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11. Migrant self-employment in Germany: on the risks, characteristics and determinants of precarious work

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INTRODUCTION

The increased significance of (solo) self-employment in the German labour market during the last two decades raised the suspicion that this goes hand in hand with a loss of autonomy, economic substance and social security of the self-employed (Bührmann and Pongratz, 2010; Bögenhold and Fachinger, 2016; Brenke and Beznoska, 2016; Conen et al., 2016; see also the contributions of other authors in this book). Regarding the central role of education for successful entrepreneurship (Brüderl et al., 1996) this may be surprising since people who start a business are generally better educated than ever before (Arum and Müller, 2004; Fritsch et al., 2015). Therefore, it can be assumed that post-Fordism and flexible work arrangements, in particular subcontracting and marginal, involuntary or pseudo self-employment, has captured a large portion of the high-skilled professions in the service sector – a process, which ultimately leads to low income levels and poor working conditions (Bögenhold and Fachinger, 2016).

At the same time, another trend in Germany becomes clear: while self-employment among non-migrants decreased by 4 per cent between 2005 and 2016, there has been a 24 per cent growth of self-employment among those with a migrant background during the same period (Leicht and Berwing, 2017). Therefore migrant self-employment is becoming a focal issue for self-employment overall. This raises the question to what extent migrant self-employment is precarious. After all, in the portrayal of the mainstream media, immigrant businesses are often associated with fast-food (e.g. döner-kebab, pizza) and greens groceries. In the scientific debate, migrant self-employment is seen as niche economy with a high risk of precarious work (Apitzsch, 2006, p. 741; Lehmann et al., 2009, p. 32).

At first glance, there seem to be signs that precarious and migrant self-employment correspond to one another: Precarious self-employment typically refers to business activities that entail not only lower incomes but also excessive working hours and self-exploitation (Vosko et al., 2003; Bögenhold and Fachinger, 2007; Schulze Buschoff, 2007). Many scholars see such working conditions as characteristics of migrant entrepreneurship – at least regarding the debate around the formation and strategies of ethnic economies in the Anglo-American literature (Bonacich and Modell, 1980; Waldinger et al., 1990; Light and Gold, 2000). Researchers often assume that discrimination and (the threat of) unemployment forces immigrants into self-employment in sectors with low qualification requirements and low entry barriers. Following this narrative, immigrants are condemned to survive in highly competitive markets and sweatshops leaving them with low earnings, unpaid family work and in a vulnerable market position. In Germany however, the labour market is thriving and the share of migrant business owners that run restaurants or retail stores is decreasing, whereas more and more start businesses in knowledge-intensive services and other industries that require higher qualifications (Leicht and Berwing, 2017). This is mainly due to the changes in the social structure of immigrants, in particular among those groups that arrived recently.

Against the backdrop of this debate, we address three questions: First, we ask, how widespread the phenomenon of precarious self-employment is among migrants and non-migrants. Second, to shed

further light on the topic, we ask, in which industries and in which fields of occupation precarious migrant self-employment is prevalent. Third, using multivariate analysis, we seek to answer the question, which the most important drivers of precarious migrant self-employment are.

So far, to our knowledge, there has been no attempt to measure the extent of precarious work among self-employed migrants in Germany. For this, we create a composite indicator variable from three different key figures (income, working hours and underemployment). The indicator allows us to address different aspects of precarious self-employment in different social and economic contexts. In so doing, we contribute to research on migrant self-employment as well as to research on precarious work. To our knowledge, no study in Germany (except for the qualitative studies by Schmiz, 2013 and Yildiz, 2017) addresses the question of precariousness amongst self-employed with foreign roots.

PREVIOUS RESEARCH

Different Fields of Research With Different Views on Self-employment

It is remarkable that classical approaches to entrepreneurship research are not suitable for understanding precarious self-employment. Scholars are less interested in by what means business owners organize their livelihood, but rather in how they organize their enterprise strategically and influence the overall economy. Thus, economists rarely deal with social risks on the individual level or even with precariousness (Bührmann and Pongratz, 2010). This may be partially explained by the fact that self-employment is not seen as an entrepreneurial activity – even less so when dealing with people who are not employers. After all, in the eyes of economists a ‘real’ entrepreneur is commonly considered a protagonist who provides innovation and additional jobs (e.g. Henrekson and Sanandaji, 2014). By contrast, sociological research on immigrant or ethnic entrepreneurship is much closer to the life world of the self-employed. However, in this context the question of the extent of precariousness does not acutely arise since it is commonly assumed that “immigrant businesses are usually unprofitable” (Light, 2005, p. 655) and based on instability, uncertainty and “scanty returns for their owners” (Waldinger et al., 1990, p. 23).

Precarious work has mainly been discussed in the research on industrial relations, labour markets and social inequality. In these fields, the self-employed were not often considered an interesting subject of study. This turned however, by the end of the last century when the debate on neo-liberal policies and flexible work arrangements like subcontracting and outsourcing was in full swing (McManus, 2000; Vosko et al., 2003). At the same time, in many advanced economies, the historic decline of non-agricultural self-employment has been reversed (Luber and Leicht, 2000; OECD, 2000; Arum and Müller, 2004). Such findings, but also the contemporary increase of self-employment in certain countries raised the suspicion that this goes hand in hand with the spread of precarious work – especially in the case of Germany where, until recently, the number of solo self-employed increased in large steps (Brenke and Beznoska, 2016; Conen et al., 2016).

However, migrants have played little role in the discourse on post-Fordism and self-employment. After all, the main focus was on native academics, whose investments into education were lost, having been forced out of the hitherto secure salaried employment into unstable and insecure jobs in the growing service sector (i.e. the ‘grey area’ between wage and self-employment). Likewise, this was long the case for less educated migrants in Germany, with the difference that they were forced from the shrinking manufacturing sector into unemployment, from where many of them fled into self-employment. Regarding the extent of precarious work, the implications for both groups (natives and migrants) have been assessed quite differently.

On the Role of Self-employed Migrants in the German Debate

So far, research on post-Fordism arrangements among immigrants focused mainly on those in wage- and salary-employment, who were the first victims of rationalization, globalization and flexibilization of work in the industrial sector (Sassen, 1990; Marcuse, 1997; Kloosterman, 2010). For decades, the unemployment rate among migrants has been about twice that of the native population. In addition, the earlier immigration cohorts, especially the former *Gastarbeiter* ('guest workers') and their offspring, are on average poorly qualified. They have also been reported to work more frequently in sectors that are characterized by bad working conditions, few or no chances for upward mobility and lower incomes vis-à-vis natives (Brinkmann et al., 2006).

These are just a few of the conditions under which an increasing number of German migrants have decided to pursue self-employment endeavours. However, in past research, the focus has been on the social position migrants have taken by entering self-employment, largely overlooking the precarious conditions they have left behind. In the mainstream discussion, the self-employment activities of migrants are seen as distress-originating ventures thought to occur in ethnic and economic niches with low incomes under exploitative circumstances out of survival motives (Wilpert, 2000; Lehmann et al., 2009; Schmitz, 2013). A large portion of the often qualitative studies in Germany hereby focus on 'ethnic economies' in socially weak quarters, where migrants operate on limited (and allegedly ethnic) markets and quickly reach upper limits on profitability. That topos of stunted migrant livelihoods dominated the public and scientific debate.

In the meantime, the development of migrant self-employment in Germany reveals a very different picture. The enlargement of the European Union at the beginning of the twenty-first century led to increasing immigration to Germany along with a considerable number of well-educated people as well as of lower qualified immigrants – who often (in)voluntarily entered self-employment directly after crossing the border. The overall growth in self-employment can be traced back mainly to the expansion of self-employed migrants in knowledge-intensive service industries and in the construction sector. As one of the results, the proportion of innovative start-ups among people from certain regions of origin (e.g. North America, South-East Asia or the Middle East) is higher than in the native population. In contrast, the prevalence of self-employed migrants in food services, catering and retail trade decreased considerably (Leicht and Berwing, 2017). Even though there is still a big stock of low-skilled immigrants in Germany stemming from earlier migration cohorts, this development gradually modified the social composition of migrant self-employment in terms of qualifications, occupations and industry affiliation and led to a greater heterogeneity (Leicht et al., 2017).

Influence of Resources, Opportunity Structures and the Institutional Environment

Existing research suggests that the absence of certain individual resources, mainly the lack of adequate qualifications, language skills or work experience, raises the risk of precarity or failure (Brüderl et al., 1996). The degree of new venture success is also determined by gender, age and social origin (Arum and Müller, 2004). However, influencing factors which are closely linked to the particular situation of migrants are of special interest. In this regard, substantial disadvantages also derive from unequal opportunity structures. Such opportunities may differ, for instance, because people with foreign roots have fewer chances of inheriting or taking over a well-established company and obtaining financing (Leicht and Berwing, 2017).

Further, the individual chances of entrepreneurial stability should be specified in view of inequality and social placement and thereby also on the basis of occupational differences. The unequal access to certain markets, economic sectors and occupations presents a major disparity in the opportunity

structure of migrants (Ram et al., 2017). This could even be the case when the qualifications of migrants improve since they can only work with the resources made available to them by their environments (Waldinger et al., 1990). That means that the quality of self-employment is also shaped by rules and regulations and by how migrants are embedded into institutional environments (Kloosterman and Rath, 2001). Especially in Germany, access into certain areas of self-employment, namely the liberal professions ('Freie Berufe') or craft trades ('Handwerk'), is strictly regulated and reserved for those with German educational certificates. Corresponding foreign certificates are often not recognized by German institutions. Thus, self-employed migrants run the risk of exclusion from the zone of integration and participation.

Scenarios in the Face of Markets, Flexibility and Educational Differences

However, as the debate focuses on the influence of post-Fordism arrangements, the question arises to what extent specific forms of labour market flexibilization, such as outsourcing and subcontracting, are responsible for the growing number of migrant-led businesses. What are additional drivers on the macro level (e.g. opportunity structures) and how do they correspond with individual factors (e.g. educational attainment)? A look at the fields of self-employment that have most clearly increased and could have led to low incomes and bad working conditions provides us with a clearer picture. Against the backdrop of institutional settings and changing markets in Germany there are a number of scenarios in which less educated migrants are either forced or misled into precarious work: Due to low barriers to market entry, sweatshops in the food services and retail trade are still a breeding ground for migrant businesses since these sectors are increasingly favoured by demographic changes and an ongoing fast food trend. Further, it seems highly probable that the more recent amendment of the crafts code in Germany flooded the hairdressing sector with low skilled business founders. Regarding the construction boom in Germany, scenarios can be different: First, the strong demand for cheap labour tempted thousands of craftsmen from Eastern European countries to work on their own account beyond the borders of their respective country. Here, the great majority works freely and independently (Leicht and Langhauser, 2014). This group is in direct contact with private clients. By contrast, another portion of the 'newcomers' are often hired by big construction companies as 'quasi self-employed' subcontractors (Leicht and Langhauser, 2014). The latter is an example in which manner post-Fordist work arrangements appear in migrant self-employment.

Taken together these scenarios alone demonstrate the plurality of factors that may lead to precarious work. Since most self-employed migrants are additionally confronted with the same challenges as natives it is quite understandable why self-employed migrants – despite the described catching-up process – are still overrepresented in sectors with low qualification requirements, and why they earn less than self-employed natives on average (Leicht et al., 2015). Further, their volume of working hours is slightly higher, in particular regarding certain groups of origin. This is, however, much more an effect of qualifications and the related economic sector (Leicht and Langhauser, 2014).

But what about the highly skilled migrants? Until now there are hardly any examples in the debate which give us reasons to believe that better educated migrants are overrepresented in professions that run the risk of precarious work. In fact, empirical studies on the income of self-employed migrants in Germany conclude that income differentials vis-à-vis natives disappear as education levels increase (Leicht et al., 2015; Block et al., 2011). However, this positive relationship between education and income does not necessarily hold for all groups. We assume that native Germans, who are more likely to work in the shelter of highly regulated liberal professions, are protected against 'outside' competitors. This presumably largely prevents a race to the bottom for natives. Since migrants frequently experience difficulty getting their degrees or professional accreditations recognized in Germany and may face discrimination, they have a harder time accessing liberal professions. Due to this restricted market access, migrants can therefore

hardly fall back on this kind of protection. This leads them to utilize their qualifications in other and oftentimes less profitable fields. Cultural professions present an exception to this rule and are among the fields in which both highly qualified migrants and natives are more strongly exposed to the risks of the market, since (in Germany) these are neither subject to the institutionally secured self-regulation of the professions nor do they have access to a corporatist regulation mode (Gottschall and Betzelt, 2001). Therefore, a question of increasing importance becomes not only whether the foreign qualifications of migrants are recognized in Germany, but also in which markets they can (best) utilize them.

Indicators of Precarious Work in Self-employment

Indicators to measure the precariousness among the self-employed are limited. There are theoretical and empirical challenges with this as well, since success in self-employment is dependent not only on personal and firm resources, but also on markets (Pongratz and Simon, 2010). In the mainstream literature, the *solo* self-employed are generally suspected of working under precarious conditions. Own account workers are seen as a product of the de-limitation of work, in particular the dissolution of the boundaries between dependent labour and self-employment. Here, a grey area of atypical forms of employment has evolved, among them subcontractors, freelancers, false or involuntary self-employed, temporary workers and job nomads. The extent to which the ‘Brazilianization’ (Beck, 2000) of Western society includes self-employment cannot be proven alone by the fact that there are fewer and fewer employers. The expansion of the knowledge-intensive services sector and the spread of information technology increases the demand for those professional activities which are usually conducted alone (Bögenhold and Leicht, 2000).

Therefore, the suspected precariousness requires solid evidence of social risks and inequality. Since subjective perceptions like the ‘(in)voluntariness’ of self-employment are difficult to measure (Kautonen et al., 2015) and such measures are not included in existing datasets, the majority of empirical research in Germany concentrates on existing ‘hard’ indicators. Therefore, researchers have investigated which income levels the self-employed reach and to which degree these are covered by social security in terms of insurance coverage, retirement preparations and living conditions (Betzelt and Fachinger, 2004; Schulze Buschoff, 2007; Wingerter, 2009; Koch et al., 2011; Fritsch et al., 2015; Brenke and Beznoska, 2016; Conen et al., 2016). Interpretations vary according to different statistical parameters (median, mean value, hourly rate, pre-tax etc.). Since other authors in this book contribute to these issues, we here forego the details of this particular debate. The structures that are investigated shed light on how precarious (solo) self-employment is in regard to individual characteristics (e.g. income, working hours and conditions). But certain indicators of precarious work overlap when observed at the individual level. Due to this interference it is difficult to assess the total numbers of self-employed that are actually affected by precariousness. Further, since no single database includes all indicators of precariousness, a complete indicator that encompasses all forms of precariousness, is methodically very difficult to conceive.

OPERATIONALIZATION AND DATA

While there are well-established indicators to describe poverty, operationalizing precariousness empirically is a rather complex task. In contrast to poverty, precariousness is a much wider concept that, besides income levels, includes economic insecurity and economic vulnerability. Scholars utilize different measures to describe insecurity and vulnerability, but four dimensions seem to be crucial: (1) income, (2) job security, (3) access to professional development and (4) social security (Keller and Seifert, 2011). In order to answer the question how precarious the self-employment of migrants is, we need to draw comparison with other groups of the working population along these dimensions. However, since the

regulatory framework of dependent employment differs strongly from that of self-employment, such a comparison becomes especially difficult.

For dependent employment, the employment law and collective agreements define standards for income, job or social security and for advanced vocational training. These standards can be used to construct the concept of a standard employment relationship (Bosch, 2013) as a possible benchmark to evaluate, whether or not dependent employment is precarious. Albeit, those standards do not apply to self-employment, for example, there are no working time regulations for the self-employed. In self-employment, there is also no comparable equivalent to the working contract. In addition, in Germany there are no mandatory pension contributions for the self-employed. These legal differences make it difficult to find a multidimensional operationalization of precariousness that can be used across the total pool of employment.

Despite these obstacles, the German Microcensus presents a dataset (Federal Statistical Office of Germany 2011), which includes a set of indicators that can be used to examine the extent of precarious work. The Microcensus is based on an annual 1 per cent sample survey of all German households and is conducted by the Federal Statistical Office of Germany. For our analysis, we use the dataset from the scientific use file of the 2011 Microcensus, which includes about 230,000 employed people (Destatis, 2017). Among migrants, 33,000 are in dependent employment and 3,700 are self-employed with their principal activities.

To define migrants, we used the standard definition of migration background by the Federal Statistical Office of Germany: "... all persons who have immigrated into the territory of today's Federal Republic of Germany after 1949, and of all foreigners born in Germany and all persons born in Germany who have at least one parent who immigrated into the country or was born as a foreigner in Germany" Occupation is an important dimension to describe the different fields of self-employment. To classify occupation we used the classification of Blossfeld (Blossfeld, 1985; Schimpl-Neimanns, 2003). Since this classification is very detailed we summarized some categories, for example, all skilled workers and clerks into one category. On the other hand we split the class 'professions' up into 'professions', 'liberal professions' and 'liberal professions in culture and education', using a classification of the liberal professions (Suprinovič et al., 2011). We did this for different reasons: First, the class professions is very heterogeneous regarding self-employment. Professions include the liberal professions, which have high qualifying conditions that control access to these professions. Second, the markets of some of the liberal professions, for example, lawyers, engineers or physicians are protected by institutional regulations and therefore allow for higher incomes. Third, the liberal professions in culture and education, largely representative of cultural professions in general, which scholars assume are prone to precarious work (Gottschall and Betzelt, 2001; Gill and Pratt, 2008; Manske and Merkel, 2009).

In order to operationalize precariousness, we focused on three different indicators: income, working hours and underemployment. As a threshold value for income we use the minimum wage. The minimum wage was introduced in 2015, but the target of 8.50 € per working hour was already on the political agenda in 2011 (the year of our dataset). Since the Microcensus only includes net incomes, we had to estimate the net minimum wage. The minimum wage is at about 6.50 € per hour after taxes and social security contributions, which makes about 1060 € per month when employed full-time (working 39.5 hours per week). As a first step, these two values are our central thresholds to operationalize precariousness. We thus include individuals who earn higher monthly incomes by working longer hours. We also cover individuals with higher hourly incomes but lower monthly incomes. Additionally, we include extreme working hours as a further indicator, which we defined as working more than 60 hours per week. This threshold is 25 per cent higher than the maximum working hours of the German working hours law, which allows working 48 hours per week (§3 ArbZG/German Labor Time Law). Thereby, we are able to distinguish two subtypes of precarious work: first, individuals with extreme working hours and second, individuals who earn sufficient hourly incomes, but state that they are under-employed.

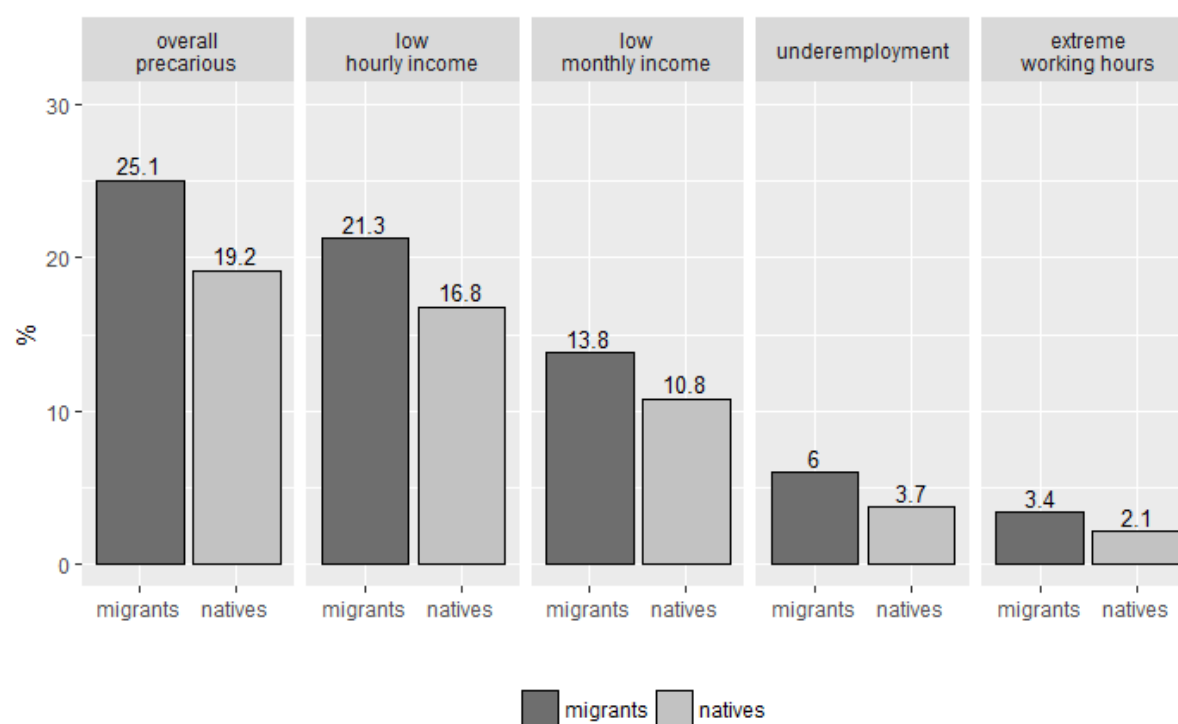
Therefore, for our analysis, we define precarious employment as income of less than 6.50 € per hour or less than 1060 € per month in a fulltime job or less than 1060 € per month working part-time, when the respondent states that he or she is under-employed.

We use this indicator to describe the extent of precarious work for self-employed migrants and natives. Employing logit regression analysis, we estimate the probabilities of precariousness for four different types of precarious working conditions: (1) low hourly income, (2) low monthly income, (3) extreme working hours and (4) under-employment.

RESULTS

Extent of Precarious Work in Migrant and Native Self-Employment

Beginning with our overall indicator for precariousness, our results show that, in Germany, migrants work more frequently in precarious self-employment than natives (25.1 per cent, 19.2 per cent, Figure 11.1). The most important component indicator of this is low hourly incomes. Second place are low monthly incomes. The difference between these two components shows that many self-employed can only increase their income by working extreme overtime hours. This is the case for 3.4 per cent of the migrants and 2.1 per cent of the natives. Underemployment also contributes to the overall indicator, where 6 per cent of the migrants and 3.7 per cent of the natives are underemployed. As in the case of the overall indicator, migrants always show higher values in the components of the indicator. There is also great variation across different groups. For example, 39.7 per cent of the self-employed of Asian origin work under precarious conditions, while this is only the case for 23.8 per cent of those from the former guest-worker recruitment countries and only for 19.7 per cent of the self-employed from Western industrial nations.



Source: Federal Statistical Office of Germany, Microcensus 2011, own calculations.

Figure 11.1 Precarious self-employment of natives and migrants

Due to our multidimensional definition of precariousness, the components of our precariousness indicator overlap, and we therefore have different subsets, which constitute different groups (Figure 11.2). The first group is composed of self-employed with low monthly incomes, representing 63 per cent of precarious migrants and natives. The second group are self-employed with low hourly incomes, which account for up to about 98 per cent of migrants as well as natives. The overlap between the former two groups – people who earn low hourly and monthly incomes – sums up to about 50 per cent of the self-employed migrants and natives. The third group consists of the underemployed and the fourth group of those with extreme working hours. Both of these groups are also subsets of the two income groups, since we excluded all persons either without low hourly income or without low monthly income. The size of groups three and four ranges between 9.8 per cent and 15.4 per cent. It should also be noted, that the share of underemployed and persons with extreme working hours is slightly higher for migrants (12.3 per cent versus 9.8 per cent and 15.4 per cent versus 12.0 per cent).



Source: Federal Statistical Office of Germany, Microcensus 2011, own calculations.

Figure 11.2 Venn diagram of precarious self-employment of natives and migrants

The size of two subsets is especially interesting. The first comprises self-employed with hourly incomes above 6.50 € but low monthly incomes, who at the same time state that they are underemployed. However, this group is quite small, comprising about 0.5 per cent of the total. The majority of the underemployed earn less or equal to 6.50 € per hour. A numerically more important group are those who earn more than 1060 € per month, but can only do so by working more than 35 hours per week. Most of them work between 35 and 60 hours, but more than a quarter of them work more than 60 hours per week. The share of the latter is slightly smaller for migrants. A tiny but exceptional group, are self-employed natives (0.2 per cent), who work more than 60 hours per week, but still say they are underemployed. A possible explanation for this strange combination is, that there is small group of self-employed who earn such low hourly incomes, that they are forced to work more than 60 hours a week to make living.

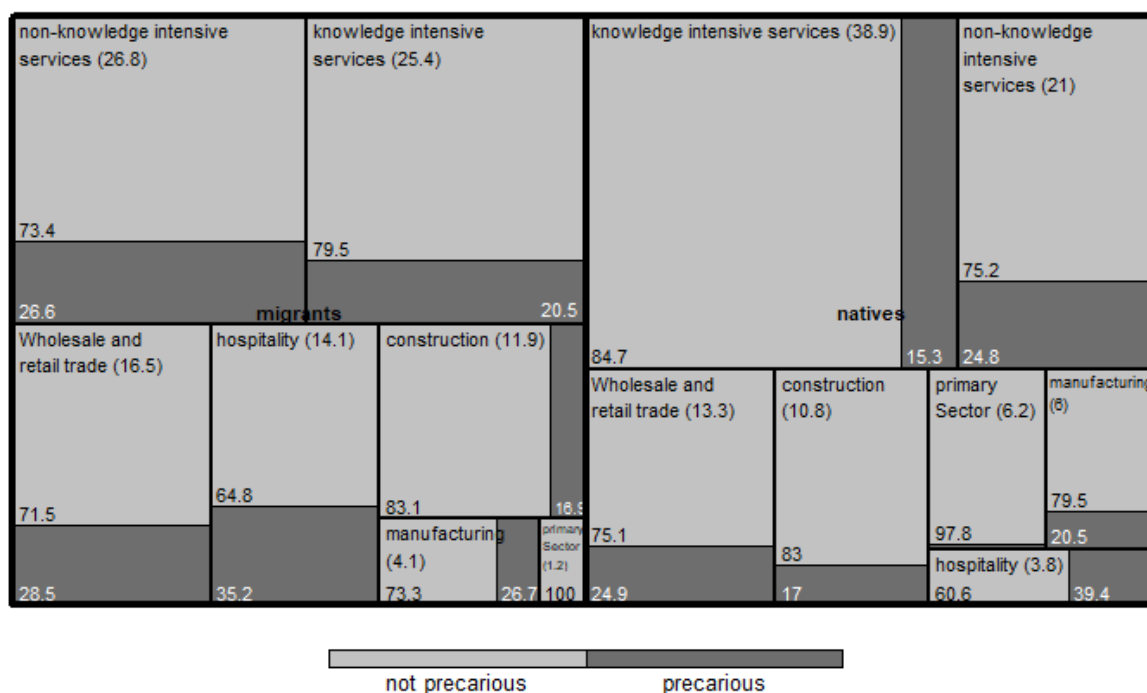
Fields of Precarious Work in Migrant Self-Employment

The branch of economic activity plays a major role in the literature about migrant self-employment. Many scholars see especially wholesale and retail trade as well as hotels and restaurants as the typical industries where migrant businesses emerge. In contrast to this, the analysis of the branches of economic activity in our analysis exhibits a more diverse picture. Our visualization as a tree map (Figure 11.3, panel *a*), shows that for both migrants and for natives, services are the most important sectors. In the case of migrants, knowledge intensive services are less relevant (25.4 per cent) than in the case of natives (38.9 per cent). Instead migrants are more often in non-knowledge intensive services (26.8 percent versus 21.0 per cent). The most obvious difference between migrants and natives is nevertheless the branch of hotels and restaurants. About 14 per cent of self-employed migrants are working in this branch, while only 3.8 per cent of native self-employed earn their living there. However, in wholesale and retail trade, a branch that many also see as typical for migrant self-employment, there is almost no difference between migrants and natives.

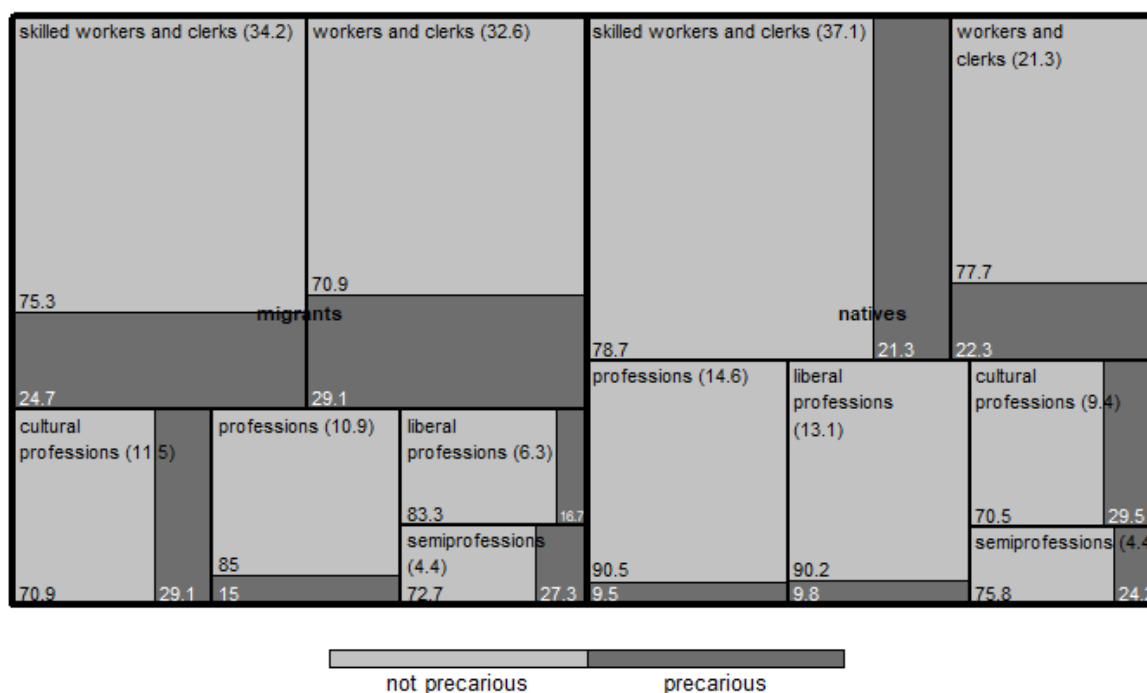
The comparison of the extent of precariousness in the different branches makes two phenomena visible. On the one hand, we can see that the branches of economic activity are important drivers of precarity and as such, their impact seems to be relatively homogenous for migrants and natives. When we sort the branches of economic activity by the proportion of precarious work, the ranking is very similar for the two groups. On the other hand, the extent of precarious work is predominantly bigger in the case of migrants. Interestingly, the probability of precarity is lower for (self-employed) migrants in the hotels and restaurant industries – though on a very high level (35.2 per cent versus 39.4 per cent).

In addition, we plotted a similar map for the distribution across occupations (Figure 3, panel *b*). Here we can see a very similar pattern. When we order the occupation by the proportion of precarious work the sequence is almost the same for migrants and natives. Only workers and clerks are at a higher position in the case of migrants. At the top and the low ends of the list, we can find occupations with high levels of education. At the low end are the semi-professionals and the cultural professions; at top end are the professions and the liberal professions, which in Germany include, for example, engineers, architects, lawyers and tax consultants. Similar to the branch of economic activity, in almost all occupations, migrants exhibit a higher probability of being engaged in precarious work. Further, migrants are less likely to be self-employed in the professions, in the group of semi-professionals or the liberal professions (33.2 per cent versus 41.6 per cent).

Panel a



Panel b



Source: Federal Statistical Office of Germany, Microcensus 2011, own calculations.

Figure 11.3 Precarious work in self-employment by branch of economic activity (panel a) and by occupation (panel b)

Determinants of Precarious Work

Which groups of self-employed are characterized by precariousness? This is not only a question of a person's labour market position. It is also determined by gender, age, education, occupation as well as social and ethnic origin. There has been little research in this direction. No empirical study addressed the risk of precarity among certain subgroups of self-employed in Germany along socio-demographic characteristics (Schmiz, 2013).

Research on the success of entrepreneurship activities emphasizes the importance of education (Brüderl et al., 1996; Arum and Müller, 2004; Fritsch et al., 2015). These findings are in line with the classic assumption of human capital theory (e.g. Mincer and Polachek 1974; Becker, 1985), that education reduces the risk of working under precarious conditions. Descriptive results of our education variable also confirm this standard argument (figure available upon request).

To see whether this assumption holds when considering the additional influence of the branch of economic activity and occupation, we calculated different logit regression models for the four different components of our overall precariousness indicator (Figure 11.1). This seemed sensible because we want to control for contradictory influences of the components of the overall precariousness indicator. Additionally, we controlled for age, gender, education, years in the current job of the self-employed, whether the entrepreneur is self-employed or an employer and whether the establishment is based in East or West Germany (Table 11.1). To address whether migrant self-employment is more precarious than the self-employment of natives, our central independent variable was initially migration background (analyses not shown). However, when we included this variable into our models, it was almost never statistically significant. The reason for this is the heterogeneity of the group 'migrants', for example, the precariousness value for Asians is at 39.7 per cent, while it is only 23.8 per cent for the former 'guest worker' countries (Spain, Greece, Turkey, Morocco, Portugal, Tunisia and former Yugoslavia). Therefore, we switched to the variable 'country of origin', which better reflects this heterogeneity. To crosscheck for differences between migrants and natives we also calculated two separate models for low monthly incomes for both groups (Table 11.2).

Starting with the models for low monthly and hourly incomes, we can see that the most important drivers for low incomes are the branch of economic activity and the occupation. As already noticeable in the descriptive results, particularly working in retail trade and hospitality raise the probability of earning less. Surprisingly, the separate models for migrants and natives show that, for migrants, the risk of precariousness is much lower in hospitality. It is also interesting to observe that working in knowledge intensive services does not statistically significantly lower the risk of precarity, although this sector has a high concentration of self-employed with high education levels. The reason for this becomes clear when we account for the impact of occupations: Namely, the self-employed in this kind of service are trained in the professions, liberal professions and semi-professions. While working in the professions or liberal professions lowers the probability of low income, working in the semi-professions and especially in the cultural professions raises this probability. There is also a strong negative effect of being a worker or a clerk.

The effects of the region of origin are very interesting. Overall, only a few regions of origin are statistically significant. For instance, only those self-employed with an Asian migration background or from Central and Eastern Europe are significantly more likely to earn less than natives. Strikingly, the coefficient for self-employed from the former guest worker recruitment countries (Anwerbeländer, e.g. Turkey, Yugoslavia, Italy, Spain, Portugal) is not significant and they were not likely to earn much worse than natives.

Moving on to the models for the underemployed and for the self-employed with extreme working hours, we can see how these models shed light on each other. We have already shown that working in wholesale and restaurants raises the risk of low incomes. Our model consistently shows that working in

those sectors also leads a higher probability of working extreme hours. Inverting the argument, underemployment is not common in these branches. Comparing the other branches of economic activity, we notice that compared to non-knowledge intensive services, all branches have a lower risk of underemployment. Turning to the occupations, the table depicts that underemployment is more likely in all occupations than in the professions, with the exception of the liberal professions. But, underemployment seems to be a very common phenomenon particularly in the cultural professions. Also, for these two models there is no clear pattern for migration background. People from the former recruitment countries are less likely to be underemployed, while self-employed from the Middle and Eastern Europe and the former USSR are often underemployed. Regarding working extreme hours, only people from the Near and Middle East and the class 'rest of the world' are likely to work extreme hours.

Table 11.1 Regression models for different components of the precariousness indicator

		Low monthly income			Low hourly income			Extreme working hours			Underemployment		
		Odds	l. 95%	h. 95%	Odds	l. 95%	h. 95%	Odds	l. 95%	h. 95%	Odds	l. 95%	h. 95%
Intercept		0,074 ***	0,053	0,105	0,14 ***	0,105	0,186	0,017 ***	0,008	0,032	0,088 ***	0,05	0,153
Branch of economic activity	Non-knowledge intensive services (ref.)												
	Knowledge intensive services	0,92	0,812	1,043	0,904 .	0,815	1,003	0,754 .	0,553	1,03	0,82 *	0,689	0,976
	Hospitality	↑ 2,162 ***	1,791	2,608	↑ 2,74 ***	2,337	3,212	↑ 4,933 ***	3,635	6,729	0,838	0,561	1,219
	Wholesale and retail trade	↑ 1,616 ***	1,406	1,857	↑ 1,709 ***	1,521	1,921	↑ 1,866 ***	1,403	2,494	0,645 ***	0,496	0,833
	Construction	↑ 1,022	0,865	1,207	0,975	0,846	1,124	0,799	0,544	1,161	0,475 ***	0,336	0,66
	Manufacturing	↑ 1,418 ***	1,165	1,719	↑ 1,556 ***	1,323	1,826	↑ 1,516 *	1,018	2,219	0,751	0,513	1,07
Primary sector		0,098 ***	0,055	0,16	0,089 ***	0,057	0,133	0,061 ***	0,01	0,197	0,037 ***	0,006	0,116
Occupation	Professions (ref.)												
	Workers and clerks	↑ 2,3 ***	1,903	2,791	↑ 2,184 ***	1,875	2,549	↑ 1,954 ***	1,416	2,732	↑ 1,492 *	1,049	2,162
	Skilled workers and clerks	↑ 2,071 ***	1,742	2,477	↑ 1,978 ***	1,724	2,277	↑ 1,448 *	1,073	1,979	↑ 1,418 *	1,026	2,002
	Semiprofessions	↑ 1,669 ***	1,271	2,183	↑ 1,855 ***	1,5	2,293	↑ 1,411	0,704	2,611	↑ 1,158	0,768	1,759
	Cultural professions	↑ 2,601 ***	2,105	3,226	↑ 2,43 ***	2,046	2,891	↑ 1,416	0,867	2,266	↑ 2,155 ***	1,533	3,094
Liberal professions		↑ 1,255 .	0,998	1,577	↑ 1,074	0,89	1,293	0,716	0,423	1,172	0,997	0,67	1,495
Education	Low (ref.)												
	Medium	0,787 **	0,661	0,941	0,908	0,782	1,057	0,966	0,702	1,347	0,84	0,639	1,12
	High	0,689 ***	0,573	0,833	0,727 ***	0,621	0,854	0,916	0,645	1,316	0,677 **	0,506	0,917
Type of self-employment	Self-employed (ref.)												
Employer		0,572 ***	0,517	0,632	0,605 ***	0,556	0,657	↑ 1,634 ***	1,343	1,993	0,154 ***	0,118	0,198
Gender	Male (ref.)												
	Female	↑ 1,344 ***	1,223	1,476	↑ 1,557 ***	1,44	1,683	0,734 **	0,597	0,9	↑ 1,721 ***	1,484	1,999
Age		0,995 *	0,991	0,999	0,992 ***	0,989	0,996	0,991 *	0,982	1	0,984 ***	0,978	0,991
Age of establishment	> 5 years (ref.)												
	3-5 years	↑ 1,14 .	0,99	1,311	↑ 1,116 .	0,991	1,255	↑ 1,042	0,768	1,391	↑ 1,252 *	0,996	1,564
	1-3 years	↑ 1,124 .	0,982	1,286	↑ 1,134 *	1,013	1,269	↑ 1,163	0,876	1,526	↑ 1,631 ***	1,339	1,979
	1 year	↑ 1,381 ***	1,181	1,612	↑ 1,247 ***	1,09	1,425	↑ 1,034	0,72	1,451	↑ 2,016 ***	1,623	2,491
East/West	West (ref.)												
	East	↑ 4,08 ***	3,702	4,496	↑ 3,307 ***	3,03	3,605	↑ 1,384 **	1,102	1,727	↑ 1,339 **	1,107	1,611
Country of origin	Natives (ref.)												
	Former recruitment countries	↑ 1,059	0,83	1,338	0,998	0,817	1,214	↑ 1,183	0,806	1,7	0,578 *	0,336	0,928
	Central and Eastern Europe	↑ 1,314 *	1,019	1,675	↑ 1,2 .	0,967	1,48	↑ 1,103	0,606	1,847	↑ 1,554 **	1,099	2,148
	Former USSR	↑ 1,094	0,768	1,522	↑ 1,065	0,795	1,408	0,267 .	0,044	0,842	↑ 1,645 *	1,073	2,436
	Near and Middle East	↑ 1,171	0,707	1,848	0,985	0,639	1,472	↑ 1,958 *	0,963	3,608	↑ 1,692	0,813	3,156
	Asia	↑ 2,004 ***	1,342	2,937	↑ 1,896 ***	1,324	2,695	↑ 1,141	0,544	2,152	0,988	0,379	2,126
	Western industrial nations	0,886	0,645	1,192	0,932	0,727	1,184	0,762	0,428	1,268	↑ 1,009	0,62	1,558
Rest of the world		0,845	0,523	1,296	↑ 1,021	0,715	1,425	↑ 2,044 *	0,993	3,744	↑ 1,014	0,528	1,773
llh			-7225			-9570			-2303			-3168	
llhNull			-9092			-11994			-2792			-4314	
McFadden			0,205			0,202			0,175			0,266	

. = 0.100, * = 0.005, ** = 0.990, *** = 0.999

Source: Federal Statistical Office of Germany, Microcensus 2011, own calculations.

Table 11.2 Comparison of regressions models for low monthly incomes for migrants and natives

		Migrants			Natives		
		Odds	conf. 5%	conf. 95%	Odds	conf. 5%	conf. 95%
Intercept		0,051 ***	0,023	0,111	0,084 ***	0,057	0,123
Branch of economic activity	Non-knowledge intensive services (ref.)						
	Knowledge intensive services	↑ 1,004	0,716	1,405	0,917	0,803	1,048
	Hospitality	↑ 1,713 **	1,191	2,463	↑ 2,326 ***	1,874	2,881
	Wholesale and retail trade	↑ 1,772 ***	1,278	2,456	↑ 1,598 ***	1,374	1,86
	Construction	0,914	0,588	1,395	↑ 1,043	0,872	1,245
	Manufacturing	↑ 1,052	0,552	1,878	↑ 1,454 ***	1,182	1,78
Primary sector		0	0	0,093	0,103 ***	0,058	0,168
Occupation	Professions (ref.)						
	Workers and clerks	↑ 2,829 ***	1,747	4,776	↑ 2,214 ***	1,807	2,727
	Skilled workers and clerks	↑ 2,243 ***	1,406	3,733	↑ 2,05 ***	1,706	2,478
	Semiprofessions	↑ 1,294	0,621	2,638	↑ 1,726 ***	1,292	2,298
	Cultural professions	↑ 2,077 *	1,196	3,703	↑ 2,694 ***	2,151	3,382
	Liberal professions	↑ 1,723	0,882	3,343	↑ 1,21	0,951	1,54
Education	Low (ref.)						
	Medium	0,744 *	0,566	0,981	0,773 *	0,62	0,973
	High	0,783	0,569	1,078	0,667 ***	0,53	0,846
Type of self-employment	Self-employed (ref.)						
	Employer	0,648 ***	0,504	0,829	0,567 ***	0,509	0,631
Gender	Male (ref.)						
	Female	↑ 1,644 ***	1,302	2,073	↑ 1,29 ***	1,166	1,428
Age		↑ 1,001	0,99	1,012	0,994 **	0,989	0,998
Age of establishment	> 5 years (ref.)						
	3-5 years	↑ 1,264	0,92	1,721	↑ 1,133	0,969	1,321
	1-3 years	↑ 1,309 .	0,969	1,757	↑ 1,067	0,918	1,238
	1 year	↑ 1,481 *	1,062	2,051	↑ 1,387 ***	1,164	1,646
East/West	West (ref.)						
	East	↑ 3,706 ***	2,552	5,328	↑ 4,121 ***	3,726	4,556
Ilh		-1183,258			-6234,02		
IlhNull		-1440,436			-7644,159		
McFadden		0,179			0,184		

. = 0.100, * = 0.005, ** = 0.990, *** = 0.999

Source: Federal Statistical Office of Germany, Microcensus 2011, own calculations.

Looking at our control variables, we observe different effects. First, we see, that gender has a strong influence. Women are of higher risk of underemployment and are more likely to earn low incomes, whereas they have a lower risk of working extreme hours. The variable ‘age of establishment’ shows that the younger an establishment is, the more likely it is for its owners to work precariously. Additionally, having employees makes it much less likely to work precariously, while it clearly raises the chances of working long hours. In the case of Germany it is important to control for regional effects given the history of reunification (as of 1989). Being self-employed in Eastern Germany raises the risk of low monthly incomes four times. This result has to be taken with a pinch of salt since we did not control for purchasing power parity. Nevertheless, taking the labour market situation in eastern Germany into account, the result seems to be plausible, although the size of the effect should be controlled by more sophisticated analyses (e.g. in a multilevel model).

Coming back to the effect of education, the starting point of this section, our results confirm the results of existing research. As could have been expected, we indeed observe a strong negative effect of education on the probability of low monthly incomes (i.e. additional education is likely to raise income). This is also true for the risk of low hourly incomes, although the effect is not as strong. However, higher educational levels are no panacea for precarity. While working in the liberal professions is not statistically significant for precariousness and is thus similar to the professions, the risk for precarity is clearly higher in the cultural professions and in the semi-professions. Both of the latter occupational classes are characterized by relatively high educational levels. Nevertheless, self-employed working in the cultural professions are much more likely to work precariously than skilled and unskilled workers and clerks. It is also noteworthy that the separate models (Table 11.2) show that high educational levels have no significant effect in the case of migrants. This is a stunning result, since existent research suggests that it should have a significant positive effect.

DISCUSSION

In the introduction, we posed three research questions: First, to what extent is migrant self-employment precarious? Second, in which industries and in which fields of occupation is precarious migrant self-employment prevalent? Third, is it possible to trace the precariousness of migrant self-employment back to certain determinants? In following, we discuss these three questions against the backdrop of our results and then point out the limitations of our approach and directions for future research.

Extent of Precarious Work and Fields of Precarious Work

Regarding the extent of precarious work, in the analysis our overall indicator shows that approximately every fourth self-employed migrant is precarious, while this is only the case for every fifth native. The most important components of our indicator are low monthly and low hourly incomes. For the dataset under study (the 2011 German Microcensus), in both of these components, migrants fare worse than natives. Extreme working hours and underemployment are less important components of the overall indicator in their extent. Nevertheless, in these components, the values of migrants have higher values by a third and are thus especially prone for underemployment and extreme working hours. Taken together, our results regarding the

extent of precarious migrant self-employment clearly show that migrants are more likely to work precariously.

Coming to our second question, a cursory glance at the data seems to confirm the common narrative of the typical migrant business. According to this narrative, migrants work to a much higher degree in hospitality and retail trade, which results in economically marginal migrant self-employment. Within this narrative, this is the reason why self-employment of migrants is more precarious than that of natives. However, our results show that the picture is much more complex in reality.

Summarizing our descriptive results, there are two major observations. First, it is true that about 30 per cent of migrants are working in retail trade and hospitality compared to about 17 per cent of their native counterparts. Still, 70 per cent of migrants work outside of these sectors. Second, if we compare the risk of precarity between migrants and natives our results show a higher risk for migrants across different economic sectors and occupations. Comparing the branches of economic activity, we see that migrants are at higher risk of precarity in all economic branches, except for construction where the risk level is comparable to that of natives, and the hospitality sector, where the risk is interestingly lower for migrants. The same pattern applies to professions: Here we can see that the risk of precarity is higher for migrants in all professions, except for the cultural professions, where migrants lie on par with natives.

Determinants of Precarious Work

To answer to our third research question, we interpret our multivariate results against the backdrop of our descriptive results. The overall model is consistent with the typical narrative about migrant self-employment and the other models show that migrants have a higher risk of low monthly and hourly incomes as well as a higher risk of extreme working hours in the retail trade and the restaurant business. However, the separate models reveal cracks in the narrative, since the risk of precarity in hospitality is actually lower for migrants. Although this is a surprising result it is nevertheless plausible. Migrants have a long tradition in the German hospitality sector. They often own old establishments and also have a lot of expertise on how to make a living in this sector. Ownership and sector-specific expertise are both important factors to lower the risk of precarity.

Taking the other independent variables into account, we see that with rising age of an establishment the risk of working precariously is lowered. Also, whether a self-employed person works alone or with other employees has an impact – the owners of businesses with employees are less often in precarity compared to those working alone. In the case of education and age of the self-employed, the overall models for low monthly and hourly incomes show the expected effects: Higher levels of education and rising age lower the risk of precarious work, since both variables are good proxies for expertise and work experience.

However, our separate results for migrants and natives reveal that these effects cannot be confirmed in the case of migrants, since high education levels and age are not statistically significant. If they were, high levels of education would lower the risk, but to a much lower degree than in the case of natives and rising age would have no effect since it would not lower or raise the risk of precarity. A possible explanation for the missing effect of high educational levels could be the German practice of recognizing foreign certificates. Until 2012 when legislation was changed, the recognition of certificates was very difficult. For this reason, migrants were often forced to find (self-)employment in jobs and sectors that did not fit their education, a possible explanation for the weak effect of education in the case of migrants. Recognition of certificates is

a general (and global) problem for migrants but it seems reasonable to assume that the distribution of these restrictions across nationalities and occupations is diverse. Two points should be considered as relevant for these differences in distribution: First, German authorities evaluate the quality of certificates differently; second, it happens that qualifications are predominant in certain immigration cohorts.

An example of such selection effects is our result regarding underemployment. Overall, it proves the assumption of existent research that migrants are, despite high educational levels, especially prone to precariousness. Our results suggest that a major driver behind their higher risk is underemployment. Considering migration background, we can see a selection effect for immigrants from the former Soviet Union and Eastern Europe, who often work in artistic and musical occupations (Leicht et al., 2004, p. 139). In the contrary case of extreme working hours there is no obvious explanation for the effect of the groups 'Rest of the world' and 'near and middle East'. As expected, extreme working hours are common in hospitality and retail trade.

Table 11.3 Results decomposition

Results Decomposition							
	value	prop.	s.e.	z-value	P	ci _l	ci _u
char	0,018	50,03	0,006	2,929	0,002	0,006	0,03
coeff	0,018	49,97	0,008	2,286	0,011	0,002	0,033
diff _{tot}	0,036	100	0,008	5,529	0	0,023	0,048

Source: Microcensus 2011 Federal Statistical Office of Germany, own calculations.

When we try to understand the drivers of precarious work against the backdrop of the descriptive results, we can see cracks in this narrative about the migrant business as a typical example of precarious self-employment. Our multivariate results show that the overall effect of country of origin is very small. Certain countries of origin have an effect in different models, but these effects do not seem to be systematic but rather idiosyncratic. For example, self-employed of Asian origin, a rather small group in Germany so far, have a very high risk of low income, while self-employed from the former guest worker recruitment countries, a very large group known to be dominant in retail trade and the hospitality, are not significantly different in income level from natives. Taking this into account, it seems plausible to assume that a major driver of the higher precariousness of migrants are endowment effects due to different distribution across occupations and branches of economic activity. Nevertheless, our descriptive results show that migrants almost always have a higher risk of precarity in almost all occupations and branches of economic activity. This descriptive result should indicate a group effect, which we are not able to prove with our regression models. To cross check whether the differences can be attributed to endowment or group effects we conducted a decomposition analysis (Table 11.3). The results thereof suggest a mixture of endowment (50 per cent) and group effects (40 per cent). Keeping the missing effect of education and age in the case of migrants in mind this is a sound result, although we see no clear effect of migration background.

Limitations and Further Research

This leads us to the limitations of our approach. To get a better hold on the effect of migration background on precarity which we could partially confirm, it would be necessary to construct a

multilevel model with random effects for different immigration groups. This would make it possible to isolate different effects of dependent variables and understand the idiosyncratic effect of migration background.

Another limitation is our data source. We used the German Microcensus which is a household survey and therefore our data are not likely to cover migrant workers in temporary makeshift shelters, for example, on construction sites and in agriculture. A look at the nationality, the inflow as well as the outflow in the German business registration statistics allows for the assumption that bogus (or pseudo) self-employment is a relevant factor. Thus, it is reasonable to assume that our data do not cover the most vulnerable forms of precarious self-employment. However, a quantitative estimate of the extent of pseudo self-employment in general and in comparison between migrants and natives remains an area of further research.

It is also potentially problematic to compare net incomes, since we do not know how biased income data of self-employed are. There are strong indications that self-employed do not pay sufficiently into pension schemes and social security, which is not adequately controlled for in surveys. Therefore, it can be assumed that the information about net incomes is often biased. Furthermore, we also did not compare self-employed with paid-employed. When doing this, further research has to take the employer's contribution to health insurance, social security payments and pension payments into account. In total, these contributions raise the gross income of paid-employed by about 20 per cent compared to self-employed. Data provided by Seifert et al. (2015, p. 10), indicate that the lower half of the self-employed income earners earn less than the paid employed, whereas the upper half of the self-employed earn better than their paid-employed counterparts. This raises the question, under which conditions self-employment becomes a viable path to social advancement and under which conditions it raises the risk of working precariously. To find answers to these questions, panel data are essential. Regarding the self-employment of migrants, we have to keep in mind, that for many unemployment would be the alternative.

Summary

In this study, we examine the extent of precarious migrant self-employment vis-à-vis natives using data from the German Microcensus. We find that migrants are more effected by precariousness overall, confirming the common narrative about migrant entrepreneurship in public discourse. Every fourth migrant self-employed works under precarious conditions, while this is the case only for every fifth German native. This means however, that the distance to native Germans is not very large (6 per cent). Taking post-Fordism into account we cannot prove that migrants are especially prone to be the subject of post-Fordist work arrangements. This could be an effect of the dataset used, which does not cover pseudo self-employment. However, our data provide firm evidence for the assumption of many scholars that cultural professions often lead to precarious working conditions. Regarding the drivers for the higher risk of precarity of migrant self-employment our results are ambiguous. On the one hand there is evidence of a strong influence of endowment effects (e.g. the overrepresentation in hospitality and retail trade), on the other hand there are also indications for various group effects. For example, we observe that the risk of precarious work in hospitality is much lower for migrants than for natives. Another example is the missing positive effect of high levels of education in the case of migrants, which could be a result of the German practice of recognizing foreign certificates. In sum, the study cannot confirm a direct relationship between migration background and precarious self-employment. We thus have to assume that the higher risk of precarity in migrant self-

employment is the result of a complex combination of different influences, which remain to be analyzed in further depth in future research. Future studies along these lines should also take a European comparative perspective that addresses different economic and institutional contexts of European countries as well as their heterogeneous immigration histories. Our results are more likely to replicate those European countries with comparable socio-economic context and immigration history, for example Austria or Switzerland, but are less likely to apply to France and Belgium or the (Anglo-Saxon) Great Britain. In general, a comparative approach seems to be a promising path for further research to gain deeper insights into the mechanisms that lead to precarious self-employment.

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