Supplementary File

Complementary material on the methodology of the project "Transnational Social Positions in the European Union" and the project-related contributions in the thematic issue "Migration and Unequal Social Positions in a Transnational Perspective"

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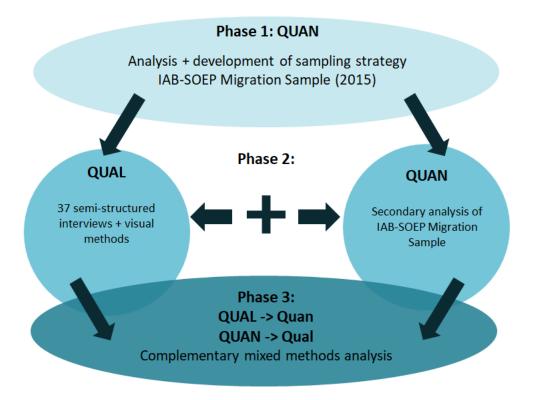
The project Transnational Social Positions in the European Union is a project funded by the German Research Foundation (Deutsche Forschungsgemeinschaft DFG) under the coordination of Thomas Faist at Bielefeld University, Germany. With a duration of three years (2016-2019), its main aim was to investigate the nexus between social and geographical mobility by focussing on the lives of migrants in Germany. In particular, the project was interested in analysing the social positions and lives of migrants who had experienced multiple mobility, i.e., those who had been living in more than one country before moving to Germany) and of those who migrated directly to Germany. The project had a mixed methods design, meaning that both quantitative and qualitative approaches were integrated in the data collection and analysis procedures. Four papers in the Special Issue "Migration and unequal social positions in a transnational perspective" of *Social Inclusion* (vol. 9, no. 1) refer to data that has been generated by this project (see Stock; Stock & Fröhlich; Tucci, Fröhlich and Stock; Waldendorf in this special issue). Here, we provide a brief summary of the design, the sample and the methods used to collect and analyse the data. Some methodological aspects on each paper are given in the last section.

Research Design

This mixed methods project is based on the Socio-Economic Panel (SOEP), a representative panel study of households and persons in Germany, conducted annually since 1984 (Goebel et al., 2018). The SOEP comprises several samples that were conducted over the 30 last years and the project uses the Migration Sample that was conducted by the Institute for Employment Research and the Socio-Economic Panel Study (SOEP) at DIW Berlin. The IAB-SOEP Migration Sample is composed of a first

sample conducted in 2013 and a follow-up sample conducted in 2015 (Kühne & Kroh, 2017). It includes, among others, migrants who have immigrated to Germany since 1994, who belong to different socioeconomic groups and who have different mobility experiences (see Brückner et al. 2014 for more details). A sample of SOEP respondents was drawn for qualitative interviewing, including respondents from both sub-samples. The mixed methods design was chosen to understand the interplay between social positions (quantitative analysis) and positioning strategies (qualitative analysis).

Figure 1. Research Design of the Mixed Methods Study "Title of the Study"



Mixed Methods Sampling Strategy

The IAB-SOEP Migration Sample is part of the SOEP panel study, which is conducted regularly once a year since 1984. It includes specifically people with migration experience. It consists of a total of 6,700 respondents living in 3,800 households in Germany. The 2013 sample includes people who have migrated to Germany since 1994 and had registered with the German "jobcenter" (Bundesagentur für Arbeit) in 1995 or later. The sample also includes a small portion of people who are descendants of migrants. The follow-up sample in 2015 interviewed migrants who came between 2009 and 2015. As part of the overall SOEP survey, the IAB-SOEP Migration Sample contains general information about the life circumstances of the respondents and members of their households. Unlike the other subsamples in the SOEP, the IAB-SOEP Migration Sample includes information on the migration

biographies of respondents and detailed information about the circumstances or conditions of their arrival in the different countries in which they stayed for at least three months. This, for Germany unique, migration biography calendar enabled the identification of persons who had experienced multiple mobility, i.e., lived in at least one other country besides their country of birth before moving to Germany, and those who had migrated directly to Germany.

In our sampling strategy, we used a sequential, nested, mixed-methods sampling design (see Creswell & Plano Clark, 2007). We constructed six respondent groups out of the SOEP survey data collected in the year 2015 and including both subsamples: On the one hand, we distinguished between migrants who had lived in two countries (their origin country and Germany) and those who have lived in more than two countries for at least three months. In other words: we distinguished between single and multiple mobility trajectories. The mobility trajectory or migration history data was collected retrospectively using the questions from the sections "How You Came to Germany" in the SOEP questionnaire (TNS Infratest Sozialforschung 2014, pp. 6–8; 2016, pp. 72–77). Respondents are asked the following initial question: "Many people live in several different countries over the course of their lives. What about you? We're interested in finding out which countries you have lived in for more than three months. First of all, when did you first move away from the country where you were born?" (answer with year and month). This section then includes questions about each country in which the respondents lived, the reason for the move and future plans to move again.

We then subdivided those two groups into three social groups each, according to their occupational status: manual working position, lower service position and upper service position. This classification follows the standardised indicator developed by Erikson, Goldthorpe and Portocarero (the EGP scheme) (Erikson, Goldthorpe & Portocarero, 1979). The EGP is commonly used as a measure of social class in social science research involving the SOEP data. It measures social class, whereas other indicators such as the International Socio-Economic Index of Occupational Status (ISEI) (see Ganzeboom, de Graaf, & Treiman, 1992), for example, measure occupational social status. Both measures are based on the International Labour Organisation's International Standard Classification of Occupations (ISCO) (see Elias, 1997) for occupational groups, although they are operationalized in different ways. We decided to use the EGP scheme because it is known for its high degree of international comparability and fits our goal of studying migrants' social position, which is shaped by social status and class in different national stratification systems. The combination of the type of mobility and EGP resulted in six different sub-groups (see Table 1).

Table 1. Cross-tabulation of mobility experience and EGP of migrants in the SOEP panel study (Germany)

	Single Mobility	Multiple Mobility	Total
	Experience	Experience	
Upper Service Position	483	143	626
Lower Service Position	616	87	703
Manual Working Position	1,199	181	1,380
Total	2,298	411	2,790

Data IAB-SOEP Migration Sample, wave 2015, v34.

In this sampling strategy we only make inferences about social status based on the respondents' occupations in Germany, leaving out their respective social status and occupational situation in their origin country or in the countries they have lived in if they have experienced multiple mobility. The qualitative data provides us with information on respondents' pre-migratory occupational lives. In Table 2 below, the six contrast groups of the quantitative sample are described according to several socio-demographic characteristics (gender, age, education, legal status, year of arrival in Germany and employment status).

Table 2. Description of the six contrast groups for qualitative sampling

	Descriptive Analysis	Single Mobility Experience	Multiple Mobility Experiences	
Upper Service	Total observations	483	143	
Position	Gender (m/f)	(258/225) (53.4%/46.6%)	(74/69) (51.8%/48.2%)	
	Mean <i>Age</i>	36.6	36.7	
	Average <i>Education</i> (Mean of CASMIN)	7.2	7.9	
	Legal Status on Arrival			
	Resettlers	58 (12.0%)	1 (0.7%)	
	Germans (Abroad)	9 (1.9%)	5 (3.5%)	
	EU Migrants	193 (40.0%)	39 (27.3%)	
	Refugees	18 (3.7%)	2 (1.4%)	
	Other Foreigners	176 (36.4%)	21 (14.7%)	
	Missing Values	29 (6.0%)	75 (52.5%)	
	Average Year of Immigration to Germany	2004	2009	
	Employment Status			
	Full-Time	343 (71.0%)	105 (73.4%)	
	Part-Time	84 (17.4%)	20 (14.0%)	
	Vocational Training	16 (3.3%)	0 (0.0%)	
	Marginally Employed	15 (3.1%)	7 (4.9%)	
	Not Employed	25 (5.2%)	11 (7.7%)	
Lower	Total observations	616	87	

Service Position	Gender (m/f)	(164/452) (26.6%/73.4%)	(21/66) (24.1%/75.9%)	
rosition	Mean <i>Age</i>	36.7	37.4	
	Average <i>Education</i> (Mean of CASMIN)	5.1	6.3	
	Declared migration group			
	Resettlers	115 (18.7%)	2 (2.3%)	
	Germans (Abroad)	10 (1.6%)	2 (2.3%)	
	EU Migrants	192 (31.2%)	11 (12.6%)	
	Refugees	58 (9.4%)	7 (8.1%)	
	Other Foreigners	224 (36.4%)	29 (33.3%)	
	Missing Values	17 (2.8%)	36 (41.1%)	
	Average Year of Immigration to	2002	2006	
	Germany			
Manual Working	Total observations	1,199	181	
Position	Gender (m/f)	(772/427) (64.4%/35.6%)	(129/52) (71.3%/28.7%)	
	Mean Age	40.5	39.9	
	Average Education		4.0	
	(Mean of CASMIN)	3.9		
	Legal Status on Arrival			
	Resettlers	263 (21.9%)	16 (8.8%)	
	Germans (Abroad)	12 (1.0%)	1 (0.6%)	
	EU Migrants	380 (31.7%)	20 (11.1%)	
	Refugees	115 (9.6%)	4 (2.2%)	
	Other Foreigners	405 (33.8%)	36 (19.9%)	
	Missing Values	24 (2.0%)	104 (57.5%)	
	Average Year of Immigration to	2002	2008	
	Germany			

Data IAB-SOEP Migration Sample, wave 2015, v34.

50 people from each contrast group were randomly selected and invited through a letter sent by post. To guarantee anonymity, respondents were contacted by Kantar Public (formerly TNS Infratest), which is the research services institute that conducts the SOEP survey every year and collects the data. Whenever a respondent gave consent to be interviewed, we contacted him/her directly to arrange the interview.

In total, we conducted 37 qualitative interviews across the whole country, with six to seven people from each group, balancing for gender (see Table 3). Table 3 shows some of the socio-economic characteristics of the respondents in each of the six groups.

Table 3: Selected socio-economic characteristics of the six contrast groups sampled for the qualitative part

Occupational groups	Single mobility	Multiple mobility

	Gender (f/m)	4/2	2/4
Upper service position:	Origin (EU/non- EU)	2/4	5/1 (USA)
12 respondents	Education	3 BA level or equivalent,	5 BA level or equivalent,
		1 MA level or equivalent,	1 MA level or equivalent
		2 upper secondary education	
	Legal status on	2 EU migrants, 4 other	1 German, 4 EU migrants, 1 other
	arrival	foreigners	foreigners
	Yearly income	2,500-60,250 Euros	39,000-60,000 Euros
	Gender (f/m)	5/1	6/1
Lower service	Origin (EU/non-	3/3	1/6
position:	EU)		
13 respondents	Education	4 BA level or equivalent,	3 BA level or equivalent,
		2 post-secondary vocational	3 upper secondary education,
		education	1 post-secondary but non-tertiary education
	Legal status on	1 German, 2 EU migrants, 3	2 EU migrant, 2 refugees, 3 other
	arrival	other foreigners	foreigners
	Yearly income	5,000–24060 Euros	9,000–19,000 Euros
	Gender (f/m)	0/5	3/4
Manual working	Origin (EU/non-	1/4 non-EU	3/4
position:	EU)		
12 respondents	Education	2 upper secondary education,	5 vocational training,
		2 lower secondary education,	2 vocational training school
		1 BA level or equivalent	
	Legal status on	4 resettlers, 1 other foreigner	3 EU migrants, 4 other foreigners
	arrival		
	Yearly income	3,700-24,000 Euros	6,400-45,200 Euros

Data IAB-SOEP Migration Sample, qualitative data.

The interviewees came from different countries in and outside the European Union and possessed a variety of occupational and educational profiles and ages. We had no detailed information about respondents prior to the interviews due to data protection regulations. However, during the interview 36 of the 37 respondents consented to the linkage of their qualitative interview data with the quantitative survey data. This allowed us to combine the qualitative interviews with information on each case from the survey data in subsequent analysis processes. It is important to mention that the respondents shared particular characteristics which are part and parcel of the IAB-SOEP Migration Sample, such as the fact that most of them had been in Germany for a long period of time and spoke relatively good German.

When comparing the qualitative sample with the overall survey sample, we find that the qualitative sample reproduces certain tendencies which are characteristic of the quantitative sample, such as the gender distribution of the respondents, educational level and origin countries. Thus, we have a slight overrepresentation of female respondents in lower service positions and a slightly higher representation of male respondents in the manual working positions. We also find that a majority of

respondents in the upper service position come from EU countries, whereas this is reversed for the respondents belonging to the group of lower service positions and manual working positions.

Data Collection and Analysis Processes

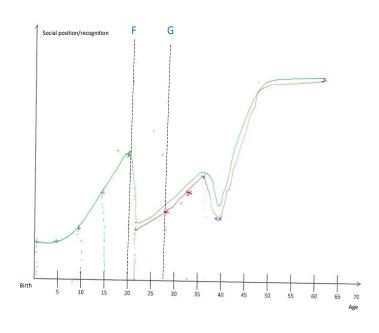
The qualitative interviews were conducted in respondents' homes in different parts of Germany and lasted between one and two hours approximately. We used a very loosely structured interview technique, consisting of various parts. In the first part, we asked respondents to tell us about their migration history and if they had the intention of moving somewhere else again in the future. In the second part of the interview a photo-based ranking technique was used to discuss the respondent's views on socio-economic status and hierarchies in their country of origin and in Germany. The photo ranking method we used in our study is adapted from the diamond ranking method using photos as cues (Clark, 2012). We adapted the method by letting respondents rank 20 photos depicting different types of people according to the social position they occupied within society (see Figure 2).

We asked respondents to do this exercise twice: once for their origin country and once for Germany. Each photo showed people carrying out different occupations. The occupations shown were those most common in the three socio-economic groups that we had identified in the quantitative data (the IAB-SOEP Migration Sample) from which we had drawn our sample of interview respondents. Importantly, we took care to ensure that the people portrayed performing the occupations were characterised by certain social heterogeneities with respect to gender, age, ethnic origin and 'race'. This was done in order to induce respondents to incorporate these aspects into their ranking process of people of different occupations (for further details about the photo ranking exercise, see Author, forthcoming). The third part of the interview involved asking respondents to draw a graph showing the development of their own social position during their life course and in the different countries they have lived in (see Figure 3). Subsequently, participants were provided with 22 cards, each of which had a keyword on it (for example, "gender" "age", "appearance", "occupation"). The participants were asked to choose cards that named factors that are responsible for upward or downward social mobility.

Figure 2: Example of a respondent's photo ranking exercise



Figure 3: Example of a respondent's life-course graph



The interviews were transcribed and the analysis of the text data was inspired by hermeneutic methods (Soeffner, 1989), i.e., text material from the interviews was coded both sequentially and thematically, aiming to uncover the intersubjective meaning of respondents' narratives. Coding evolved in line with different research questions that led to a number of different publications. First, data was ordered thematically and then analysed sequentially by uncovering key concepts and recurrent topics in respondents' answers.

In terms of data analysis, several strategies were followed and the analyses were performed in an iterative process (Fetters et al. 2013). In a first phase, the qualitative and quantitative data were analysed separately, following different research questions that all aimed at reaching a better understanding of the nexus between mobility and social positions (see Figure 1). Exchange between researchers occurred inevitably, regularly leading to the exploration of the data, and to finding new possibilities for how the data can answer the research questions that are investigated in the project.

Supplementary Methodological Information on Project-Related Contributions

Four papers in the Special Issue "Migration and unequal social positions in a transnational perspective" of *Social Inclusion* (vol. 9, no. 1), were written on the basis the project data. Two articles are based on the qualitative data alone and two articles are mixed methods papers. In each mixed methods paper, the emphasis if put on one the type of data what could be seen as a partially mixed sequential dominant status design (Leech & Onwuegbuzie, 2009).

The article by **Stock** is a qualitative study which uses the interview material to identify different types of social comparisons that migrants use in order to position themselves in transnational social hierarchies. In order to do this, the author has classified and ordered different types of comparisons that were used by respondents during the interviews and then related the meaning of the instances in which these were used by respondents to subjective meanings of social hierarchies and social mobility.

The article by **Stock and Fröhlich** is a QUAL \rightarrow quan study: In this particular case, qualitative data was used to identify three different groups of migrants according to their subjective social positioning strategies. We then elaborated a working hypothesis on factors contributing to the assignment of respondents to the groups we created, based on mostly socio-economic variables and migration history. Based on these factors, we elaborated proxy indicators which were measured quantitatively in the SOEP data from both migration subsamples. We were thus able to construct a quantitative index that captures two of the three migratory groups with quantitative indicators. We then used both quantitative and qualitative data to test how members of each of the groups we had identified used specific markers of social status, such as travel, to distinguish themselves from others. In order to do this, we conducted a descriptive quantitative analysis of the SOEP data on the importance ascribed to travel as well as an analysis of the qualitative interview data on this topic.

The article by **Tucci, Fröhlich and Stock** is a QUAN→qual study that aims at exploring the nexus between migration and social positions by mixing quantitative and qualitative data. To do so, a Multiple Correspondence Analysis (MCA) was performed using the SOEP data using the R-package FactoMiner. MCA is a descriptive method, also known as a geometric data analysis (GDA), and one key idea behind GDA is that "Geometric modelling comes before probabilistic modelling, in the spirit of

inductive philosophy" (Le Roux & Rouanet 2010, p. 2). Historical landmarks and principles of this method, which was made prominent by J.P. Benzecri in the 1960s and used by Bourdieu in his book "La distinction", are well described in Le Roux and Rouanet's book. Using MCA enables us to highlight the two first dimensions that structure our population according to the respondents' responses to the questions (variables) included in the analysis. We then performed a hierarchical cluster analysis in order to identify types of migrants that distinguished themselves according to different heterogeneities, mobility-related characteristics and social positions. The hierarchical clustering is based on the MCA results, i.e., on the ten first dimensions structuring the data that are used as continuous factors (Le Roux & Rouanet, 2010; Husson et al., 2017). The Ward criterion was used for hierarchical clustering. In this article, the quantitative and qualitative data are integrated through the consented record linkage at the respondents' level using their identifier. Only 26 out of the 37 respondents could be associated to the four clusters identified due to missing data on the variables used in the quantitative analysis. The qualitative data is used to complement and deepen the quantitative analysis, focussing in particular on opportunities, structural constraints and individual strategies.

The article by **Waldendorf** is a QUAL study. A qualitative approach is used to identify the legitimation strategies used by certain respondents (highly educated migrants who migrated to be with their partner) to create a positive narration of their current social position, despite it objectively being lower than what might have been expected based on their university level education. The quantitative data is used in a supplementary and descriptive manner to measure objective occupational positions and to help reconstruct the mobility trajectories of participants (see above as well as TNS Infratest Sozialforschung 2014, pp. 6–9; 2016, pp. 72–78).

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