

## SOEPpapers

on Multidisciplinary Panel Data Research

SOEP – The German Socio-Economic Panel Study at DIW Berlin

1011-2018

# Different Strokes for Different Folks: Entrepreneurs' Job Satisfaction and the Intersection of Gender and Migration Background

Teita Bijedić and Alan Piper

## **SOEPpapers on Multidisciplinary Panel Data Research** at DIW Berlin

This series presents research findings based either directly on data from the German Socio-Economic Panel study (SOEP) or using SOEP data as part of an internationally comparable data set (e.g. CNEF, ECHP, LIS, LWS, CHER/PACO). SOEP is a truly multidisciplinary household panel study covering a wide range of social and behavioral sciences: economics, sociology, psychology, survey methodology, econometrics and applied statistics, educational science, political science, public health, behavioral genetics, demography, geography, and sport science.

The decision to publish a submission in SOEPpapers is made by a board of editors chosen by the DIW Berlin to represent the wide range of disciplines covered by SOEP. There is no external referee process and papers are either accepted or rejected without revision. Papers appear in this series as works in progress and may also appear elsewhere. They often represent preliminary studies and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be requested from the author directly.

Any opinions expressed in this series are those of the author(s) and not those of DIW Berlin. Research disseminated by DIW Berlin may include views on public policy issues, but the institute itself takes no institutional policy positions.

The SOEPpapers are available at  
**<http://www.diw.de/soeppapers>**

### **Editors:**

Jan **Goebel** (Spatial Economics)  
Stefan **Liebig** (Sociology)  
David **Richter** (Psychology)  
Carsten **Schröder** (Public Economics)  
Jürgen **Schupp** (Sociology)

Conchita **D'Ambrosio** (Public Economics, DIW Research Fellow)  
Denis **Gerstorff** (Psychology, DIW Research Fellow)  
Elke **Holst** (Gender Studies, DIW Research Director)  
Martin **Kroh** (Political Science, Survey Methodology)  
Jörg-Peter **Schräpler** (Survey Methodology, DIW Research Fellow)  
Thomas **Siedler** (Empirical Economics, DIW Research Fellow)  
C. Katharina **Spieß** (Education and Family Economics)  
Gert G. **Wagner** (Social Sciences)

ISSN: 1864-6689 (online)

German Socio-Economic Panel (SOEP)  
DIW Berlin  
Mohrenstrasse 58  
10117 Berlin, Germany

Contact: [soeppapers@diw.de](mailto:soeppapers@diw.de)



# DIFFERENT STROKES FOR DIFFERENT FOLKS: ENTREPRENEURS' JOB SATISFACTION AND THE INTERSECTION OF GENDER AND MIGRATION BACKGROUND

---

*Teita Bijedić\* and Alan Piper\*\**

## **Abstract**

Migrant enterprises comprise about 10% of all enterprises in Germany and are therefore a crucial part of the German economy and its entrepreneurial ecosystems. Relatedly, migrant entrepreneurship is a highly recognized topic within political discussions as well as within entrepreneurship research. While there is already an impressive body of work regarding the nature and quality of migrant enterprises, many questions regarding the personal motives and satisfaction of migrant entrepreneurs still remain unanswered (particularly with reference to gender and generation of migration). Using the German Socio-Economic Panel dataset, we close this research gap by investigating the job satisfaction of migrant entrepreneurs in Germany compared with native entrepreneurs, and also with conventionally employed migrants and natives. First generation migrants show, in general, less job satisfaction than the native population. Second generation male migrant entrepreneurs' show less job satisfaction, however this association is reversed for females: second generation female migrant entrepreneurs are more satisfied with their self-employment than their native counterparts. These differing results lead to differing implications for policy makers who wish to create and develop entrepreneurial and labour market support for different target groups.

**Keywords:** Migrant entrepreneurship, family firms, job satisfaction, intersectionality

JEL-Classification: L26, J15, J16, J28

**Submission date:** December 20th, 2018

*\*Institut für Mittelstandsforschung (IfM) Bonn, Maximilianstr. 20, 53111 Bonn, Germany, [bije-dic@ifm-bonn.org](mailto:bije-dic@ifm-bonn.org)*

*\*\*International Institute for Management and Economic Literacy, Europa-Universität Flensburg, Munketoft 3B, Flensburg, 24937, Germany Email: [alan.piper@uni-flensburg.de](mailto:alan.piper@uni-flensburg.de)*

## Introduction

There are more than 15 million individuals in Germany with a migration background. Studies focusing on entrepreneurial activity within Germany show that approximately one out of ten business founders (Kohn, Spengler, 2007) and one out of six self-employed individuals is a migrant (Leicht, Langhauser 2014). Furthermore, the number of migrant entrepreneurs is steadily increasing, while the number of native (nascent) entrepreneurs stagnates (Statistisches Bundesamt 2017). This is not a finding restricted to the German economic framework, but also an internationally recognized phenomenon. According to the Global Entrepreneurship Monitor (GEM), which analyses different aspects of entrepreneurship across 69 countries every year, not only in Germany, but generally in innovation driven economies, the migrant population show more entrepreneurial activity than natives. Therefore, they affect the economy of the host country in a significant manner (Xavier et al. 2012).

People engage in entrepreneurial activities for several reasons. These different motives are predominantly clustered into necessity and opportunity driven entrepreneurship (Thurik et al. 2010; Fairlie, Fossen 2017), although empirical research shows that most entrepreneurial activities are a mix of both. While we do not fully consider this distinction as a dichotomy in the study at hand, it might nevertheless help explain some characteristics of migrant entrepreneurship and the related association of specific barriers on their job satisfaction.

Job satisfaction is a key focus of this investigation. This is commonly assessed via survey data which asks individuals directly about their satisfaction with their jobs. Job satisfaction is a popular area of enquiry within economics and social science, and recent works about this topic related to employment and self-employment are Georgellis, Yusuf 2016; Hetschko 2016; Ebbers, Piper 2017. The average satisfaction with their jobs of different groups of society (here groups based on gender and migration status) can highlight where the efforts of policy makers may focus in terms of helping migrants integrate successfully (and to their own satisfaction) in the labour market and, as a consequence, the host country. For example, if first generation migrants (male or female) are more satisfied with their jobs within conventional employment rather than self-employment policy may be more effective by focusing more on conventional employment. This and related questions are investigated below. There is empirical evidence that migrants face specific conditions and challenges on the labour market which, in part, significantly differ from those for the native population (Kay, Schneck 2012). Therefore, migrant entrepreneurs may show less job satisfaction than native entrepreneurs.

To analyse these issues, we make use of the German Socio-Economic Panel (SOEP), a nationally representative longitudinal dataset which started in 1984. Overall, in this survey, the self-employed are more satisfied with their jobs than the conventionally employed; and in general, males are slightly more satisfied with their jobs than females. With this sample we also compare the differing job satisfaction of natives and migrants, and while undertaking this analysis we consider both gender and migration background. The results indicate some important differences by group. This leads to a conclusion that different target groups need to be addressed individually, when conceptualizing policy measures. Furthermore, effects on the societal, organizational and individual level need to be taken into account.

In summary, we find that first generation migrants are significantly less satisfied with their job situation than non-migrants or second generation migrant entrepreneurs. Our findings suggest

that entrepreneurship is not a common cure for labour market integration for migrants, and particularly not for first generation migrants, i.e. entrepreneurship does not eliminate discrimination nor is it a guarantee for a higher job satisfaction. Thus, instead of pushing first generation migrants into entrepreneurship per se, we also recommend the encouragement of entrepreneurial behaviour within wage and salary employment. The results for gender are also suggestive of a need for different and specific policies to support and develop both migrant employment and integration.

## **Literature review and conceptual framework**

### ***Necessity and opportunity driven entrepreneurship***

One established way to cluster motives is necessity-driven and opportunity-driven entrepreneurship, a distinction introduced by GEM in 2001/2002. Necessity-driven entrepreneurship is based on the assumption that a person chooses self-employment out of a lack of other feasible opportunities on the labour market, while opportunity-driven entrepreneurship arises out of detecting and exploiting opportunities in the market (Reynolds et al. 2002; Sternberg et al. 2006).

Accordingly, the determinants that lead to necessity or opportunity driven entrepreneurship are divided into push and pull factors. Push factors, for example (fear of) unemployment, lead to necessity driven entrepreneurship, while pull factors are mostly positive incentives like observing a lucrative opportunity, which lead to opportunity-driven entrepreneurship (Brixey et al. 2013; Blanchflower 2004; Gries, Naude 2011). Opportunity driven entrepreneurship is more likely to be intrinsically motivated, for example by a need for autonomy, self-fulfilment, and not only by financial aspects (Benz, Frey 2008; Bijedić et al. 2014; Brixey et al. 2013). In contrast, necessity driven entrepreneurship is mostly extrinsically motivated, often by financial and labour market obstacles (Block, Sander 2009) which makes the individuals feel like they are losing their agency over their employment choices (Gries, Naude 2011).

Several studies have found relationships between different employment statuses and job satisfaction, providing empirical evidence that self-employed individuals report being more satisfied with their jobs than their more conventionally waged and salaried employed counterparts (e.g. Blanchflower 2000; Frey, Benz 2003; Roche 2015). According to GEM global reports (Amoros, Bosma 2013; Xavier et al. 2012) entrepreneurs are, across different countries, happier than their wage worker counterparts. Furthermore, entrepreneurial motives have an impact on entrepreneurial satisfaction: intrinsic motivation leads to higher job satisfaction and life satisfaction (Benz, Frey 2008; Block, Koellinger 2009; Carree, Verheul 2011). Therefore one can assume that, in general, it is likely that opportunity-driven entrepreneurship leads to more job satisfaction, whereas necessity-driven entrepreneurship leads to less job satisfaction (Block, Koellinger 2009).

A very high rate of self-employment often indicates not only opportunity, but also a higher rate of necessity driven entrepreneurship. Due to the lack of other viable labour market opportunities, entrepreneurship rates are oftentimes particularly high in rather economically challenged regions and times (Naude et al. 2014; Gries, Naude 2011). For example, Koellinger and Thurik (2012) found that entrepreneurial rates correlate positively with national unemployment rates for 22 OECD-countries indicating that, in many cases, self-employment

results out of (fear of) unemployment. Bell and Blanchflower (2011) found similar results for the UK. Also, self-employment is not a general remedy for job satisfaction: Fuchs and Schündlein (2009) emphasize that many people find that they are indeed happier within wage employment than self-employment and state both more social security and the satisfaction received by getting feedback from supervisors as two reasons. Also, it has been argued, some people are just not suited to becoming entrepreneurs (Naude et al. 2014).

However, while the dichotomy of necessity-driven and opportunity-driven entrepreneurship is broadly recognized, it is also often criticized. For example, it is not always possible to detect the motivation behind the decision to become self-employed ex-ante when, as in most cases, there is only ex-post information. In order to solve this operationalization issue, Fairlie and Fossen (2017) propose a distinction between opportunity and necessity entrepreneurship based on the last prior employment status of the entrepreneur. In this case, opportunity entrepreneurs would become self-employed out of regular salaried employment; whereas a necessity entrepreneur would have been previously unemployed (see also Metzger 2017 for the case of Germany, and Aguilar et al. 2013 for a Latin American context).

### ***Migrant entrepreneurship***

There is evidence that migrants more frequently face challenges on the primary labor market as employees (Kay, Schneck 2012). This can be a result of discrimination, lack of networks as well as lacks in institutional and cultural knowledge, or other institutional barriers. For example, certificates, vocational training or educational degrees earned in the migrant's home country are sometimes not officially recognized, which is a barrier for access to jobs, and particularly for those jobs which require high qualifications. Occasionally, the lack of human capital is due to qualifications that are not transferable to the labour market of the host country (Tienda, Raijman 2004, Vinogradov 2008). These factors can lead to higher rates of unemployment for migrants compared to the native population, as well as a higher incidence of underemployment. These are issues which would particularly affect first generation migrants.

Even when in regular salary or wage employment migrants earn on average less than native employees (Anderson 2014; Lehmer, Ludtseck 2013). One possible way to overcome this and its associated disadvantages is self-employment, with the labour market influencing migrants to escape into entrepreneurship (Boyd 2000; Lo et al. 2002; Volery, 2007). Human capital theory emphasizes that people with both a broad set of skills and experience should be more successful entrepreneurs, as well as being better able to exploit opportunities (Davidson, Honig 2003; Lazear 2005). Furthermore, they will be more likely to lead more successful ventures (Sexton 1994). Somewhat relatedly, given human capital specificities, it has been asserted that there are opportunities for migrant entrepreneurs that are based within their ethnic communities (Volery, 2007). Indeed, migrant entrepreneurs tend to open up niche businesses that cater to their co-ethnic communities, which is also known as ethnic entrepreneurship (Chrysostome, Arcand 2009; Zhao et al. 2010). Cultural theories capture a similar phenomenon and state ethnic solidarity as a motivator for ethnic niche businesses but are criticized for overemphasizing the aspect of ethnic solidarity over other impact factors (Vinogradov, 2008).

The Mixed Embeddedness approach offers a broader conceptual framework to explain migrant entrepreneurship, where migrant entrepreneurs are considered as embedded “*in social networks of immigrants as well as in [the] socio-economic and politico-institutional environment of the country of settlement*” (Kloosterman et al. 1999, p. 254). Thus, according to this particular framework, migrant entrepreneurs have unique resources while, at the same time, face challenges that correspond with their migrant status and discriminate them from the native population. In this way, this approach is similar to aspects of both human capital theory and the cultural theories discussed just above. Furthermore, the Mixed Embeddedness approach combines assumptions of different theories about migrant and ethnic entrepreneurship and emphasises the resource and opportunity-oriented aspects with aspects of disadvantage (Vinogradov, 2008). This theory also combines individual influences like ethnic origins within a broader social, political and institutional framework, e.g. migrant and legal status (Teixeira et al., 2007). Therefore, it applies to first and second generation migrants.

Migrants rate self-employment as a valuable career opportunity, more so generally than the native population (Brixy et al. 2013). For immigrants, self-employment is an opportunity to have more meaningful jobs, higher autonomy and commitment despite lower status positions and low skilled employment as well as lower status within society (Johansson et al. 2016). However, entrepreneurship is far from serving as a universal remedy for labour market discrimination: migrants also face barriers while pursuing entrepreneurship and are also more likely to be discriminated against by capital givers, potential customers or business partners (Blanchflower et al. 2003; Brooks et al. 2014). Also they often have less broad networks and fewer network ties than non-minorities, both of which lead to less access to crucial resources (Bijedić et al 2017; Seidel et al 2000). Beaujot (2003) also found that skilled migrants are more often underemployed within self-employment than natives.

Based on the stated body of research, we expect the following:

*Hypothesis H<sub>1</sub>: In general, self-employed migrants are less satisfied with their jobs than self-employed non-migrants*

There are differences between first and second generation migrants, which can necessitate a separate consideration. First generation migrants are, on average, less educated than second generation migrants, for reasons including institutional barriers (Apitzsch 2005). For example, and as mentioned above, their certificates are not always recognized whereas second generation migrants are socialized within the educational system of the target country. In our SOEP sample, second generation migrants have, on average, just over one year more education than first generation migrants. Furthermore, it is likely that second generation migrants also have more market related knowledge since they are more familiar with the institutional and market framework in the target country, in which they grew up, than first generation migrants.

Second generation migrants are on average more socially integrated in the host country and have a higher human capital. These factors foster entrepreneurial success in general (Beckers, Blumberg 2013). There is evidence that highly integrated migrants consider themselves opportunity driven (Rasel 2014). This is mostly the case for second generation

migrants, since they are already educationally, socially and institutionally integrated into the host country.

In contrast, first generation migrants are often involved in so-called ethnic businesses, where they use their ethnic and cultural resources for niche businesses and customers from similar cultural backgrounds. These are predominantly operated as family businesses and often have poor working conditions. Nevertheless they help first generation migrants avoid prejudices and xenophobic stereotypes so they might lead to a higher satisfaction. However, being involved in family businesses might lead to lower educational opportunities for the second generation (Decroix 2001; Apitzsch 2005).

Poor education correlates with poor social status and lower life satisfaction overall, so male children of first generation ethnic entrepreneurs might be less educated and satisfied (Apitzsch 2005). Since education and social status often reproduce themselves, second generation migrants are often descendants from so called guest workers, i.e. low and semi-skilled workers (Essers, Benschop 2007), and as such perhaps the second generation will not differ too much from the first generation. However, due to these above reported barriers that first generation migrants face on the labour market when compared to second generation migrants, we derive following hypothesis:

*Hypothesis H2: The expected negative difference between first generation migrants' job satisfaction and that of natives is greater than the difference for job satisfaction between second generation migrants and natives.*

Finally, entrepreneurial diversity also includes gender differences regarding entrepreneurial motives as well as entrepreneurial activities. While female entrepreneurs, on average, are less often full-time employed and less often have employees, they are, on average, more satisfied with self-employment than males (regardless of the existence of employees) (Sevä et al. 2016). Also, self-employed women are, on average, more satisfied with their income than men, regardless of the lower turnovers of their companies (Carree, Verheul 2011). Furthermore, these gender differences with respect to job satisfaction are even higher for migrants than for natives (Sevä et al. 2016).

These differences in satisfaction might be partially based in gender differences with respect to motivation. Already stated above is the notion that intrinsic motivation leads to higher entrepreneurial and life satisfaction. This is especially true for non-monetary goals, for instance autonomy, work-life balance, and more work variety which lead to more work satisfaction for self-employed workers in comparison to wage or salary workers (Benz, Frey 2008; Block, Koellinger 2009; Carree, Verheul 2011, Stephan, Roesler 2010). Women, in comparison to men, are driven more often by such non-financial motives than by output or financially driven motives (Sevä et al. 2016). Women's motives more often revolve around family and work-life balance when choosing self-employment. One consequence of this is that having employees does not matter as much as a motive. Perhaps relatedly, female entrepreneurs state high earnings or other status-related, extrinsic motives as reasons for becoming self-employed less often than men (Sevä et al. 2016).

With regards to migrant entrepreneurship, there are often assumptions about gender differences regarding involvement in family businesses as well as the associated responsibilities for the second generation (Decroix 2001; Apitzsch 2005). Female second

generation migrants are often marginalized within their culture so they are more prone to branch out while able to take advantage of both cultures (Essers, Benschop 2007). Therefore, the female second generation migrants might especially strive for better educational and vocational opportunities outside of the family business while male children might accumulate less human capital outside of the business due to their responsibilities towards the business (Decroix 2001; Apitzsch 2005). To the contrary, ethnic female entrepreneurs are less dependent on ethnic business and resources for several reasons: often they are taken less seriously than their male counterparts due to conservative gender stereotypes favouring men; and they do not employ co-ethnic staff as often as their male counterparts. Furthermore, they more often employ co-ethnic females because in some cultures they can supervise only women and not men (Apitzsch 2005). Therefore, due to often not being taken seriously within the ethnic market, they seem to branch out to the mainstream market. Based on the stated previous finding we derive the following hypothesis:

*Hypothesis H3: Within the context of self-employment, the expected negative difference between male migrants' job satisfaction and that of native males is greater than the expected negative difference for job satisfaction between female migrants and native females.*

The next section describes the data which will be used to assess these hypotheses, and the subsequent section to that presents the results.

## **Data and Methodology**

The data come from the German Socio-Economic Panel , which started in West Germany in 1984 with over 12,000 observations and has grown over time due to sample refreshments. The SOEP is broadly representative data for Germany, and has questions regarding migration, job satisfaction and employment status, making it well suited for this investigation. Further details about the panel are provided by Goebel et al. (2018). To investigate our hypotheses we restrict our sample to individuals who are either self-employed or employed. This means that we are considering individuals, both migrants and non-migrants, who have had at least some success within the labour market. Thus, the important issue of unemployment for migrants and non-migrants, for example, is not considered here.

Our job satisfaction data come from a question in the SOEP which asks individuals directly about their satisfaction with their job with an 11 point Likert scale. Table 1 presents the number of person-year observations, mean and standard deviation of job satisfaction for our different groups of interest. Furthermore, we base our definition on migrants on the definition of Statistisches Bundesamt (German national statistical office) and define an individual as migrant, if he/she migrated himself/herself (i.e. is not born in Germany) as first generation migrant or if he/she is born in Germany, but at least one parent migrated (i.e. is not born in Germany) as second generation migrant.<sup>1</sup>

Table 1: Mean and standard deviation of job satisfaction, by employment status, gender and migration background; SOEP data 1984-2014.

---

<sup>1</sup> The definition by Statistisches Bundesamt also includes a third generation which is based on the migration history of the grandparent generation, as long as the migration took place after 1945.

JOB SATISFACTION	(1) female			(2) male		
	observations	mean	standard dev.	observations	mean	standard dev.
employed, no migrant	90455	7.06	2.06	96505	7.06	2.00
employed, migrant	27351	7.09	2.11	35740	7.13	2.08
employed 1st gen mig	18480	7.07	2.11	26409	7.14	2.10
employed 2nd gen mig	8708	7.13	2.10	9131	7.12	2.03
selfemp, no migrant	8856	7.40	1.97	15963	7.32	2.02
selfemp, mig	1786	7.30	2.07	3435	7.12	2.16
selfemp, 1st gen mig	1157	7.15	2.12	2174	7.13	2.17
selfemp, 2nd gen mig	619	7.57	1.96	1242	7.09	2.14

For the employed, table 1 shows us that migrants are (very) slightly more satisfied than non-migrants, but that their job satisfaction is also subject to more variation. This is the case for both females and males. There is a difference by gender regarding the generation of migration: second generation females are more satisfied with their employment, whereas first generation males are (slightly) more satisfied. With respect to self-employment, we note that migrants overall report less average job satisfaction than non-migrants, again with slightly more variation in the responses. Male migrants appear (based on these averages) to be indifferent between employment and self-employment, whereas females are more satisfied with self-employment. Female second generation migrants are particularly satisfied with self-employment.

Table 2: Mean and standard deviation of real income, by employment status, gender and migration background; SOEP data 1984-2014.

REAL INCOME	(1) female			(2) male		
	observations	mean	standard dev.	observations	mean	standard dev.
employed, no migrant	93939	20.55	17.10	99274	38.44	30.87
employed, migrant	28365	18.69	15.78	36490	32.70	21.58
employed 1st gen mig	19122	17.79	13.00	26873	31.22	17.11
employed 2nd gen mig	9076	20.60	20.32	9415	36.95	30.63
selfemp, no migrant	9605	24.46	31.54	16546	50.16	64.34
selfemp, mig	1890	22.76	30.22	3557	46.34	49.93
selfemp, 1st gen mig	1213	22.77	28.23	2244	45.76	43.89
selfemp, 2nd gen mig	667	22.79	33.61	1294	46.44	53.66

Whether employed or self-employed, males have substantially higher average real incomes (deflated by the CPI) than females. This broad finding is unaffected by migrant status. Given that these overall figures will include both part-time and full-time (self-)employed, which influences the averages, the importance of considering full or part-time status in the later analysis is clear. We do this by including a dummy variable for full-time workers in each regression undertaken. Comparing males with males, and females with females, regardless of migrant status the self-employed have higher average incomes than the employed; a difference that is more evident for males. Perhaps unsurprisingly, the table shows that there is much more variation in the incomes of the self-employed than the employed. There are also differences between employed migrants and non-migrants, with non-migrants earning

substantially more. The second generation employed migrants fair better on the labour market (in terms of income) than first generation employment migrants. No notable difference between the migration generations exists for self-employment: both first and second generation migrants have similar average incomes, a finding particularly noteworthy given the relative job satisfaction of second generation female migrants (see table 1 and the next section).

Given these differences, real income will be an important control variable. Other control variables relate to the nature of employment, whether someone has German citizenship or not, whether they work considerably more (or less) than they would like to, health, education (in years), broad age group, industry (1 digit industrial class), region (county and East/West), and survey year. Most of these are self-explanatory, and linked to satisfaction with one's job in many previous studies (Clark 1996; Lange 2012; Georgellis and Yusuf 2016; Ebberts et al. 2018). The literature review above explains why taking into account education is potentially important. Furthermore, research has found that self-employed individuals tend to be healthier than wage employees, which may be due to self-selection as rather healthy people choose self-employment; in contrast people with health issues consider entrepreneurship both a less valuable and viable option due to likely absence days caused by health issues, health insurance, stress levels and challenges getting financial resources (Hilbrecht, Lero 2014). However, it is also conceivable that individuals with health issues may also be pushed into necessity entrepreneurship (Verheul et al. 2010). Although in our sample the self-employed are only marginally healthier than the employed, these considerations explain our use of health as a control in our analysis. More generally, the descriptive data, presented in the appendix (tables A1 and A2) and discussed just below, also highlights the importance of controlling for these various factors.

The importance of the variable German citizenship is based on the notion that migrants who already obtained German citizenship have already taken crucial steps to integrate into the society as well as having rights which non-citizens do not have. Therefore we expect them to be more integrated into the labour market as well. Our consideration of whether the individual works considerably more (or less) than they would like is based on the difference between actual working hours and desired working hours. If the former is at least five hours above (below) the latter, then an individual is said to be working considerably more (less) than they would like to.<sup>2</sup> This would be a further indicator of not being in a desirable situation in the labour market.

Though the SOEP is a longitudinal data set we are unable to exploit the benefits that this offers. This is because there is no 'within' variation with respect to migrant status, and thus not enough variation for fixed effects estimation.<sup>3</sup> Thus we treat the data as if they were pooled cross-sections and, as is reasonably common in the literature, treat the dependent variable as if it were cardinal (although this does not make much qualitative difference to the results). Therefore our investigation is rather simple: we employ ordinary least squares to estimate regressions and base our interpretation (largely) on the sign and significance of the

---

<sup>2</sup> This is also included because Grözinger et al. (2008) provided evidence that the hours which someone desires to work is associated with job satisfaction; a finding important for employees but not necessarily for the self-employed (Ebberts and Piper 2017).

<sup>3</sup> Random effects estimation is rarely supported in a job (or life) satisfaction context.

coefficients of especial interest.<sup>4</sup> These are the dummy variables for migrant status (1 for migrant; 0 non-migrant), for self-employment (1 for the self-employed; 0 for the employed) and an interaction term of these two dummy variables. We make three different estimations, differing by migration (all migrants; first generation; second generation) to help us answer our research questions.

## Results

This section presents the results from the pooled cross-section OLS estimations. Table 3 considers all migrants; table 4 first generation migrants; and table 5 second generation migrants. As mentioned above our sample only includes those employed and self-employed, which might explain the general positive finding for male migrants in table 3 below.<sup>5</sup> Table 3 also shows that if, on average, a self-employed individual is also a male migrant then this individual is less satisfied with their job than self-employed non-migrants. Potential reasons for this were given in the literature review, where it was explained that, particularly, first generation migrants face many specific on average more challenges on the labour market and might more often choose self-employment out of necessity than the other analysed groups. Furthermore, our data indicate that male first generation entrepreneurs earn less than native entrepreneurs (table 2) and the literature review also indicates that male entrepreneurs are often motivated by financial incentives of self-employment: two findings that, when combined, can also potentially explain this job satisfaction gap. Even though income is controlled for, the psychological disappointment of a (potentially) lower than expected income is not.

Overall, whether a self-employed female is a migrant or not makes no difference to job satisfaction; a result that (as we will see) is modified when we consider separate generations of migrants. The obtained coefficients indicate that health is very important for job satisfaction, and having German citizenship is also positive for job satisfaction. Furthermore, if individuals work five hours more or less than their stated desired hours they are less satisfied with their jobs; particularly so if they are working more hours (based on the point estimates). Thus, hypothesis one, *self-employed migrants are less satisfied with their jobs than self-employed non-migrants*, depends on gender. Evidence in support of this hypothesis is found for males, but not for females.

---

<sup>4</sup> Our model shares the problems of other studies which use OLS and repeated cross-section data. Important for a job satisfaction investigation is that we are thus not able to control for unobserved individual heterogeneity, and have to rely on the averages from a representative dataset.

<sup>5</sup> In the tables of this section (3, 4 and 5), the employed base category does not include apprentices and 'beamte' (government) employees, for both of which coefficients are displayed; however when the employment base category also includes these categories the coefficients of interest (the self-employment variables) are substantially the same.

Table 3: The job satisfaction of the employed and self-employed, all migrants and all natives, OLS regression coefficients; SOEP data 1984-2014.

VARIABLES	(1)	(2)
	Job Satisfaction Females	Job Satisfaction Males
Real income	0.01*** (0.000)	0.00*** (0.000)
Migrant	0.03 (0.019)	0.06*** (0.018)
Deutsch	0.09*** (0.029)	0.18*** (0.025)
Full time	-0.02 (0.017)	0.08*** (0.021)
Self-employed	0.29*** (0.026)	0.20*** (0.019)
Self-employed migrant	-0.06 (0.065)	-0.25*** (0.046)
Government employed	0.01 (0.027)	0.17*** (0.023)
Apprentice	0.26*** (0.037)	0.39*** (0.036)
Work five hours more than desired	-0.32*** (0.016)	-0.28*** (0.012)
Work five hours less than desired	-0.18*** (0.017)	-0.20*** (0.022)
Very good health	1.96*** (0.026)	2.25*** (0.025)
Good health	1.34*** (0.020)	1.63*** (0.020)
Satisfactory health	0.66*** (0.021)	0.84*** (0.020)
Years of education	-0.01*** (0.002)	0.00* (0.002)
Persons in household	0.07*** (0.007)	0.03*** (0.007)
Children in household	0.04*** (0.011)	-0.00 (0.009)
Age 21-30	-0.02 (0.044)	-0.09** (0.041)
Age 31-40	-0.02 (0.046)	-0.17*** (0.043)
Age 41-50	-0.00 (0.046)	-0.24*** (0.044)
Age 51-60	0.05 (0.047)	-0.16*** (0.044)
Age 61+	0.46*** (0.057)	0.27*** (0.049)
Constant	5.71*** (0.102)	5.31*** (0.098)
Observations	102,638	117,029
R-squared	0.096	0.129

Notes: standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Base categories are non-migrant, non-German citizenship; part-time; conventionally

employed; work desired hours; less than satisfactory health; age 16-18.  
Industry, country and year dummy variables included.

Table 4 provides some important nuance by considering first generation migrants, and not individuals with a later migration generation background. Again, these first generation migrants are more satisfied with their work than non-migrants (albeit controlling for many other factors including German citizenship). This may reflect their having found some success in the host country's labour market, i.e. having found some work. Generally, the self-employed are more satisfied with their jobs than the employed. However, for first generation migrants, this benefit is severely reduced (females) or wiped out (males).<sup>6</sup> The result for first generation female migrants is different from that for all migrants (table 3). However, health and german citizenship remain important for job satisfaction.

Table 4: The job satisfaction of the employed and self-employed, all first generation migrants and all natives; SOEP data 1984-2014.

VARIABLES	(1) Job Satisfaction Females	(2) Job Satisfaction Males
Real income	0.01*** (0.000)	0.00*** (0.000)
Migrant (first generation)	0.05* (0.027)	0.15*** (0.025)
Deutsch	0.13*** (0.036)	0.29*** (0.031)
Full time	-0.02 (0.018)	0.07*** (0.022)
Self-employed	0.29*** (0.026)	0.20*** (0.020)
Self-employed 1st gen migrant	-0.20** (0.081)	-0.28*** (0.058)
Government employed	0.02 (0.028)	0.16*** (0.023)
Apprentice	0.25*** (0.040)	0.39*** (0.040)
Work at least five hours more than desired	-0.32*** (0.016)	-0.27*** (0.013)
Work at least five hours less than desired	-0.18*** (0.018)	-0.22*** (0.023)
Very good health	1.96*** (0.027)	2.26*** (0.026)
Good health	1.35*** (0.021)	1.64*** (0.020)
Satisfactory health	0.66*** (0.022)	0.84*** (0.021)
Years of education	-0.01*** (0.002)	0.00** (0.002)
Persons in household	0.07*** (0.008)	0.02*** (0.007)
Children in household	0.04***	-0.00

<sup>6</sup> This statement is based upon a simple comparison of the coefficient sizes.

	(0.011)	(0.009)
Age 21-30	0.01	-0.11**
	(0.048)	(0.045)
Age 31-40	0.00	-0.19***
	(0.050)	(0.047)
Age 41-50	0.02	-0.26***
	(0.050)	(0.047)
Age 51-60	0.08	-0.16***
	(0.051)	(0.048)
Age 61+	0.47***	0.25***
	(0.061)	(0.053)
Constant	5.67***	5.08***
	(0.109)	(0.104)
Observations	94,527	107,905
R-squared	0.097	0.130

Notes: standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Base categories are non-migrant, non-German citizenship; part-time; conventionally employed; work desired hours; less than satisfactory health; age 16-18. Industry, country and year dummy variables included.

Table 5 below presents results for second generation migrants and all natives. The one key difference in comparison with all migrants (table 3) and first generation migrants (table 4) is that female second generation migrants are more satisfied with self-employment than non-migrants; a result that is additional to the job satisfaction benefit that the self-employed have compared to the employed. There is also no longer a job satisfaction premium for German citizens when the comparison group is restricted to second generation migrants. This is explained by the larger overlap between being a German citizen and a second generation migrant, as compared to the smaller proportion of first generation migrants who are also German citizens.

Table 5: The job satisfaction of the employed and self-employed, all second generation migrants and all natives; SOEP data 1984-2014.

VARIABLES	(1)	(2)
	Job Satisfaction Females	Job Satisfaction Males
Real income	0.01***	0.00***
	(0.000)	(0.000)
Migrant (second generation)	0.01	-0.02
	(0.026)	(0.024)
Deutsch	-0.06	-0.01
	(0.054)	(0.047)
Full time	-0.02	0.05**
	(0.018)	(0.023)
Self-employed	0.29***	0.19***
	(0.026)	(0.019)
Self-employed 2nd gen migrant	0.16*	-0.19***
	(0.097)	(0.066)
Government employed	0.02	0.17***
	(0.028)	(0.023)
Apprentice	0.25***	0.36***
	(0.039)	(0.038)
Work at least five hours more	-0.32***	-0.27***

than desired	(0.016)	(0.013)
Work at least five hours less than desired	-0.18*** (0.018)	-0.20*** (0.024)
Very good health	1.97*** (0.028)	2.24*** (0.026)
Good health	1.35*** (0.021)	1.63*** (0.021)
Satisfactory health	0.68*** (0.022)	0.84*** (0.022)
Years of education	-0.01*** (0.002)	0.00* (0.002)
Persons in household	0.08*** (0.008)	0.03*** (0.007)
Children in household	0.04*** (0.011)	0.00 (0.010)
Age 21-30	-0.01 (0.046)	-0.09** (0.043)
Age 31-40	-0.00 (0.048)	-0.17*** (0.046)
Age 41-50	0.02 (0.048)	-0.24*** (0.046)
Age 51-60	0.11** (0.049)	-0.17*** (0.047)
Age 61+	0.48*** (0.059)	0.27*** (0.052)
Constant	5.90*** (0.115)	5.46*** (0.111)
Observations	90,919	101,778
R-squared	0.096	0.128

Notes: standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Base categories are non-migrant, non-German citizenship; part-time; conventionally employed; work desired hours; less than satisfactory health; age 16-18. Industry, country and year dummy variables included.

In summary, the results for the different generations of female migrants are particularly noteworthy. First generation female migrants (like their male counterparts) are less satisfied with self-employment than non-migrants however, second generation female migrants (very different from their male counterparts) are more satisfied with their self-employment than non-migrants.

Tables 4 and 5 help us address the second hypothesis: the expected negative difference between first generation migrants' job satisfaction and that of natives is greater than the difference for job satisfaction between second generation migrants and natives, and is comfortably supported by the results and for both genders.

Hypothesis three, within the context of self-employment, the expected negative difference between male migrants' job satisfaction and that of native males is greater than the expected negative difference for job satisfaction between female migrants and native females can be answered after consulting all three tables. In all three cases, i.e. all migrants (table 3), first generation migrants (table 4), and second generation migrants (table 5) the hypothesis is

comfortably supported. The job satisfaction gap between self-employed migrants and natives is greater for males than females.

## **Concluding discussion**

This section discusses the outcome of our three hypothesis tests: (1) self-employed male migrants are less satisfied than self-employed male natives; (2) the job satisfaction gap between first generation background migrants and natives is greater than that between second generation background migrants and natives; and (3) the gap between self-employed migrant males and self-employed native males is greater than that between self-employed migrant females and self-employed native females. As well as discussing these results, policy recommendations are also offered.

Much of the literature review focused on the notions of necessity and opportunity entrepreneurship. Arguments were made that migrants were more likely to become self-employed out of necessity, in comparison to natives who might be better able to perceive and exploit opportunities. Furthermore, other research has shown that qualifications and experience gained in the home country do not always translate well to the host country and also push migrants into self-employment. Male migrants are less satisfied with their self-employment than natives, which may well reflect the necessity (push) rather than the opportunity (pull) explanation. However female migrants, overall, do not experience more or less satisfaction with their self-employment compared to female self-employed natives, though this is an average of the differing results for first and second migration background (discussed below). Therefore it seems that the intersectionality between gender and migrant status leads to the differing results and needs a deeper insight in future research.

Our results are only suggestive of this conclusion however; we do not have information on ex-ante reasons for entering self-employment. The large gap for male, and first generation female, migrants lends itself to the necessity vs. opportunity conclusion discussed above, but as the literature review highlighted, these are not necessarily dichotomous. Decisions can contain reasons that reflect both necessity and opportunity motives, and a clean line cannot be drawn between these two categories. Additionally, attitudes towards entrepreneurship can change over time: what was once based on necessity motives initially can come to be based on opportunity motives, and vice versa. What does seem clear, however, is that migrants (at least males and first generation females) seem, on average, to be much more satisfied with regular employment than self-employment. This may be on one hand due to the fact that dependent employment in Germany includes social benefits, i.e. social security and insurances (health insurance, insurance for unemployment, etc.), as well as social interaction and inclusion within the company which is especially important for newcomers without as much resources (human capital, financial or social). On the other hand, necessity-driven self-employment may lead, especially first generation, migrant entrepreneurs into a precarious situation. The lack of language skills, qualifications or market knowledge and networks may lead them into markets with a high degree of price competition, forcing them to offer their services at a very low price. This would have a negative effect on job satisfaction, besides other serious disadvantages. The second result, when judged by the size of the obtained coefficients, demonstrated possible 'catch up' in terms of job satisfaction for migrants. To repeat the hypothesis test result: the job satisfaction gap between first generation background migrants and natives is greater than that between second generation background migrants

and natives. The literature review above also highlighted possible explanations for this generational difference. These included: education, qualification recognition as well as social inclusion and cultural familiarity within the host country. It seems therefore that the second generation is less necessity driven than the first generation. This finding also supports the notion that first generation migrants seem to seek dependent employment more in order to obtain these aspects and aid integration.<sup>7</sup>

The central finding from the investigation of the third hypothesis was that self-employed females with a second generation migration background are more satisfied with self-employment than native females. According to previous research we reported in the literature review, the second generation migrants are raised and educated in the host country which, on average, leads to a higher education, better market and institutional knowledge (i.e. higher human capital) as well as a better social integration and broader networks (i.e. higher social capital). These factors, along with a more secure status of residency (e.g. permanent residency or German citizenship) may lead to a higher job satisfaction within self-employment. But this should apply to male as well as female second generation migrants. This is where intersectionality between migration and gender comes into effect. First generation migrants are often involved in necessity-driven entrepreneurship in niche markets and a low-price competition (e.g. so called ethnic markets). But despite the precarious conditions, entrepreneurship can still be a vehicle for avoiding prejudices and discrimination on the labour market, so entrepreneurship may be a viable alternative. These enterprises often turn into family businesses with children (i.e. second generation migrants) taking them over. On average, male children get the successor's roles more often than female children early on, leading to decisions to not consider higher education and just work for the family business. Previous research shows that daughters are less often successors of family businesses in general and especially within the migrant community, e.g. due to the culturally determined gender roles and marginalization of females within the family (see the literature review). This circumstance provides the opportunity for female second generation migrants to obtain higher education and pursue more qualified careers, while simultaneously being socialized within an entrepreneurial household, which is one of the strongest determinants of entrepreneurial propensity. All these aspects may have led to female second generation migrants being able to pursue opportunity driven entrepreneurship within their fields of interest.

Further analysis was undertaken to try to identify potential causes of this job satisfaction premium for self-employed second generation female migrants. To do so potential confounders were additionally included in the estimated regression. The subsequent change in the main coefficient of interest, the interaction term of the self-employed and second generation migrants, is somewhat instructive of what may or may not play a role with respect to the job satisfaction of the second generation migrant females. Specifically we investigate household income rather than individual income – thus asking whether the second generation migrant self-employed female gain job satisfaction because of reduced stress due to being able to rely on her household's income – and job quality. Job quality is captured here by the amount of training needed for the job she does. Our base category is little or no training needed and we include as controls dummy variables indicating whether vocational training or

---

<sup>7</sup> See <https://www.iab-forum.de/anerkennung-auslaendischer-abschluesse-buerokratieabbau-und-bessere-information-koennten-die-antragsquote-erhoehen/> for part of the policy discussion.

higher education was required. Table 6, for brevity, reports only the confounding variable and the coefficient for the interaction term.

Table 6: Potential confounding factors for second generation self-employed female migrants; SOEP data 1984-2014.

Potential confounding factor	Coefficient (standard error) for the self-employed second generation migrant females
None (i.e. table 5's estimation)	0.16* (0.097)
Household income (instead of individual income)	0.15 (0.097)
Training required for the job	0.15 (0.096)

Note: standard errors in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . See previous results tables for control variables and base categories.

Table 6 indicates that both potential confounding factors play a role in table 5's significant difference in job satisfaction. The second row in table 6 is suggestive that the ability to rely on a (high) household income is at least somewhat behind the relatively high job satisfaction for these self-employed second generation females. Furthermore, the third row indicates that job quality also seems to moderate this high job satisfaction. To be clear: when job quality is controlled for females with a second generation migration background are not, at a conventional level of statistical significance, any more satisfied with their jobs than natives ( $p=0.147$ ); in contrast, when job quality is not controlled for we have table 5's results. This indicates that second generation migrant background self-employed females do not, on average, have quality jobs, at least when measured by required training.<sup>8</sup>

These results and the rest of our findings suggest that different target groups need to be addressed individually, when conceptualizing policy measures. While first and second generations have different needs when it comes to support measures, language, qualification and institutional barriers, our findings also lead us to a policy recommendation for fostering vocational qualification and higher education in general. This particularly applies for migrants and children of migrants who migrated with a poor educational background (e.g. low skilled, guest workers or migrants from countries with lower educational status). Here entrepreneurship education programmes can have a particularly important role: Lyons and Zhang (2017) state that, while all target groups benefit from entrepreneurial training programmes, the effect is stronger and more sustainable for migrants and other socially disadvantaged groups. Entrepreneurial training can also give access to resources like networks, capital and skills which are otherwise more difficult to access for migrants than for natives.

Finally, with regards to the first generation migrants, the question is worth asking if the necessity driven low skill entrepreneurship is really a viable form of integration and a source of satisfaction. According to Doeringer and Piore (1971), the labour market can be divided into a primary and secondary market. While the primary labour market is characterised by qualified

---

<sup>8</sup> It is conceivable that self-employed second generation migration background females are more likely to take over an existing business, with self-employed native females more likely to start a business. If so, this is a further factor potentially responsible for both the differences in job satisfaction and job quality.

and stable employment conditions, career options and high salaries, the secondary labour market provides much less social upward mobility and employment stability (Doeringer, Piore 1971). While the primary labour market requires formal qualification, the secondary does not (Segenberger 1978). Secondary labour markets are more often dominated by women and migrants than primary labour markets (Segenberger 1978). Especially for the first generation, the primary labour market seems to be a more desirable option

Perhaps, for the sake of an effective integration and social security, policy makers might rather foster the qualification of these migrants for the primary labour market and improve their standing and status within wage employment. Fostering an entrepreneurial mind-set might also lead to more job satisfaction regardless of employment status.

## Literature

Amoros, J.E.; Bosma, N. (2013): Global Entrepreneurship Monitor 2013 Global Report. Babson Park, Santiago, Kuala Lumpur, London.

Apitzsch, U. (2005): The chances of the second generation in families of migrant entrepreneur Quality of life development as a biographical proces In: Revue Europeenne des migrations internationales, Vol. 21(3), 83-94.

Beckers, P. Blumberg, B. (2013): Immigrant entrepreneurship on the move: a longitudinal analysis of first- and second-generation immigrant entrepreneurship in the Netherland Entrepreneurship; Regional Development, 25(7-8), 654-691.

Bell, D.; Blanchflower, D. (2011): Underemployment in the UK in the Great Recession. National Institute Economic Review 215(1), R23 - R33.

Benz, M.; Frey, B. (2008): The value of doing what you like: Evidence from the self-employed in 23 countrie Journal of Economic Behaviour and Organization, 68, 445-455.

Berglund, V. (2014): Entrepreneurs subjective well-being and job satisfaction: does personality matter? Umeå University, Faculty of Social Sciences, Department of Sociology. URL: <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A762866&dswid=-8236>.

Bijedić, T.; Kay, R.; Schleppehorst, S.; Suprinovic, O. (2017): Familienunternehmen von Migranten, in: IfM Materialien Nr. 261, Bonn.

Blanchflower, D.G. (2004): Self-employment: More may not be better. In: NBER working paper No. 10286, Cambridge, MA.

Block, J.; Koellinger, P. (2009): I can't get no satisfaction - Necessity entrepreneurship and procedural utility. Kyklos, 62(2), 191-209.

Block, J; Sander, P. (2009): Necessity and Opportunity Entrepreneurs and their Duration in Self-employment: Evidence from German Micro Data. Journal of Industry, Competition and Trade, 9 (2), 117-337.

- Bonin, H .; Constant, A .; Tatsiramos, K.; Zimmermann, K. (2009): Native-migrant differences in risk attitudes, *Applied Economics Letters*, 16(15), 1581-1586.
- Brixy, U .; Sternberg, R.; Vorderwülbecke, A. (2013): Unternehmensgründungen durch Migranten. IAB-Kurzbericht, Nr.25/2013, 1-7.
- Brooks, A .; Huang, L .; Kearney, ; Murray, F. (2014): Investors prefer entrepreneurial ventures pitched by attractive men. *Proceedings of the National Academy of Sciences*, 111(12), 4427-4431.
- Caliendo, M.; Kritikos, A. (2009): "I Want to, But I also Need to": Start-Ups Resulting from Opportunity and Necessity. IZA Discussion Paper 4661.
- Clark, A. E. (1996): Job satisfaction in Britain. *British journal of industrial relations*, 34(2), 189-217.
- Caliendo, M.; Kritikos (2010): Start-ups by the Unemployed: Characteristics, Survival and Direct Employment Effect, *Small Business Economics* 35, 71 -92.
- Carree, M.; Verheul, I. (2011): What Makes Entrepreneurs Happy? Determinants of Satisfaction Among Founder, *Journal of Happiness Studies*, 13(2), 371-387.
- Chrysostome, E. (2010): The success factors of necessity immigrant entrepreneurs: In Search of a model, *Thunderbird International Business Review*, 52(2), 137-152.
- Dávila, A.; Mora, M. (2013): *Hispanic Entrepreneurs in the 2000s: An Economic Profile and Policy Implication*, Stanford University Press.
- Ebbers, I .; Mikkelsen, K .; Piper, A. T. (2018): Existenzgründung von Frauen im Care-Bereich–Effekte von Arbeitszeit, Arbeitsform und Einkommen auf die Arbeits- und Lebenszufriedenheit. In *Entrepreneurship im Gesundheitswesen*. Springer Gabler, Wiesbaden, 201-219.
- Ebbers, I.; Piper, A. T. (2017) Satisfaction comparisons: women with families, full-time and part-time self-employed, *International Journal of Gender and Entrepreneurship*, 9(2), 171-187.
- Fairlie, R.W.; Fossen, F.M. (2017): Opportunity versus Necessity Entrepreneurship: Two Components of Business Creation. In: Stanford Institute for Economic Policy Research, SIEPR Discussion Paper No. 17-014, Stanford, CA.
- Georgellis, Y.; Yusuf, A. (2016): Is Becoming Self- Employed a Panacea for Job Satisfaction? Longitudinal Evidence from Work to Self- Employment Transition *Journal of Small Business Management*, 54(S1), 53-76.
- Goebel, J.; Grabka, M.; Liebig, S.; Kroh, M.; Richter, D.; Schröder, C.; Schupp, J. (2018): The German Socio-Economic Panel (SOEP): Jahrbücher für Nationalökonomie und Statistik/Journal of Economics and Statistics, URL: <https://doi.org/10.1515/jbnst-2018-0022>.

- Grözinger, G., Matiaske, W., Tobsch, V. (2008): Arbeitszeitwünsche, Arbeitslosigkeit und Arbeitszeitpolitik: SOEPpapers on Multidisciplinary Panel Data Research 103.
- Gries, T.; Naude, W.A. (2011): Entrepreneurship and human development: A capability approach. In: Journal of Public Economics, Nr. 95(3), 216-224.
- Hetschko, C. (2016): On the misery of losing self-employment. Small Business Economics, Nr. 47(2), 461-478.
- Hilbrecht, M.; Lero, D. (2014): Self-employment and family life: Constructing work-life balance when you're 'always on'. Community, Work; Family, 17(1), 20-42.
- Kay, R.; Schneck, S. (2012): Hemmnisse und Probleme bei Gründungen durch Migranten. IfM-Materialie, Nr.214.
- Kloosterman, R.; van der Leun, J.; Rath, J. (1999): Mixed Embeddedness: (In)formal Economic Activities and Immigrant Businesses in the Netherlands, International Journal of Urban and Regional Research, Vol. 23(2), 253-267.
- Kloosterman, R.; Rath, J. (2003): Immigrant entrepreneurs: Venturing abroad in the age of globalization: Berg.
- Koellinger, P.; Thurik, R. (2012): Entrepreneurship and the Business Cycle. Review of Economics and Statistics 94(4), 1143-1156.
- Kohn, K.; Spengler, H. (2007): Unternehmensgründungen von Personen mit Migrationshintergrund, in: KfW Research: WirtschaftsObserver online, Nr. 165, Frankfurt am Main.
- Lange, T. (2012): Job satisfaction and self-employment: autonomy or personality? Small Business Economics, 38(2), 165-177.
- Lehmer, F.; Ludsteck, J. (2013): Lohnanpassung von Ausländern am deutschen Arbeitsmarkt: Das Herkunftsland ist von hoher Bedeutung. IAB-Kurzbericht, Nr.1/2013, 1-7.
- Leicht, R.; Langhauser, M. (2014): Ökonomische Bedeutung und Leistungspotenziale von Migrantenunternehmen in Deutschland, in: Friedrich-Ebert-Stiftung (Ed.): WISO Diskurs, September 2014.
- Lyons, E.; Zhang, L. (2017): Creating Entrepreneur: The Impact of Entrepreneurship Programs on Minorities, American Economic Review: Papers; Proceedings, 107(5), 303-307.
- Naude, W.; Amoros, J.E.; Cristi, O. (2014): Surfeiting, the appetite may sicken: entrepreneurship and happiness, Small Business Economics, Nr. 42, 523-540.
- Parker, S. (2009): The Economics of Entrepreneurship. Cambridge University Press, UK.
- Rasel, B. (2014): Opportunity-driven Immigrant Entrepreneurship. A comparative case study of immigrant entrepreneurship in the Norwegian-host country context, University of Oslo.

- Reynolds, P.; Hay, M.; Camp, M. (2002): Global Entrepreneurship Monitor, Executive Report, Boston.
- Roche, K. (2015): Job satisfaction and the educated entrepreneur, *Journal of Small Business & Entrepreneurship*, 27(4), 353-368.
- Seidel, M.; Polzer, J.; Stewart, K. (2000): Friends in High Places: The Effects of Social Networks on Discrimination in Salary Negotiations, *Administrative Science Quarterly*, 45(1), 1-24.
- Sevä, I.; Vinberg, , Nordenmark, M.; Strandh, M. (2016): Subjective well-being among the self-employed in Europe: macroeconomy, gender and immigrant status, *Small Business Economics*, Nr.46, 239-253.
- Socio-Economic Panel (SOEP): data for years 1984-2014, version 31, SOEP, 2015, URL: 10.5684/soep.v31.
- Statistisches Bundesamt (2017): Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund, Ergebnisse des Mikrozensus 2016, Fachserie 1, Reihe 2.2, Wiesbaden.
- Stephan, U.; Roesler, U. (2010): Health of entrepreneurs v employees in a national representative sample, *Journal of Occupational and Organizational Psychology*, 83(3), 717-738.
- Sternberg, R.; Brixy, U.; Vorderwülbecke, A. (2013): Global Entrepreneurship Monitor, Länderbericht Deutschland 2012. Hannover, Nürnberg.
- Teixeira, C.; Lo, L.; Truelove, M. (2007): Immigrant entrepreneurship, institutional discrimination, and implications for public policy: a case study in Toronto, *Environment and Planning C: Government and Policy*, 25(2), 176-193.
- Thurik, Roy; Verheul, Ingrid; Hessels, Jolanda; van der Zwan, Peter (2010): Factors Influencing the Entrepreneurial Engagement of Opportunity and Necessity Entrepreneurs Scales, Research Reports H201011, EIM Business and Policy Research.
- Verheul, I.; Thurik, A.R.; Hessels, J.; Van der Zwan, P.W. (2010): Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneur Research Reports, EIM Zoetermeer.
- Vinogradov, E.; Isaksen, E. (2008): Survival of new firms owned by natives and immigrants in Norway, *Journal of Developmental Entrepreneurship*, 13(1), 21–38.
- Volery, T. (2007): Ethnic entrepreneurship: a theoretical framework. In L. Dana (Ed.), *Handbook of Research on Ethnic Minority Entrepreneurship: A Co-Evolutionary View On Resource Management*, Cheltenham: Edward Elgar Publishing Limited, 30-41.
- Xavier, S.; Kelly, D.; Kew, J.; Herrington, M.; Vorderwülbecke, A. (2012): Global Entrepreneurship Monitor 2012 Global Report, Babson Park, Santiago, Kuala Lumpur, London.

Zhang, Z. (2010): The Home Country's Role in Shaping Chinese Immigrant Entrepreneurship, Auckland University of Technology, Auckland.

## Appendix

Appendix A1: Descriptive statistics, females, SOEP data 1984-2014

Table A1: FEMALES	(1) no migrant	(2) migrant	(3) 1st generation migrant	(4) 2nd generation migrant
Job satisfaction	7.12 (2.05)	7.14 (2.10)	7.11 (2.11)	7.21 (2.08)
Real income	20.97 (18.97)	18.40 (16.96)	17.71 (14.42)	19.70 (20.87)
Deutsch	1.00 0.00	0.53 (0.50)	0.40 (0.49)	0.78 (0.42)
Full time	0.46 (0.50)	0.44 (0.50)	0.44 (0.50)	0.43 (0.49)
Self-employed	0.08 (0.27)	0.06 (0.23)	0.06 (0.23)	0.06 (0.23)
Employed	0.80 (0.40)	0.86 (0.34)	0.90 (0.30)	0.80 (0.40)
Government employed	0.06 (0.24)	0.02 (0.14)	0.01 (0.09)	0.04 (0.19)
Apprentice	0.05 (0.22)	0.06 (0.24)	0.04 (0.19)	0.10 (0.30)
Work five hours more than desired	0.28 (0.45)	0.23 (0.42)	0.22 (0.42)	0.25 (0.44)
Work five hours less than desired	0.25 (0.43)	0.29 (0.45)	0.28 (0.45)	0.30 (0.46)
Workwithin	0.47 (0.50)	0.48 (0.50)	0.50 (0.50)	0.45 (0.50)
Very good health	0.11 (0.31)	0.13 (0.33)	0.12 (0.32)	0.14 (0.35)
Good health	0.47 (0.50)	0.44 (0.50)	0.44 (0.50)	0.46 (0.50)
Satisfactory health	0.30 (0.46)	0.30 (0.46)	0.31 (0.46)	0.29 (0.46)
Less than satisfactory health	0.11 (0.32)	0.13 (0.34)	0.14 (0.35)	0.11 (0.31)
Years of education	12.12 (3.29)	10.80 (3.39)	10.42 (3.11)	11.55 (3.72)
Persons in household	2.89 (1.22)	3.23 (1.46)	3.35 (1.46)	3.00 (1.42)
Children in household	0.69 (0.93)	0.86 (1.05)	0.93 (1.08)	0.73 (0.98)
Age 15-20	0.04 (0.20)	0.05 (0.23)	0.03 (0.17)	0.10 (0.30)
Age 21-30	0.19 (0.39)	0.21 (0.40)	0.17 (0.38)	0.26 (0.44)
Age 31-40	0.26 (0.44)	0.27 (0.44)	0.29 (0.45)	0.23 (0.42)
Age 41-50	0.30 (0.46)	0.27 (0.45)	0.30 (0.46)	0.23 (0.42)
Age 51-60	0.19 (0.39)	0.17 (0.38)	0.19 (0.39)	0.14 (0.35)
Age 61+	0.03 (0.18)	0.03 (0.16)	0.02 (0.15)	0.03 (0.17)

East Germany	0.27 (0.44)	0.07 (0.25)	0.03 (0.16)	0.15 (0.35)
--------------	----------------	----------------	----------------	----------------

Appendix A2: Descriptive statistics, females, SOEP data 1984-2014

Table A2: MALES	(1) no migrant	(2) Migrant	(3) 1st generation migrant	(4) 2nd generation migrant
Job satisfaction	7.14 (2.00)	7.17 (2.08)	7.16 (2.10)	7.20 (2.03)
Real income	38.57 (36.18)	32.45 (25.85)	31.64 (21.21)	34.24 (33.35)
Deutsch	1.00 (0.00)	0.44 (0.50)	0.31 (0.46)	0.74 (0.44)
Full time	0.82 (0.39)	0.76 (0.42)	0.78 (0.41)	0.72 (0.45)
Self-employed	0.12 (0.33)	0.08 (0.27)	0.07 (0.26)	0.10 (0.30)
Employed	0.73 (0.45)	0.83 (0.37)	0.88 (0.32)	0.72 (0.45)
Government employed	0.09 (0.29)	0.02 (0.14)	0.01 (0.10)	0.05 (0.22)
Apprentice	0.05 (0.21)	0.06 (0.24)	0.03 (0.18)	0.12 (0.33)
Work five hours more than desired	0.35 (0.48)	0.26 (0.44)	0.23 (0.42)	0.32 (0.47)
Work five hours less than desired	0.15 (0.36)	0.18 (0.39)	0.16 (0.37)	0.23 (0.42)
Work within	0.49 (0.50)	0.55 (0.50)	0.60 (0.49)	0.44 (0.50)
Very good health	0.11 (0.32)	0.16 (0.37)	0.15 (0.36)	0.17 (0.38)
Good health	0.49 (0.50)	0.48 (0.50)	0.48 (0.50)	0.49 (0.50)
Satisfactory health	0.30 (0.46)	0.26 (0.44)	0.27 (0.44)	0.25 (0.43)
Less than satisfactory health	0.09 (0.29)	0.10 (0.30)	0.11 (0.31)	0.08 (0.27)
Years of education	12.21 (3.37)	10.71 (3.28)	10.30 (2.90)	11.71 (3.74)
Persons in household	3.06 (1.28)	3.55 (1.60)	3.70 (1.65)	3.22 (1.44)
Children in household	0.76 (1.01)	1.07 (1.20)	1.19 (1.25)	0.79 (1.04)
Age 15-20	0.04 (0.20)	0.06 (0.23)	0.03 (0.17)	0.11 (0.31)
Age 21-30	0.17 (0.38)	0.22 (0.42)	0.19 (0.39)	0.30 (0.46)
Age 31-40	0.26 (0.44)	0.27 (0.45)	0.28 (0.45)	0.25 (0.44)
Age 41-50	0.28 (0.45)	0.25 (0.44)	0.28 (0.45)	0.20 (0.40)
Age 51-60	0.20 (0.40)	0.16 (0.37)	0.19 (0.39)	0.11 (0.32)
Age 61+	0.05	0.03	0.03	0.03

	(0.22)	(0.18)	(0.18)	(0.17)
East Germany	0.25	0.05	0.02	0.13
	(0.43)	(0.22)	(0.13)	(0.34)

Appendix A3: Official labour force proportions by migration status.

DISTRIBUTION RELATIVE TO BASIC POPULATION						
	Total		Non-Migrants		Migrants	
	%	% Sub-population	%	% Sub-population	%	% Sub-population
Population	100		77,5		22,5	
Employed	100	50,2	79,2	51,7	20,2	44,9
Unemployed	100	2,2	64,7	1,8	35,3	3,4
Self-employed, no employees			80,1	2,9	19,9	2,5
Self-employed, employees			83,9	2,4	16,1	1,6
Family helpers			82,8	0,2	17,2	0,1
Public officers (Beamte)			95,6	3,0	4,4	0,5
Salary employees			82,1	33,2	17,9	24,8
Wage employees			67,4	8,1	32,6	13,5
Trainees			76,2	1,8	23,8	1,9
Non tenured employees			68,1	3,0	31,9	4,9
Tenured employees			78,9	36,8	20,1	31,8
Full time employed			80,4	35,7	19,6	30,0
Part time employed			78,9	14,2	21,1	13,1

Source: Statistisches Bundesamt (Destatis)(2017).

Appendix A4: Income groupings by migration status.

DISTRIBUTION RELATIVE TO THE BASIC POPULATION			
Net Income	Total	Non-Migrants	Migrants
Up to 1.300 Euro	30.629	23.083	7.610
1.300-2.000 Euro	17.359	14.375	2.984
2 -3.200 Euro	12.139	10.312	1.827
3.200 Euro and more	5.272	4.662	610

Source: Statistisches Bundesamt (2017): Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund, Ergebnisse des Mikrozensus 2016