons beyond kinship boundaries than immigrant women's social networks (Schrover et al. 2007). Ethnically heterogeneous networks, and contacts to non-immigrants in particular (*bridging ties*), are not only beneficial for improving language abilities, but being friends or acquainted with natives can open access to labour market positions that are not available within an ethnically homogenous social surrounding (*bonding ties*) (Lancee 2012). Further benefits of social networks that comprise natives are the provision of information on the host country's labour market and assistance with applications for jobs. Ample evidence shows that these positive effects are reflected in better employment chances and higher occupational status (e.g. Kalter 2006, Koopmans 2016, Lancee 2012).

A preference for ethnic homophily in friendship networks is a common finding for second-generation immigrants. This preference is particularly relevant for larger ethnic minority groups, who have the opportunity to befriend others with the same ethnic origin (Leszczensky and Pink 2018).

Relying on the findings of previous studies, we expect the lack of sociocultural resources to be higher among first-generation Turkish women and that this lack can partly account for their additional disadvantage compared to first-generation men, German men and women. We do not assume to find gender differences in contact with natives and language proficiency in the second-generation or among FSU immigrants.

Labour market segmentation, segregation and preferences

In their classical work Doeringer and Piore (1971) differentiate between two labour markets: The *primary labour market*, which requires higher levels of (formal) qualification, but provides jobs with favourable characteristics like high wages, job security and mobility opportunities. In

contrast, the *secondary labour market* is composed of jobs that require (almost) no qualification, are quite contrary to the first-mentioned, unstable and poorly paid. Besides general formal qualifications, in the highly regulated German labour market specific skills acquired through on-the-job-training are demanded as well. Newly arrived immigrants lack these specific skills even if they gained high formal qualifications abroad. They are likely to enter the secondary labour market and have restricted opportunities to shift to the primary labour market later on. This can create ethnically segregated labour markets with long-term negative consequences on immigrants' wages and other labour market outcomes (e.g., Chiswick 1978, Friedberg 2000).

According to classical works within the human capital framework, women who anticipate employment interruptions prefer jobs that have high starting salaries and low declines after maternal leaves. In turn they accept less career opportunities and lower wages on average (Polacheck 1981). Or the labour division in the household makes it rational for women to decide to be homemakers and be responsible for rearing the children. In the course of growing educational and labour market participation of women, the labour division and especially women's choice to work is increasingly based on preferences rather than on rational cost-benefit analyses (Hakim 2000). Particularly adaptive women who prefer to combine family and work might prefer part-time jobs that make this combination possible. It is assumed that these preferences are shaped by social norms and intergenerational transmission within families (e.g. Farré & Vella, 2013; Platt & Polavieja, 2016).

Norms and preferences transmitted through socialisation shape occupational choices as well (e.g. Polavieja & Platt, 2014). To avoid employers who require large human capital investments and long periods of on-the-job training that are not transferable to other companies, women are overrepresented in traditionally female-dominated jobs. Typically these jobs can be found in the administrative, service and health care sector that come along with low levels of responsibility and usually pay less than male-dominated jobs (e.g., Blau and Kahn 2000,

England 2010). Particularly for lower educated women, occupational segregation and consequently wage differentials to the detriment of women still exist (Dolado et al. 2003).

Gender differences regarding the labour market involvement across immigrant groups can be based on different heritage cultures that manifest themselves in different gender role conceptions (cf. Khoudja and Fleischmann 2015). Female immigrants originating from countries, in which the traditional male-breadwinner model is apparent, might stick to that tradition in the host country and prefer to be home-centred (Hakim 2000). Those, who are active on the labour market due to economic reasons, however, might prefer part-time jobs that allow combining work and family.

Taken together, based on their low qualification level on average, first-generation Turkish women are at a higher risk of exclusively accessing the secondary labour market and based on more traditional gender roles on average (e.g. Diehl et al., 2009; Salikutluk & Heyne, 2014), they might be more likely to prefer jobs that allow combining work and family. Thus, first-generation Turkish women should work in less prestigious jobs and have the lowest wages on average. We assume no ethnic specific, but gender specific disadvantages in occupational status and wages of other female immigrants that are related to differences in job characteristics.

Discrimination

Besides the theoretical arguments described above, discrimination by employers can also lead to ethnic and gender inequalities. Here we shortly describe two possible forms of employer discrimination, but do not formulate hypotheses as we cannot (directly) test them in our analyses.

Employers can prefer to employ some groups and hold negative attitudes towards others. This concept of *taste-based discrimination* (Becker 1971) is usually raised to explain

either ethnic or gender based discrimination on the labour market, can apply to both immigrant men and women or native and immigrant women, respectively, and does not necessarily provide arguments why the one should be preferred over the other. Employers simply could have preferences for or aversions against specific subgroups regarding employment decisions or set the wages of one group higher than for the other. However, based on the *outgroup-male-target hypothesis* (Navarrete et al. 2010, Dahl and Krog 2018) immigrant men could be more exposed to discrimination on the labour market than immigrant women as the majority population perceives male immigrants more threatening than female immigrants, for instance because of the higher criminality rates among immigrant men. In this case, the gender disparity among immigrants would be to the detriment of immigrant men.

According to the concept of *statistical discrimination* (Phelps 1972, Arrow 1973, Aigner and Cain 1977; for a recent discussion of statistical discrimination's implications, see: Schaeffer et al. 2016), employers hire their employees without having full information about their productivity and thus have to rely on estimations. These estimations can be based on experiences employers have made with employees of the same origin or on heuristics about the average productivity of these groups. Like taste-based discrimination, statistical discrimination is applied to explain either ethnic or gender disadvantages by employers' evaluation of immigrants or women as being less productive than non-immigrants and men respectively which lead to lower employment chances or wages. But, for instance, if employers assume that immigrant women tend to have more children than non-immigrant women, they can anticipate higher fluctuation rates and lower commitment to work among immigrant women and thus avoid hiring them. In this scenario, immigrant women would experience a specific disadvantage that is not a simple sum of ethnic and gender disparities.

In survey based studies it is not possible to directly consider employer discrimination. Alternative attempts, e.g. by asking respondents about their discrimination experiences in the labour market (e.g. Koopmans 2016), do not seem to be fruitful. There are a number of field

studies that conclude fairly large discrimination of ethnic minorities on the labour market in various Western countries (e.g., Kaas and Manger 2012, Blommaert et al. 2014). In a recent correspondence study in Germany, Koopmans and colleagues (2018) report that Muslim and black applicants in particular are less likely to get call-backs or invitations to job interviews than non-immigrant applicants even after considering indicators of productivity like education or current job contract. More detailed analyses speak in favour of taste-base discrimination rather than statistical discrimination. While some are in line with the outgroup-male-target hypothesis (e.g. Dahl and Krog 2018, Koopmans et al. 2018), others find no specific discrimination patterns for male or female immigrants (e.g. Blommaert et al. 2014, Bursell 2014). One field study in Germany by Weichselbaumer (2016) that focuses on women finds that an applicant with a Turkish name has a five to six percentage points lower probability than an applicant with a German name to receive a call-back after application, whereas the probability of a Turkish applicant wearing a headscarf is even lower (15 percentage points). In sum, no clear conclusion on the impact and direction of employer discrimination by applicants' intersection of ethnic origin and gender can be drawn from these studies. The gender gap among immigrants might vary by country of origin, by the country of residence or affect specific religious groups.

Data, variables and methods

Data

For our analyses we use data from the *German Socio-economic Panel* (GSOEP), which is a representative annual survey of about 30,000 individuals in approximately 11,000 households (Goebel et al. 2019). The GSOEP is particularly well suited for our purposes as immigrants are repeatedly oversampled (e.g. Brücker et al. 2014) and as it allows differentiating between immigrant groups. The data provide rich information on labour market outcomes and variables

that are specifically relevant for immigrants, e.g. on the migration biography and several indicators of integration. The last immigrant oversamplings were conducted in 2013 and 2015 (Brücker et al. 2014).[2] In our analyses we pool data from 2013 and 2015 to maximise the number of immigrants in our sample. After restricting the age range from 18 to 67 and excluding cases with missing information on relevant variables our sample for the analyses on employment status consists of 31,507 cases (sample size for occupational status: N=29,850, sample size for wages: N=26,023).[3]

Variables

Dependent Variables

We capture the labour market integration of ethnic groups by gender on three dimensions: employment status, occupational status and hourly-wages.

Our first dependent variable is the *employment status* that differentiates between respondents who are employed and those who are unemployed.

To measure the occupational status of the employed respondents, which is our second dependent variable, we use the International Socio-Economic Index (Ganzeboom et al. 1992). The ISEI scale ranges from 16 (agricultural workers) to 90 (judges).

Finally, for those who are employed, we analyse the *log hourly gross wages.* To include self-employed respondents, our calculation of hourly wages is based on actual working hours

[2] In 2013 the target populations were immigrants who came after 1995 to Germany as well as second-generation immigrants. In 2015 immigrants who arrived between 2010 and 2013 from the new EU-countries were oversampled. Regarding compositional characteristics (e.g. education and German skills), those who came after 2010 are similar to those who arrived in the 1990s.

[3] Using multiple imputation to supplement missing information does not change our results. To correct our Average Marginal Effects with the method by Karlson, Holm and Breen (2012), we present the results with the non-imputed data in the paper.

rather than the contracted working hours. We excluded 122 cases with 0 euros hourly wage and 15 cases with an hourly wage above 200 euros.

Independent Variables

Immigrant groups and gender. Our definition of first-generation immigrants from Turkey and from the FSU refers to the origin variable, which is provided in the GSOEP and relies on respondent's country of birth. To identify second-generation Turkish immigrants, we refer to parents' country of birth and exclude cases with mixed origins. The groups are further differentiated by respondents' gender.

Qualifications. To test our assumptions based on human capital theory, we use respondent's highest level of *formal (vocational) educational attainment*. One peculiarity of the German labour market is the importance of vocational qualification besides general education, which is why we summarized both types of qualifications in five categories: (1) General education on lower level without vocational education training (VET), (2) general education on lower level with VET, (3) general education on intermediate level without VET, (4) general education on intermediate level with VET, and (5) tertiary education.

Informal qualifications gathered through *labour market experience* are measured as years in full-time work.

Sociocultural resources. We use two different types of sociocultural resources in our analyses. First, a specific form of cultural resource that is highly relevant for the German labour market is the respondent's *German skills*. For first- and second-generation immigrants we use the mean of self-reported speaking and writing abilities in German measured on a five-point Likert-scale ranging from 'not at all' to 'very good' (Cronbach's Alpha 0.91). As these items are only

measured for immigrants, we follow the strategy by Koopmans (2016) and others and assign 'very good' speaking and writing skills to German respondents.

Secondly, we use *information on visits at home* as a proxy for social networks or contact with natives. All respondents were asked, whether they visited Germans and if Germans visited them at home within the last year. We summarized the answers to both questions into one item indicating no visits (0), respondents either were visited by or visited Germans (1) and respondents were visited by Germans at home and visited Germans as well (2).

Job characteristics and job match. We use five indicators to profile respondents' job. Firstly we consider the *industry/sector*, aggregated in manufacturing and construction, trading, hospitality, other service, health care and others, in which the respondent works. Secondly, we use the *level of autonomy* that comes along with the job, i.e. the level of responsibility, measured on a five-point scale from 'low' to 'high'. Thirdly, the *type of employment* differentiates between full-time, part-time, and marginally employed. Fourthly, the *firm size* measured by the number of employees: Less than 20 employees, 20 to 199 employees, 200 to 1.999 employees, more than 2.000 employees and those who are self-employed. Finally, we compare information given by the respondent about the qualification level that is necessary for their job to respondent's actual level of qualification and construct a variable that indicates whether a person is *overeducated* for his or her job.

Control variables. We control for a number of (demographic) variables: age, age-squared, region (East vs. West Germany), marital status, the number of children younger than six and the year of the survey.

Methods

For each dependent variable we estimate nested logistic (employment) and OLS (ISEI and log hourly wages) regressions. The results of the logistic regressions for the employment status are

reported as Average Marginal Effects (AME). We use German men as reference category and compare the gaps between them and the other subgroups by immigrant group and gender. The set-up of all analyses is the same: All start with a baseline model showing subgroup differences when demographic and other control variables are considered. We add qualifications in the second model, German proficiency and visits in the third model, and – for the wage analyses – the job characteristics in the fourth model. For a multi-perspective comparison, we additionally show the differences between immigrant women and men as well as German women and how they change by adding explanatory variables in the analyses in separate tables. All analyses are weighted.

Results

Descriptive results

Table 1 gives an overview of all variables by ethnic groups and gender. We highlight some of the group differences and start with the outcome variables. An ethnic gap seems to be apparent in employment, occupational status and wages among men and women, whereas the gender differences within the ethnic groups do not vary systematically. Among first-generation Turkish immigrants we find a disadvantage in the occupational status and a difference of more than 3 Euros in the hourly wages for women. Contrary to the expectation that gender gaps will dissolve in the following generations, second-generation Turkish women seem to continue to struggle more than their male counterparts on the labour market. They work in jobs with a similar status, but they have lower employment rates and earn less than second-generation men on average. We observe a wage gap of almost 3 Euros for FSU women as well even though a larger share of them is employed and there are no gender differences in the ISEI values compared to FSU men.

The assumed gender gap in education in favour of men in Turkey emerges in the distribution of educational qualifications of first-generation Turkish immigrants. A larger share of women has the lowest level of qualifications and, consequently, a smaller share possesses intermediate or higher educational credentials. The gap is even larger when first-generation Turkish women are compared to German women, e.g. only 5 per cent of German women have low levels of qualification, whereas this applies to 54 per cent of first-generation Turkish women. Among second-generation Turkish immigrants, the gender gap as well as the ethnic gap compared to Germans decrease. Second-generation Turkish women graduate even more often than their male counterparts from school on an intermediate level and acquire vocational educational training (11 percentage points difference). A female advantage is also apparent among FSU immigrants. About a third of FSU women are in the highest category of qualifications, thus, they do not only surpass FSU men by 12 percentage points, but German women by 8 percentage points as well.

There are clear ethnic and gender differences in labour market experience. Compared to Germans, immigrants have on average less full-time work experience among both genders. Furthermore, men gained more experience on the labour market than women across all groups. Taken together, immigrant women, particularly those of Turkish origin, gained less informal experience on the labour market than the other groups.

With respect to sociocultural integration, first-and second-generation Turkish men and women rate their German proficiency on the same level, but men seem to have more contact with Germans than women. In both generations Turkish men reported more often that they visited Germans at home and additionally that they were visited by Germans at their homes (9 percentage point difference in the first-, 12 percentage point difference in the second-generation). Contrary to the Turkish group, FSU women indicate to have on average higher German skills and to have more contact with Germans than FSU men.

Unsurprisingly, men and women work predominantly in different sectors. In all groups, for men, the manufacturing and construction sector is the largest, while at least half of women in all groups are located in the service and health care sector. Furthermore, across all groups women work less often in full-time and a larger share of women, particularly immigrants, are marginally employed.

- Table 1 here -

Employment status of male and female immigrants

Table 2 shows the results of logistic regressions for the determinants of employment status, in which German men are the reference group. The first model specifies the base model including groups, gender and control variables. Generally, with the exception of German women, all other groups have lower probabilities of being employed than German men. This disadvantage is most strongly pronounced for first-generation Turkish men (16 percentage points) and women (14 percentage points) followed by second-generation Turkish women (12 percentage points) and FSU men (9 percentage points). Only second-generation Turkish men do not differ from German men in their employment probability on a statistically significant level. Contrary to our assumptions, there seems to be no additional disadvantage for women in the employment probability of first-generation Turkish immigrants. Both, first-generation Turkish men and women have the lowest employment probabilities.

One possible explanation for the disadvantage of first-generation Turkish immigrants is their lower amount of human capital. Model 2 reveals that the level of qualification and the work experience is positively linked to the probability of being employed and that the gaps largely diminish when we include them in the models. None of the gaps between immigrant women and German men is statistically significant in the second model. The residual effects for first-generation Turkish and FSU men indicating 9 and 7 percentage points lower

employment probability than German men remain statistically significant. These results indicate that the disadvantage of immigrant women seems to be mainly based on compositional differences in formal qualifications and gained labour market experience, on which they score on average lower than male respondents.

The returns to education can be lower for immigrants when they lack German abilities. This seems to be an important explanatory factor for immigrant men's detriment in employment probabilities (model 3). Combined with the effect of contact with Germans any remaining disadvantages vanish. Note that the gaps for first-generation Turkish men decrease when we add only German skills (results not shown here). In this model constellation, the initial disadvantage of first-generation Turkish women even turns into an advantage of 4 percentage points on average.

- Table 2 here -

The gender gaps within the groups are depicted in Table 3 with the same set-up as in Table 2. Positive Average Marginal Effects indicate an advantage for women over the comparison groups. In the first-generation, there is no gap in employment probabilities between Turkish men and women. After considering the explanatory variables, a positive effect of 7 percentage points exists for women. The pattern among second-generation Turkish immigrants is different: Before adding the level of qualification, labour market experience, language abilities and contact with natives into the models, women have lower employment probabilities than men. Second-generation Turkish women have on average higher educational and vocational qualifications than Turkish men. However, this is accompanied with less experience gained on the labour market. Correspondingly, the negative effect is reduced in the second model and is statistically insignificant. Having contact with natives barely changes the gender gap in this

group (see model 3). Similar to first-generation Turkish immigrants, in the FSU group, women have higher employment probabilities than men. Apart from working experience, FSU women are better equipped for the labour market in terms of education, German proficiency and contact with natives. Including these factors decreases the gap from 5.5 percentage points to 4 percentage points, thus FSU women' advantage seems to rest on other unobserved characteristics as well.

Overall, only second-generation Turkish women seem to experience an additional disadvantage in employment probabilities. While the disparities compared to second-generation Turkish men are not statistically significant when qualifications are considered, there remains a disadvantage of 7 percentage points compared to German women that needs further explanation. In the other two groups, first-generation Turkish and FSU immigrants, our results can be interpreted in line with previous correspondence studies finding an advantage for female immigrants regarding responses and call-backs from employers to their job applications.

- Table 3 here -

Ethnic and gender gaps in occupational status

With the second set of regression models, we want to examine gender- and ethnic-based variation in occupational status. Because of their unfavourable endowment with resources that are essential for labour market positions, first-generation Turkish women should have the lowest occupational status. For all other women, we do not expect an additional disadvantage compared to their male comparison group.

Table 4 confirms these assumptions: The jobs occupied by first-generation Turkish women score on average 18 points lower on the ISEI scale than the jobs of German men. The gap between first-generation Turkish and German men that amounts to 14.5 points is noticeable

as well. In the other two groups the gaps vary between 6 to 9 points and are in both groups, second-generation Turkish and FSU immigrants, smaller for women.

The disadvantage of first-generation Turkish decreases across models, but remains on a statistically significant level. In the second model, with the consideration of qualifications and labour market experience, the gap decreases for all other groups. FSU women are the only exceptional group for which we observe even a slight increase of the gap. This is no surprise, as they are the only group with higher qualifications than German men on average. Although the gap seems partly to be driven by lacking German skills and contact with Germans, it cannot be fully explained by these characteristics (model 3). In the last model, the disadvantage is with 5 points the largest for them. For first-generation Turkish men and women, second-generation men and FSU men, the gap in occupational status ranges between 2 and 3 points.

- Table 4 here -

These patterns are partly reflected in the analyses of gender and ethnic differences with different reference groups (Table 5). In the base model, the disadvantage within groups is the largest among first-generation Turkish immigrants (3 points), whereas the gap is only statistically significant on the 10 per cent level. While the gender imbalances within the first-generation Turkish group vanish across the models, the gap among FSU immigrants becomes larger. In the third model, FSU women work in jobs that score 2 points lower on the ISEI scale on average than FSU men. Again, this difference is only statistically significant on the 10 per cent level. The advantage of second-generation Turkish women over men, however, is neither substantial nor statistically significant. Ethnic differences in both genders are on a similar level, i.e. the overall patterns suggest no additional disadvantage for immigrant women. Interestingly, second-generation Turkish women are the only subgroup having no statistically significant

disadvantage compared to German men and women in the final model. This might be linked to a positive selection through lower employment probabilities (cf. Table 2 and 3).

- Table 5 here -

Ethnic and gender gaps in wages

In the last step we examine possible reasons for group gaps in wages (Table 6). We assume that first-generation Turkish women should earn less than other subgroups because of unbeneficial characteristics based on their ethnic origin (particularly with regard to their qualifications) and their gender (particularly with regard to their limited access to high-paying or their preference for low-paying part-time jobs). The other two female immigrant groups should share these preferences, but experience no disadvantages based on their qualifications. Hence their gaps should be less pronounced and mainly be based on gender related disparities.

We convert the coefficients of the OLS regression and express the wage differentials in percentages.[4] There is a clear hierarchy of hourly wages topped by German men, with first-generation Turkish women at the bottom. Compared to German men, first-generation Turkish women have the lowest wage with an estimated gap of 40 per cent. Among women, the distance between German men and women is the smallest (17 per cent) followed by second-generation Turkish women and FSU women (38 and 33 per cent). A similar picture appears among men: With a gap of 26 per cent first-generation Turkish men earn least, second-generation Turkish men second least (17 per cent) and FSU men 15 per cent less than German men.

Educational and vocational attainment contribute significantly to the gaps for most groups (model 2). For first-generation Turkish immigrants of both genders the penalties are

[4] This transformation can be done by applying the formula ([exp(b)] – 1) * 100.

reduced drastically by considering human capital characteristics (8 per cent disadvantage for Turkish men and 7 per cent for Turkish women). The gap between German men and second-generation Turkish men disappears almost completely (1 per cent disadvantage for Turkish men). The gap for second-generation Turkish and FSU women remains almost stable in the second model (26 to 27 per cent).

The better the German skills, the higher are the wages (model 3). Having reciprocal contact with Germans increases the wages. This seems to be particularly relevant for the first-generation immigrants from Turkey and the FSU men. Nevertheless there are disadvantages left for German (8 per cent), second-generation Turkish (23 per cent) and FSU women (21 per cent). For Turkish men of both generations the gap reverses and indicates an advantage over German men (4 and 2 per cent respectively).

To evaluate whether women choose different types of jobs that pay less than jobs chosen by men, we include several job characteristics. Women across ethnic groups tend to work more often in health care and service jobs, are more often part-time or marginally employed, have jobs with lower levels of autonomy on average, and are to a higher share employed in smaller companies than men (see Table 1), which are all linked negatively to wages. The initially large disadvantage of first-generation Turkish women fully vanishes when we consider these differences. In contrast to first-generation Turkish women, the penalties of all other female subgroups decrease, but remain statistically significant (4 to 12 per cent). There are various plausible explanations for these findings. First-generation Turkish women who are employed are probably more positively selected than all other groups of women as a higher proportion of the latter are active on the labour market and employed (cf. Fleischmann and Höhne 2013). Second, around 20 per cent of first-generation Turkish women work in the manufacturing and construction sector, which is associated with typically male-dominated jobs that pay more than typically female-dominated jobs. German women and second-generation women work less often in this sector (see Table 1). The persisting penalty of FSU women might be based on a

different reason: They have on average the highest levels of qualification and are, thus, at a higher risk of being overeducated for their jobs. Around half of them work in a job, which does not match their qualifications (see Table 1).

The job characteristics do not only explain parts of gender differences but ethnic differences as well. All male subgroups are predicted to earn more than German men once we consider in which type of jobs they work.

- Table 6 here -

Overall, the analyses on wage differences hint on additional disadvantages for female immigrants that cannot be solved for second-generation Turkish and FSU women by the individual and job characteristics included in the models. First-generation Turkish women are here an exceptional case. The wage differential compared to Turkish men, German men and women diminishes when qualifications and labour market experience are taken into account (see Table 7). The gender gap among second-generation Turkish and FSU immigrants does not vanish completely and sticks at 17 and 12 per cent in the last model. The ethnic gaps compared to German women decrease to 8 per cent (second-generation Turkish) and 3 per cent (FSU) and are not statistically significant.

- Table 7 here -

Discussion

A number of recent studies deal with patterns of labour market disparities that appear when two dimensions of social inequality – ethnic origin and gender – are analysed at the same time. Theoretically, combining both dimensions, additional disadvantages can be expected for

immigrant women by the combination of both dimensions. The goal of this study was to extend previous research on immigrant women's labour market integration by theoretically elaborating on and testing explanations of possible disparities based on their immigrant origin and gender for those who are active on the labour market. There is ample evidence concluding that the labour market activity of immigrant women is strongly correlated with the female labour force participation rate of the country of origin. Most important to the present study are the findings that the labour market activity is low among Turkish women and high for women originating from the FSU (e.g. Fleischmann and Höhne 2013). Typically, traditional gender role orientations rooted in the culture of the country of origin or in Islam are used to explain the low labour supply of female Turkish or Muslim immigrants (e.g. Khoudja and Fleischmann 2015). The arguments based on cultural or religious differences are not backed up by studies. Especially in recent studies, in which not solely ethnicity or religious affiliation but measures on gender role orientations are used in the analyses, no correlation between heritage culture or religiosity and labour market participation are reported (e.g., Ala-Mantila and Fleischmann 2018, Khattab et al. 2018).

Indeed, we find specific disparities of immigrant women on each outcome variable. Even though some of these disparities remain stable after considering individual and job characteristics, most of the initial gaps diminished or were closed after considering structural, sociocultural and job related indicators. However, the additional disadvantages do not appear systematically in the same immigrant groups across the labour market indicators.

For first-generation Turkish women, no additional disadvantages remain after individual (and job) characteristics are considered. As a consequence of the lower labour market activity on average, first-generation Turkish women who are working seem to be more positively selected than the labour force among other subgroups. This positive selection might be the reason that the employment probabilities of first-generation Turkish women are higher compared to first-generation Turkish men and that the wage gap between Turkish women and

German men and women reverses when we consider individual and job characteristics. Being the only group, in which the gender gap in education is in favour of men, first-generation Turkish women's unfavourable position on the labour market can be ascribed to their lower qualifications on average.

Contrary to them, FSU women experience wage penalties compared to FSU men, German men and women although they have the highest formal educational credentials on average. This finding points out the lower returns to education for FSU women. Large parts of these FSU women are working in jobs, which require lower educational credentials than these women possess. These results hint on missing recognition of these qualifications or that the official recognitions are not approved by employers.

The most striking results can be found among second-generation Turkish women. Although they catch-up on their male counterparts regarding educational qualifications, they have on average lower employment probabilities and earn less compared to them. It is important to pursue gender differences on the labour market among ethnic minorities and to examine other explanations for the disadvantage of second-generation Turkish women that – instead of becoming smaller – increases compared to the gender gap among the first-generation. The measure of contact to Germans implies that the social network of second-generation Turkish women might be composed differently and they might activate different channels for job search (cf. Drever & Hoffmeister, 2008). Additionally, second-generation Turkish women who are higher educated and hence apply to more prestigious jobs might be more prone to discrimination than immigrants who apply for less prestigious jobs. This would be in line with previous studies showing for instance higher income disadvantages for higher educated second-generation Turkish immigrants (Schaeffer et al., 2016) and lower call-back rates for Turkish women when they apply for more prestigious jobs (Weichselbaumer, 2016).

Some limitations should be noted. In this paper we provided cross-sectional analyses of immigrant women's situation on the labour market. To capture the dynamic aspects of the

integration process, it is necessary to analyse the gaps in the long run. The longer immigrants live in the host country the more proficient they become in the language of the host country or the more likely they are to befriend natives. Whether immigrant men assimilate faster than women needs to be analysed in future research.[5] For second-generation Turkish and Maghreb women in Belgium, Maes et al. (2019) find that they are not only less likely to enter employment than native women, they are also more likely to quit their jobs. If this pattern also holds compared to second-generation men, than this could provide a plausible explanation for second-generation Turkish women's patterns of disadvantages.

We had to refer to indirect measures or measures that are not optimal. We used self-reported German skills for immigrants. This is problematic at least for two reasons. First of all, the self-assessment can be biased (Edele et al. 2015). Secondly, we have no indicators for Germans' language ability and assigned them very good skills. This is common practice in studies on immigrants' labour market integration (e.g., Koopmans 2016), although having no variations for the native reference category might cause biased estimates. Furthermore, the indicator of having private contact to Germans is a rough indicator of respondents' network. More detailed measures on the composition of social networks and if the jobs were found through them could help to explain the specific drawbacks of second-generation Turkish women and FSU women.

Finally, we could not consider possible employer discrimination in our analyses. There is an on-going debate in the literature about the role of discrimination for ethnic disparities on the labour market (for a discussion of this, see: Koopmans 2016). Although field studies show

[5] In additional analyses (not shown here), we tested whether length of stay in Germany affects gender differences among first-generation immigrants. Turkish men lived one year longer than Turkish women in Germany on average, FSU men half a year longer than FSU women. These differences did not have any statistically significant effects on gender disparities.

worse labour market prospects for ethnic minorities net of qualifications, more experimental field studies that vary ethnic origin and gender are needed to complement analyses of survey data. Especially for second-generation women and FSU women preference of employers might be relevant to answer, why they are more disadvantaged than their male counterparts. Against the background of new migration waves to Germany and other European countries from Syria and other countries and experiences from the past, the labour market integration of female refugees will be challenging (Salikutluk et al. 2016). Thus, to support and encourage the labour market integration of female immigrants, it is necessary to take into account barriers based on ethnic origin and gender simultaneously. Otherwise, there is a danger that mechanisms that are important for the labour market integration of female immigrants are overlooked.

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Table 1. Overview of variables by origin and gender

		Men				Women			
		German	**1st gen. Turkish**	**2nd gen. Turkish**	**FSU**	**German**	**1st gen. Turkish**	**2nd gen. Turkish**	**FSU**
Employment									
Unemployed	%	6.48	17.62	8.72	12.92	5.42	18.84	15.70	9.35
Employed	%	93.52	82.38	91.28	87.08	94.58	81.16	84.30	90.65
N		13,402	481	278	1,066	14,569	275	225	1,211
ISEI	Mean (SD)	46.99 (17.00)	34.14 (11.57)	39.41 (12.81)	38.93 (13.98)	46.87 (16.25)	30.55 (14.79)	40.88 (14.32)	39.49 (15.75)
N		12,920	429	251	920	13,876	226	185	1,043
Hourly wages	Mean (SD)	19.83 (13.25)	15.59 (7.61)	12.94 (7.53)	15.26 (6.20)	16.09 (10.39)	12.19 (7.87)	9.57 (6.25)	12.52 (7.04)
N		11,488	372	211	793	11,955	178	149	877
Age	Mean (SD)	43.92 (12.38)	42.86 (8.05)	28.16 (7.48)	39.53 (11.68)	44.02 (12.08)	41.44 (8.14)	29.25 (7.76)	40.62 (12.53)
Family status									
Married	%	49.85	71.92	29.66	59.19	47.79	59.82	38.66	56.90
Unmarried	%	37.95	8.55	68.03	34.21	33.67	12.36	52.88	27.31
Other	%	12.20	19.54	2.31	6.59	18.54	27.82	8.46	15.80
Number of children < 6 years	Mean (SD)	0.05 (0.26)	0.19 (0.50)	0.18 (0.46)	0.15 (0.45)	0.04 (0.22)	0.07 (0.28)	0.14 (0.38)	0.10 (0.33)
Region: East Germany	%	21.88	0.40	1.01	7.17	21.47	0.68	1.02	10.79
Wave: 2013	%	50.20	48.33	49.78	55.37	49.72	46.50	52.43	53.88
Qualifications									

Low	%	6.14	46.53	21.65	14.57	5.32	54.11	20.52	14.57
Low+VET	%	22.39	23.60	19.72	28.32	15.81	19.06	15.42	13.92
Intermediate	%	3.20	23.60	19.55	3.20	3.58	1.34	14.81	2.66
Intermediate+VET	%	42.81	23.60	30.02	33.81	51.09	18.93	40.48	36.95
High	%	25.45	8.02	9.06	20.10	24.21	6.56	8.78	31.91
Labour market experience in years	Mean (SD)	19.16 (12.88)	18.86 (10.05)	5.20 (7.15)	14.38 (12.07)	12.27 (10.93)	6.36 (8.32)	2.89 (3.98)	10.67 (11.01)
German skills (0-4)	Mean (SD)	4 (0)	2.86 (0.95)	3.76 (0.49)	2.94 (0.92)	4 (0)	2.75 (0.90)	3.76 (0.45)	3.24 (0.82)
Visits									
No visits	%	3.53	20.28	8.88	10.50	3.02	23.20	14.83	9.48
Visited or was visited	%	3.63	12.72	4.86	10.67	2.91	18.52	10.75	6.67
Visted and was visited	%	92.84	67.00	86.25	78.83	94.07	58.28	74.42	83.85
Sector									
Manufactoring & Construction	%	38.53	52.53	41.76	51.52	13.19	18.86	7.53	18.31
Trading	%	9.04	10.21	10.08	6.81	14.19	12.68	27.41	15.34
Hospitality	%	1.92	11.38	12.67	2.36	3.65	9.53	7.60	8.56
Service	%	33.27	12.65	26.03	20.19	41.22	31.07	31.74	32.52
Health Care & Other	%	16.94	13.23	9.46	19.11	27.75	27.86	25.73	25.28
Level of autonomy (1-5)	Mean (SD)	2.83 (1.20)	2.01 (1.15)	2.01 (1.26)	2.12 (1.13)	2.71 (1.05)	1.73 (0.88)	1.80 (1.22)	2.16 (1.06)
Adequately employed	%	81.61	70.24	80.16	69.90	76.90	71.16	66.81	51.39
Firm size (no. of employees)									
Less than 20	%	20.89	30.63	36.82	23.54	26.90	32.50	36.71	35.86

20 to 199	%	24.94	30.63	14.84	31.38	25.29	27.51	20.68	25.62
200 to 2,000	%	20.73	19.18	14.83	21.71	19.82	17.72	12.82	16.47
At least 2,000	%	28.47	21.41	30.49	21.42	23.58	20.59	28.51	20.90
Self-employed	%	4.98	0.71	3.02	1.95	4.41	1.68	1.28	1.15
Work time									
Full-time employed	%	81.18	72.27	73.18	78.08	46.48	30.59	32.98	35.75
Part-time employed	%	14.72	24.28	18.30	18.02	42.97	49.73	51.98	46.41
Marginally employed	%	4.09	3.45	8.52	3.90	10.56	19.67	15.04	17.85

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015, weighted.

Table 2. Ethnic and gender differences in employment status (Average Marginal Effects)

	Model 1		**Model 2**		**Model 3**	
Group and gender (ref: German men)						
Men						
1st gen. Turkish	-0.160	***	-0.091	*	-0.032	
2nd gen. Turkish	-0.034		0.000		0.010	
FSU	-0.089	***	-0.069	***	-0.021	
Women						
German women	0.014	**	0.038	***	0.039	***
1st gen. Turkish	-0.144	**	0.011		0.043	**
2nd gen. Turkish	-0.120	***	-0.052	+	-0.035	
FSU	-0.034	*	-0.006		0.018	
Age	0.002	+	-0.006	***	-0.006	***
Age - squared	-0.000	*	0.000		0.000	
Family status (ref. married)						
Unmarried	-0.059	***	-0.063	***	-0.063	***
Other	-0.072	***	-0.064	***	-0.064	***
Number of children < 6 years	-0.019	***	-0.022	***	-0.022	***
East Germany	-0.041	***	-0.050	***	-0.049	***
Wave (ref: 2013)	0.004		0.004		0.004	
Education (ref: low)						
Low+VET			0.036	***	0.034	***
Intermediate			0.036	**	0.033	**
Intermediate+VET			0.080	***	0.076	***
High			0.123	***	0.119	***
Labour market experience			0.007	***	0.007	***
Labour market experience - squared			-0.000	***	-0.000	***
Visits (ref: no visits)						
Visited or was visited					-0.003	
Visited and was visited					0.018	+
German skills					0.024	***
Pseudo-R^2	0.062		0.167		0.171	
N	31,507		31,507		31,507	

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on logistic regressions and reported as Average Marginal Effects. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001

Table 3. Pairwise comparison of ethnic and gender differences in employment probability (Average Marginal Effects)

	Women	German men	Turkish 1st gen. men	Turkish 2nd gen. men	FSU men	German women
Model 1	German	0.014**				
	Turkish 1st gen.	-0.144**	0.017			-0.158***
	Turkish 2nd gen.	-0.120***		-0.086+		-0.134***
	FSU	-0.034*			0.055*	-0.048***
Model 2	German	0.038***				
	Turkish 1st gen.	0.011	0.102*			-0.027
	Turkish 2nd gen.	-0.052+		-0.053		-0.090***
	FSU	-0.006			0.063**	-0.044***
Model 3	German	0.039***				
	Turkish 1st gen.	0.043**	0.075*			0.004
	Turkish 2nd gen.	-0.035		-0.045		-0.074**
	FSU	0.018			0.039*	-0.021+

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on logistic regressions in Table 2 and reported as Average Marginal Effects. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001

Table 4. Ethnic and gender differences in occupational status (OLS regressions)

	Model 1		**Model 2**		**Model 3**	
Group and gender (ref: German men)						
Men						
1st gen. Turkish	-14.507	***	-6.672	***	-2.620	+
2nd gen. Turkish	-7.715	***	-3.067	**	-2.054	+
FSU	-8.996	***	-6.454	***	-3.000	*
Women						
German women	0.008		0.377		0.360	
1st gen. Turkish	-17.778	***	-7.427	***	-3.081	*
2nd gen. Turkish	-6.007	***	-2.256		-0.961	
FSU	-7.728	***	-8.027	***	-5.436	***
Age	1.086	***	0.135		0.136	
Age - squared	-0.012	***	-0.003	*	-0.003	*
Family status (ref. married)						
Unmarried	1.675	**	0.238		0.231	
Other	-1.939	***	-0.452		-0.445	
Number of children < 6 years	1.973	***	0.573		0.570	
East Germany	-4.753	***	-5.653	***	-5.543	***
Wave (ref: 2013)	0.529	**	0.028		0.036	
Education (ref: low)						
Low+VET			3.400	***	3.102	***
Intermediate			7.312	***	6.854	***
Intermediate+VET			11.569	***	11.098	***
High			29.538	***	29.010	***
Labour market experience			0.195	***	0.201	***
Labour market experience - squared			-0.002		-0.002	
Visits (ref: no visits)						
Visited or was visited					-0.075	
Visited and was visited					1.934	**
German skills					3.323	***
Constante	25.413		31.746		16.792	
R^2	0.051		0.386		0.389	
N	29,850		29,850		29,850	

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on OLS regressions. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001

Table 5. Pairwise comparison of ethnic and gender differences in occupational status (OLS regressions)

	Women	German men	Turkish 1st gen. men	Turkish 2nd gen. men	FSU men	German women
Model 1	German	0.008				
	Turkish 1st gen.	-17.778***	-3.270+			-17.786***
	Turkish 2nd gen.	-6.007***		1.707		-6.016***
	FSU	-7.728***			1.267	-7.737***
Model 2	German	0.377				
	Turkish 1st gen.	-7.427***	-0.755			-7.804***
	Turkish 2nd gen.	-2.256		0.811		-2.634+
	FSU	-8.027***			-1.573	-8.405***
Model 3	German	0.360				
	Turkish 1st gen.	-3.081*	-0.461			-3.441*
	Turkish 2nd gen.	-0.961		1.094		-1.320
	FSU	-5.437***			-2.436+	-5.796***

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on OLS regressions in Table 4. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001

Table 6. Ethnic and gender differences in wages (OLS regressions)

	Model 1		**Model 2**		**Model 3**		**Model 4**	
Group and gender (ref: German men)								
Men								
1st gen. Turkish	-0.316	***	-0.083	+	0.034		0.080	*
2nd gen. Turkish	-0.191	**	-0.010		0.023		0.054	
FSU	-0.167	***	-0.082	*	0.023		0.042	+
Women								
German women	-0.184	***	-0.084	***	-0.085	***	-0.047	***
1st gen. Turkish	-0.514	***	-0.072		0.066		0.108	+
2nd gen. Turkish	-0.471	***	-0.305	***	-0.266	***	-0.133	*
FSU	-0.392	***	-0.312	***	-0.233	***	-0.082	*
Age	0.104	***	0.056	***	0.055	***	0.038	***
Age-squared	-0.001	***	-0.001	***	-0.001	***	-0.000	***
Family status (ref. married)								
Unmarried	-0.041	*	-0.087	***	-0.088	***	-0.059	***
Other	-0.111	***	-0.087	***	-0.086	***	-0.060	***
Number of children < 6 years	0.083	***	0.052	***	0.052	***	0.035	**
East Germany	-0.302	***	-0.352	***	-0.346	***	-0.249	***
Wave: 2015	0.072	***	0.066	***	0.067	***	0.054	***
Education (ref: low)								
Low+VET			0.259	***	0.246	***	0.177	***
Intermediate			0.082	+	0.063		0.028	
Intermediate+VET			0.424	***	0.403	***	0.228	***
High			0.824	***	0.801	***	0.411	***
Labour market experience			0.027	***	0.027	***	0.015	***
Labour market experience - squared			-0.000	***	-0.000	***	-0.000	***
Visits (ref: no visits)								
Visited or was visited					0.031		0.021	
Visited and was visited					0.118	***	0.068	**
German skills					0.097	***	0.015	
Sector (ref: Manufactoring & Construction)								
Trading							-0.189	***
Hospitality							-0.303	***
Service							-0.081	***
Health Care & Other							-0.111	***
Level of autonomy							0.184	***
Ad. qualification							0.083	***
Employment status (ref: Full-time)								
Part-time							-0.025	
Marginal employment							-0.204	***
Firm size (ref: at least 2.000 empl.)								
Less than 20							-0.276	***
20 to 199							-0.171	***
200 to 1,999							-0.097	***
Self-employed							-0.316	***
Constante	0.472	***	0.970	***	0.481	***	1.057	***

R^2	0.213	0.372	0.375	0.510
N	26,023	26,023	26,023	26,023

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on OLS regressions. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001

Table 7. Pairwise comparison of ethnic and gender differences in wages (OLS regressions)

	Women	German men	Turkish 1st gen. men	Turkish 2nd gen. men	FSU men	German women
Model 1	German	-0.184***				
	Turkish 1st gen.	-0.514***	-0.197			-0.330***
	Turkish 2nd gen.	-0.471***		-0.280**		-0.290***
	FSU	-0.392***			-0.224***	-0.208***
Model 2	German	-0.084***				
	Turkish 1st gen.	-0.072	0.011			0.012
	Turkish 2nd gen.	-0.305***		-0.295***		-0.221***
	FSU	-0.312***			-0.231***	-0.228***
Model 3	German	-0.085***				
	Turkish 1st gen.	0.066	0.032			0.151*
	Turkish 2nd gen.	-0.266***		-0.289***		-0.181**
	FSU	-0.233***			-0.256***	-0.148***
Model 4	German	-0.047***				
	Turkish 1st gen.	0.108+	0.029			0.155**
	Turkish 2nd gen.	-0.133*		-0.186*		-0.086
	FSU	-0.082*			-0.124***	-0.035

Source: German Socio-economic Panel v33, own calculations.
Note: Pooled data for 2013 and 2015; weighted and clusterrobust results. Results based on OLS regressions. + p<0.1 * p<0.05. ** p<0.01. *** p<0.001