

(Why) have women left East Germany more frequently than men?

JOHANNES STAUDER

Max Weber-Institute of Sociology, Heidelberg University

Abstract

There has been a massive internal migration from East to West Germany after German reunification in 1990. While there is a higher net emigration rate for women than for men, this is not the result of a surplus of women leaving East Germany, but a result of less West German women migrating to East Germany. Only at ages under 25, some more women than men migrated from East to West Germany. Using the German Socio-Economic Panel, this paper describes gender specific internal migration from East to West Germany and from West to East Germany between 1991 and 2012. It separates migration for labour market reasons, migration for educational reasons and migration due to a partner. In addition, the description differentiates original migration vs. re-migration and highly educated vs. lowly educated women and men. Results show that a new job in the respective other part of Germany is the most frequent reason for internal migration in both directions. However, the gender differences in East-West-migration with more (young) women moving West do not mainly result from job-related moves, but from migration with educational motives. In a similar way, the excess number of men over women who moved from West to East Germany is mainly the result of educational migration. These findings contradict speculations about a stronger discrimination of women on the Eastern compared to the Western labour market.

1 Introduction and problem

One secure knowledge about German demography is that there has been a massive internal migration from East to West Germany after German reunification in 1990. Between 1991 and 2012, 2.9 million people over 18 years migrated from East to West Germany, whereas only 2.0 million people went from West to East Germany.

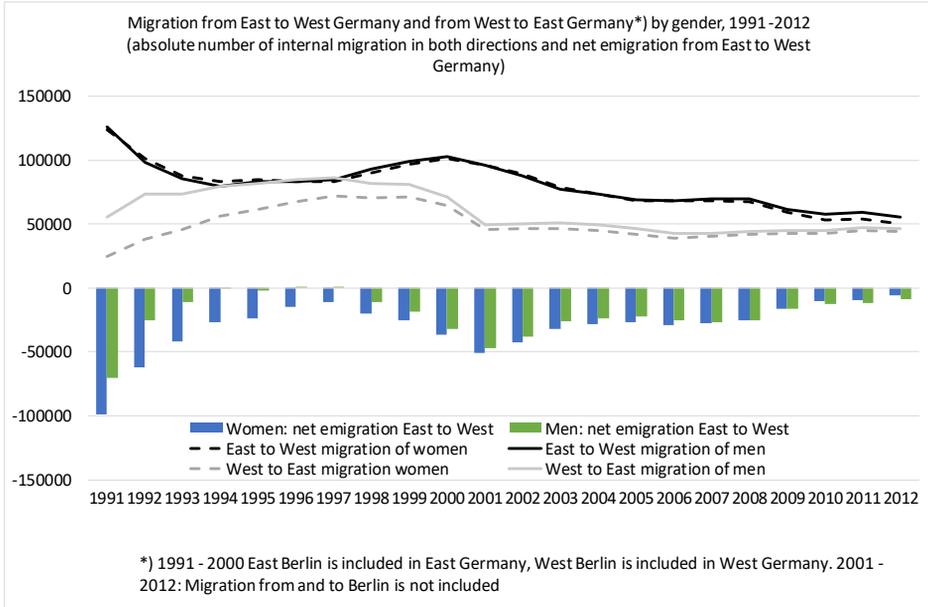


Figure 1: Source: German Statistical office, Fachserie 1, Reihe 1.2 1991-2012, Tabelle 2.5

In addition, many researchers take for granted that more women than men have gone West (especially Kröhnert and Vollmer 2012). However, this diagnosis is based on net emigration rates. As it can be seen in the lower part of Figure 1, net emigration of women indeed is much stronger than net emigration of men, especially during the early 1990ies.¹

¹ Note that there is a statistical friction between the year 2000 and 2001: Until 2000, both former separated parts of Berlin were counted with the respective West or East part of Germany. After 2000, migration from and to Berlin is ignored in both East to West and West to East migration. A similar figure has first been published by Beck (2011: 52).

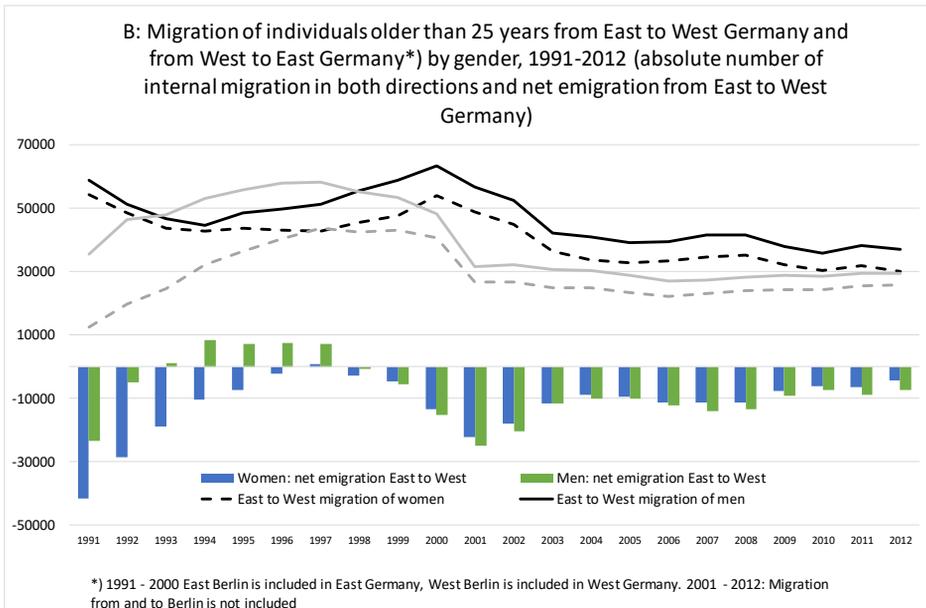
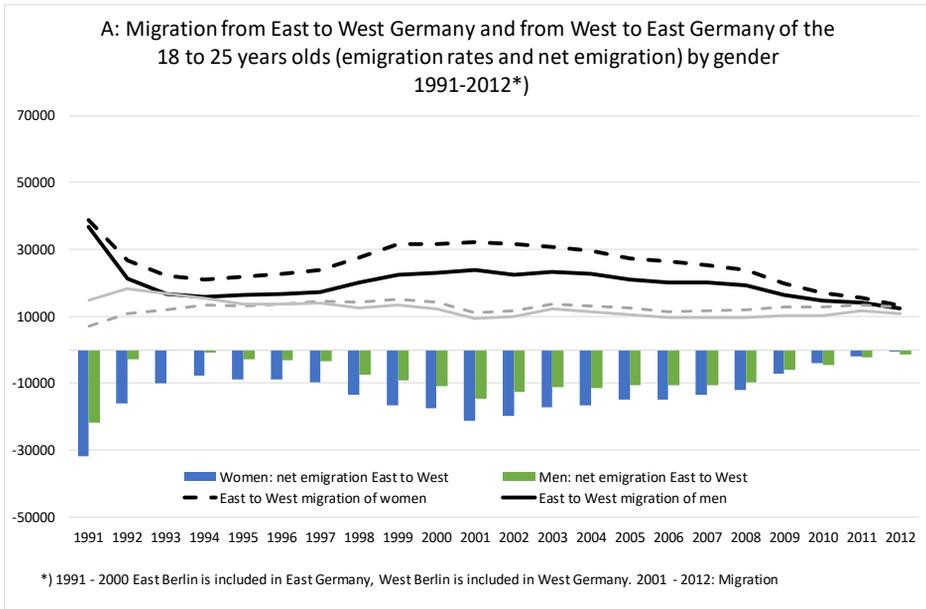


Figure 2: Source: German Statistical office, Fachserie 1, Reihe 1.2 1991-2012, Tabelle 2.8

The gender difference in net emigration results from the behaviour of four populations: women and men moving from East to West Germany and women and men moving from West to East Germany. Thus, it is superficial to conclude that more women than men have left East Germany after reunification. The upper part of figure 1 presents the absolute numbers of men and women migrating from East to West and from West to East Germany. It shows that between 1991 and 2012, women left East Germany at the same extent as men, whereas less women than men from West Germany went to East Germany. Thus, the difference in the net migration rate in the first place is the result of a gender-specific behaviour of women and men from West Germany, and theoretical explanations should concentrate more on the gender selective push- and pull-factors for them. Several recent studies already have implicitly pointed at this wrong interpretation of the net emigration rate (Herfert 2007: 442f; Beck 2011: 52; Kühntopf and Stedtfeld 2012: 17; Fuchs-Schündeln and Schündeln 2009).²

As figure 2a shows, there is a surplus of women migrating from East to West Germany only for the 18 to 25 age group. For all other age groups, more men than women migrated from East to West (figure 2b).³ Many previous analyses focused on the labour market as the crucial determinant of gender specific internal migration, stating that high unemployment and an especially low demand for female attributed jobs have pushed women more than men to leave East Germany (see for example Kröhnert and Vollmer 2012). But, when the surplus of women leaving East Germany is concentrated exclusively on the 18- to 25-years-olds, other push and pull factors might be central, namely education and family events. Authors of recent studies thus account for these factors (see for example Kühntopf and Stedtfeld 2012).

Summing up, previous research trying to explain the surplus of women in net emigration from East to West Germany (1) has concentrated too much on the push and pull factors of people moving from East to West. But, what are the factors that explain the shortage of women moving from West to East Germany? And (2) previous research concentrated too much on the labour market as a pull factor. Thus, do we actually find a surplus of women when concentrating on migration

² Figure 1 yet reveals another wrong diagnosis: The rise of net emigration after 1999 is only to a small extent due to more people from East Germany moving West; it is mainly the result of a reduction of West to East migration.

³ Figure 2b aggregates all age groups over 25 years. Detailed analyses for different age groups over 25 years reveal a surplus of men for all those age groups.

linked to the labour market? Or is the surplus of women moving from East to West Germany in the early life course the result of migration linked to education or family events? In addition, there are only few studies that differentiate between first migration from East to West or West to East on the one hand and re-migration in the respective other direction (Fuchs-Schündeln and Schündeln 2009). How important are re-migrating East German women and men for the number of West-to-East-migrations? What are the central push and pull factors for re-migration? At what age do people re-migrate? And finally, many push-factors for migration are related to education. Do we find different gender-specific patterns for the migration of the highly educated compared to the lowly educated?

To answer these questions, this paper uses the German Socio-Economic Panel (GSOEP) to provide a thorough description of internal migration from East to West and from West to East Germany between 1991 and 2012 over the life course of women and men. It adds to the literature by explicitly separating migration for labour market reasons, migration for educational reasons and migration linked to one's partner (moving in together with a partner, following a partner who has a job offer or starts a new track of education). In addition, the description will differentiate original migration vs. re-migration and the highly educated vs. the lowly educated women and men.

The paper is organized as follows: First, I will sum up previous research about gender selective internal migration between the both regions (section 2). Section 3 provides information about the GSOEP, about data preparation and methods. Section 4 will cover the description in the way sketched above. Finally, I will discuss the findings in section 5.

2 Previous research

Most research on East to West migration has focused on *economic* reasons for moving West. The wage gap and the unemployment rate are seen as the driving forces behind migration (Raffelhüschchen 1992; Wagner 1992; Burda 1993; Schwarze 1996; Burda et al. 1998; Heiland 2004; Brücker and Trübswetter 2004; Hunt 2000; Alecke and Untiedt 2000; Burda and Hunt 2001; Parikh and Van Leuvensteijn 2002; Melzer 2013; Zaiceva 2007; see Wolff 2006 for a review on this literature). Some of these studies especially point at gender (Zaiceva 2007; Fuchs-Schündeln and Schündeln 2009) or educational differences (Melzer 2013; Fuchs-Schündeln and Schündeln 2009). Kröhnert and Klingholz (2007) pointed out the higher net emigration rate of East German women compared to men. This study received

large attention in the media but it misinterpreted the net emigration rate as a mere result of East German's out-migration (see above).

As an explanation, Kröhnert and Vollmer (2012: 97) speculate that women suffer from a stronger discrimination on the Eastern compared to the Western labour market. Therefore, they have strong incentives to invest in human capital that allows them to find a job in the West. Indeed, a study by Wiest and Leibert (2013) based on qualitative interviews with young women and men in rural parts of eastern Germany concludes that more women than men are willing to leave their home region in the case of deficient employment opportunities. Mai (2006: 113) as well as Kröhnert and Klingholz (2007: 34-35) argue that the lack of job opportunities in rural eastern Germany applies especially to occupational fields that are preferred by women, i.e. jobs in the tertiary sector. The study by Fuchs-Schündeln and Schündeln (2009) is the closest to the approach conducted in the present paper: They use official population data and show in a first step, that the higher net out-migration rate of women is the result of lacking female migration from West to East Germany. They also show that the majority of younger East-to-West-migrants is female (52.8 per cent among the 18-30-year olds). Using the GSOEP, they analyse the determinants of migration of born East Germans (those having resided in the East in 1989) and find a low regional income in the origin county as a push factor, whereas social ties in the hometown and other psychological factors make people less likely to migrate.

All studies referenced so far exclusively concentrate on job opportunities and wage gaps as determinants of migration. Thus, they neglect that the excess East-to-West-migration of women is exclusively concentrated at ages 18 to 25, when many young people are not yet active on the labour market but are still in their final *educational* stages. This holds especially for women who prefer jobs that imply a vocational training in schools, whereas young men prefer apprenticeships integrated in the labour market. Thus, when a higher out-migration of women is exclusively concentrated at ages 18-25, a gender-different sensitivity to job opportunities or wage gaps might not be crucial for this phenomenon.

Therefore, for the higher out-migration rate of women at ages 18-25 the local supply for education and vocational training might be crucial (for an overview see Kühntopf and Stedtfeld 2012). Dienel et al. (2004) found that young women from rural Saxony often decide to move because of a deficient supply of apprenticeship in their preferred vocational fields. Steiner (2004) showed that the proportion of those who leave East Germany towards the West for the purpose of vocational training is higher for women than for men. Moreover, it is well known that

those who attain or aspire to a higher educational achievement show exceeding emigration rates (Schultz 2009; Wolff 2010; Windzio 2007; Schneider 2005). In Germany, and especially in the East, more women than men qualify for higher education (Helbig 2012). Therefore, women move more frequently towards regions offering universities than men. It has been argued that educational migration is widespread especially among women from East Germany because universities in the East are often aligned to more technical fields (e.g. engineering and natural sciences) which are preferred rather by men than by women (Klemm and Thomas 2010: 53; Weiss and Isermann 2003: 103).

Apart from labour and education market considerations, there are several hints in previous research that *private motives* are crucial especially for women's decision to go West. Dienel et al. (2004: 111) show that 30 per cent of those women that have left Saxony-Anhalt at an age between 18 and 35, did not move for a job or for education, but had other motives (in the same way: Leibert and Wiest 2010: 6). From family sociology we know, (1) that within intimate relationships, women on average are two or three years younger than men (Klein 1996; Klein and Stauder 2008; Klein and Rapp 2014), (2) that, given the well-known wage gap between men and women, couples are more likely to move due to a job offer for the husband than due to one for the wife (Abraham et al. 2010; Stickney and Konrad 2007). Taken together, moving as a couple for a husband's job offer in the West implies that men move together with their younger wife from East to the West - producing the observed pattern that women migrate at earlier ages than men. Some authors argue that East German women are more successful at school than East German men; therefore, they do not find appropriate partners at the same educational level in East Germany and go West in order to find one (Kröhnert and Klingholz 2007; Kröhnert and Vollmer 2012; Kubis 2007). Hence, moving in with a partner might be another private motive to migrate from East to the West.

Little is known about the motives of migrants from West to East Germany. During the early nineties, many highly educated went from West to East for a job. They were sent by bureaucracy or their company to manage the political and economic integration of the new states into the system of West Germany (Hansch 1992, 1996). A large part of West to East migration might stem from re-migration of original East Germans. Roesler (2003: 571-572) speculates that those returnees to East Germany might be a selection of those who failed to integrate in the West German labour market. And indeed, Schneider et al. (2010) show that the intention to go back to East Germany is lower for those who are successfully integrated into the labour market. But, according to Jain and Schmidhals (2009: 325), 60 per

cent of all returnees to the East German city of Magdeburg state private motives (especially the family or “coming home”) for moving back and only about 30 per cent came back for career reasons (a new job, a finished vocational or academic training). This is in line with another finding by Schneider et al. (2010) who found that those East-to-West-migrants who still maintain many ties with their home region have stronger intentions to go back. Roesler (2003: 572) even talks about home sickness.

Summing up, prior research concentrated exclusively on economic reasons for East to West migration. Since most internal migration takes place at an early stage in the life course, this might not be appropriate in general; and it is especially not appropriate to explain the higher net emigration of women at ages 18 to 25, when many young people are still enrolled in school, university or a vocational training. In addition, migration may often be motivated by motives linked to the migrant’s partner, contributing to the pattern found in official statistics that women migrate earlier in the life-course than men (see Kubis and Schneider 2007, who use a similar classification of motives for an analysis on the macro-level).

Those few studies that explicitly analyse different motives for migration are restricted in several ways: Some studies use age at migration as a proxy for the underlying motives. According to this, migration at the ages 18 to 24 is supposed to be motivated by educational decisions, migration at ages 25 to 29 is motivated by a job career and migration at ages 30 to 49 is motivated by family decisions (Mai et al. 2007; Kühntopf and Stedtfeld 2012). Since many people have to look for a job before they are 24 and after they are 29, since some people are still enrolled in education at 25 and especially since many people find partners and get children before they are 30, this assumption seems too speculative and inaccurate. Other studies evaluate the association of social ties and the mere intention to move back from East to West Germany (Schneider et al. 2010), or they rely on quite low and restricted samples (Jain and Schmithals 2009). In contrast, in this paper I will use actual events (finding a new job, losing a job, starting or ending a training, moving in with a partner etc.) that take place at the same time as the migration as indicators for the underlying motives for the decision to migrate.

3 Data and methods

3.1 The German Socio-Economic Panel

Official statistics on migration – as used in figures 1 and 2 – result from bureaucratic processes and can be accepted as a full census of the migration between East and West Germany for every year. But official statistics are limited to only a few independent variables, namely gender, age group, and period. Therefore, to answer the research questions listed above, the following description of migration processes between 1991 and 2012 is based on data from the German Socio-Economic Panel (GSOEP). The GSOEP started in 1984 for West Germany and in 1990 for East Germany. Since 1998, there have been several additional samples to compensate for attrition (Kroh 2011). The GSOEP allows for both longitudinal and cross-sectional weighting. Longitudinal weights are used to compensate for sample attrition only, whereas cross-sectional weights are the basis for statistical projections as intended in this paper (Pischner 2006).

3.2 Methods of description

The paper will describe the number of men and women who have realised a migration from East to West and from West to East Germany until a specific age. For each individual interview, the GSOEP provides the information whether the interview took place in East or in West Germany.⁴ The event of migration from East to West Germany is marked for a respondent, if the previous interview was realised in East Germany whereas the current interview took place in the West and vice versa. After migration, the respondent belongs to the population under risk (of (re-) migration) of the receiving region.

To describe the process of migration, I will use (1) cumulative probability plots of migration calculated with the life-table method. Cumulative probability $C(t)$ is defined as the risk to already have faced the event of migration in one direction at an age of t . In addition, I will (2) use the projected absolute number of migration until age t in both directions. This allows the calculation of net emigration rates at a respective age.

⁴ In contrast to official statistics since 2001, within GSOEP, residents of the former Eastern part of Berlin are counted as living in East Germany, residents of the former Western part of Berlin are counted as living in West Germany.

The GSOEP also provides information about the region of residence in 1989 (shortly before reunification). This information allows to differentiate between original East and original West Germans and is used to separate first migration from re-migration.

One central intention of the following description is to differentiate between possible causes for migration.

- A migration is linked to the labour market (1) when respondents reported to have started a (new) job in the period when they migrated and (2) when respondents were part of the labour force in the year before migration but reported not to belong to the labour force after migration. If respondents started a vocational training in the period when migration took place, the migration is not accounted for being linked to the labour market but for being linked to a new educational enrolment.
- A migration is linked to education, when (1) the respondent is in any training at the interview following migration – thus covering both starting a training or changing the place of training – or (2) when the respondent finished or stopped a training during the period when migration took place. If respondents started a new job in the same period, the migration is not accounted as being linked to education but as linked to the labour market.
- Given that respondent's migration is not yet linked to the labour market or to education, a migration is linked to an intimate partner, when (1) the respondent moved in with a partner in the period when migration took place, or when (2) the respondent moved together with his/her partner, because the partner started a new job or a new training.⁵

The description will differentiate between highly educated and lowly educated respondents based on the CASMIN classification. A respondent is categorized as highly educated, if (s)he has a general maturity certificate (Abitur), a vocational maturity certificate (Fachabitur) or any form of tertiary education (Universitäts- / Fachhochschulabschluss).

⁵ There are migrations together with a partner that are not linked to a partner's new job or education. I did not consider these migrations, because it remains unclear what actual event is linked to migration.

3.3 Methodic analyses: under-coverage of migration

Since one central cause for panel attrition is a change of residence, it is useful to look at the congruence of the number of migrations in the GSOEP and in official statistics. Table 1 gives an overview. For example, it shows that, according to official migration statistics, about 1.47 million men changed residence from East to West Germany between 1991 and 2012 (column 1, first row). According to the projection of the GSOEP, only about 1.15 million men migrated (column 2). Thus, the GSOEP covers about 79 percent of all East to West migrations of men (column 3)⁶. One source of general under-coverage might be that official statistics refer to the current residence population within the respective regions. In the GSOEP, I only use the population that resided either in West or East Germany in 1989. Nevertheless, general under-coverage is no problem for a comparative description, as long as both sexes, all age groups and both directions of migration are evenly affected.

If we look at all people over the age of 18, we find that under-coverage of internal migration in the GSOEP is stronger for men than for women: The GSOEP covers 79 percent of East to West migration of men, but 91 percent of women (column 3). And, whereas official statistics reveals that slightly more men than women went from East to West Germany, in the projection of the GSOEP, significantly more women than men migrated in this direction (column 2). In addition, the gender gap in coverage is even stronger when looking at West to East migration (76 percent for men vs. 94 percent for women). For both sexes and for both directions of migration, under-coverage is strongest at the age of 18 to 25. For older people we even find cases of over-coverage. For methodical reasons, I will not consider moves to and from Berlin; therefore, column 4 presents the numbers of migration with this restriction. Since large cities as Berlin attract women more than men, the resulting sex ratio of migrants is a bit more unbalanced (from $1154/1326 = 0,87$ to $885/1050 = 0,84$).

An additional source of bias might arise from identifying motives for migration, since I cannot attribute a labour market related, an educational or a partner related event to every move between East and West. Column 6 in table 1 shows, that for

⁶ Actually, under-coverage will still be underestimated. GSOEP counts all migrations from, to and between both parts of Berlin, whereas official statistics changed this after 2001. Thus, Berlin is accounted for as one single unit. Figures 1 and 2 therefore ignore migration to, from and between the both parts of Berlin after 2001.

Table 1

Migration from East to West Germany and from West to East Germany 1991-2012 by gender, age and data source (absolute number in 1.000, without migration to and from Berlin)

	official statistics	GSOEP*)	coverage= 2/1	GSOEP, without migration to and from Berlin*)	GSOEP*), with motive identified	percentage with motive identified 5/4
	1	2	3	4	5	6
East to West migration of men						
total (over 18 years old)	1.469	1.154	0.79	805	623	0.77
age 18 to less than 25	438	280	0.64	226	184	0.81
25 -30	328	270	0.82	203	180	0.89
30-50	549	457	0.83	285	200	0.70
50-65	110	90	0.82	69	41	0.59
65 and older	44	57	1.28	22	18	0.82
East to West migration of women						
total (over 18 years old)	1.451	1.326	0.91	999	863	0.86
age 18 to less than 25	561	464	0.83	388	378	0.97
25 -30	274	246	0.90	181	158	0.87
30-50	423	382	0.90	285	258	0.91
50-65	111	148	1.33	103	69	0.67
65 and older	81	87	1.07	42	-	-
West to East migration of men						
total (over 18 years old)	1.135	863	0.76	456	324	0.71
age 18 to less than 25	271	141	0.52	92	92	1.00
25 -30	240	206	0.86	104	88	0.85
30-50	466	337	0.72	161	110	0.68
50-65	108	96	0.89	62	34	0.55
65 and older	50	82	1.65	37	-	-
West to East migration of women						
total (over 18 years old)	909	857	0.94	497	354	0.71
age 18 to less than 25	277	201	0.73	136	119	0.88
25 -30	188	132	0.70	83	69	0.83
30-50	278	345	1.24	176	115	0.65
50-65	83	108	1.30	81	51	0.63
65 and older	83	72	0.87	21	-	-

*) projection using cross-sectional weights

Source: German Statistical office, Fachserie 1, Reihe 1.2 1991-2012, Tabelle 2.5, GSOEP, waves 1991-2012, own calculations

men moving from East to West (not considering Berlin), a motive can be attributed in 77 percent of all moves (86 percent for women) and for men moving from West to East, in 71 percent of all changes of residence I can identify at least one motive (71 percent for women).

Table 2
**Migration from East to West Germany and from West to East Germany
 1991-2012 by gender and age (without migration to and from Berlin,
 absolute frequencies in the sample)**

	men		women	
	GSOEP	GSOEP, with motive identified	GSOEP	GSOEP, with motive identified
East to West				
total (over 18 years old)	331	181	486	266
age 18 to less then 25	107	55	239	116
25 -30	86	53	85	56
30-50	109	60	118	78
50-65	23	10	32	16
65 and older	6	3	12	-
West to East				
total (over 18 years old)	186	85	175	92
age 18 to less then 25	40	22	42	30
25 -30	57	28	34	21
30-50	62	28	67	33
50-65	16	7	21	8
65 and older	11	-	11	-

Source: GSOEP, waves 1991-2012, own calculations

Summing up, using the GSOEP, we will find that more women than men have gone West – even though we know from official data that this is not true. Further, we have to keep in mind that excess numbers of women over men will be over-estimated, whereas excess numbers of men over women will be underestimated. And this bias will be strongest for the 18 to 25 years old, i.e. the only age group in which actually more women than men migrated from East to West.

4 Findings

4.1 Cumulative risk of migration

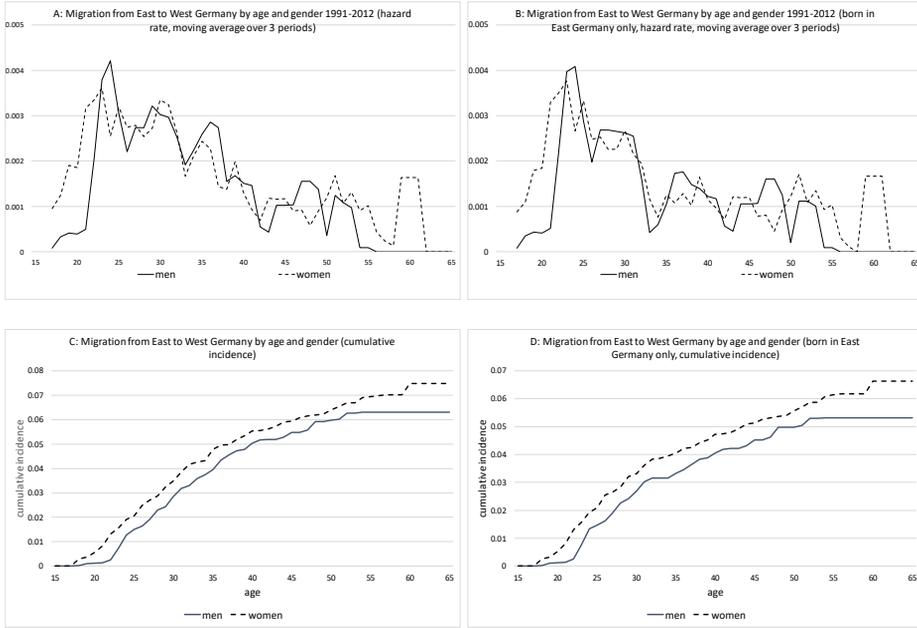


Figure 3: Source: GSOEP waves 1991–2012, own calculations

Figure 3 in its upper parts presents the hazard rates of migrating from East to West Germany by age and gender, in its lower parts we see the resulting cumulative risk of having migrated until a specified age by gender. The left panels refer to all migrations from East to West, including re-migrations of men and women who resided in West Germany in 1989. The right panels refer exclusively to those men and women who lived in East Germany in 1989. Most moves from East to West Germany take place during the third decade of the life-course. In congruence with official statistics presented in the introduction (figure 2), women migrate earlier in the life course (high hazard rates at ages 19 to 26) compared to men (at ages 23 to 30). From the lower panels we learn that, according to the projection of the GSOEP, women have a higher risk to have moved West over the complete life course, because women have a higher incidence to move West in the early life course. But

note that the excess cumulative incidence of women over men is overestimated, especially in the early life course (as discussed above in section 3.3).

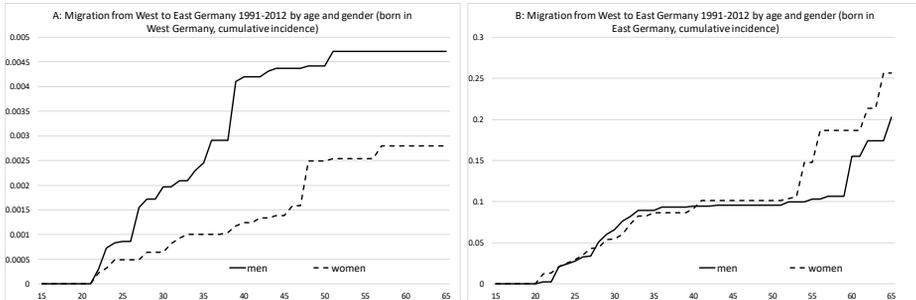


Figure 4: Source: GSOEP waves 1991–2012, own calculations

Figure 4 presents the cumulative risk by age for West Germans (left panel) to move to the East and the cumulative risk for East Germans to re-migrate (right panel). The figures confirm that West German women older than 21 years have a considerably lower risk to go East than men, whereas East German women re-migrate to East Germany at quite the same extent as East German men. Re-migration takes place at higher ages, especially during the fifties and sixties of a life course.

4.2 Gross and net East to West migration

Figure 5 presents the projection of absolute gross and net migration numbers from East to West Germany (without Berlin) by age and gender. The three panels of the first row show these numbers for job (A1), educational (B1) and motives linked to a partner (C1). The second and third row present these numbers for the lower and the higher educated migrants, respectively.

The panel in the first row on the left shows that, at younger ages, some more women than men who resided in East Germany in 1989 (thin black lines, women: dashed lines, men: solid lines) have gone to the West for job reasons. For example, by an age of 28, 158 000 men and 212 000 women found a job in the West in the projection of the GSOEP. If we look at all migrations from East to West, including re-migration of original West Germans (bold black lines), there are some more women than men moving East to West for a job, but by age 33, men have caught up. The other panels in the first column of figure 5 reveal that there are different patterns for the lowly and the highly educated: For the lowly educated, after age

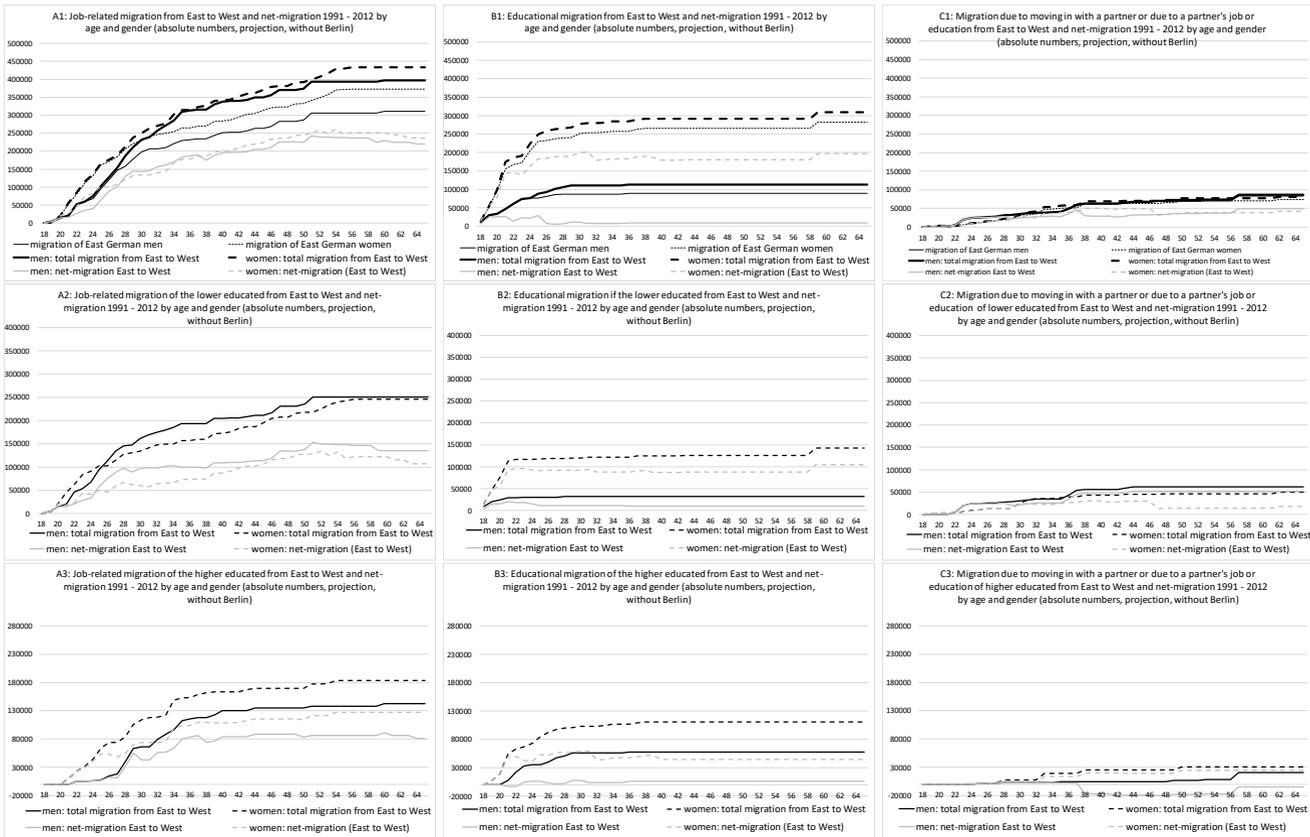


Figure 5: Source: GSOEP waves 1991–2012, own calculations

Stauder (Why) have women left East Germany more frequently than men?

25, there have been more men than women who went West for a job. For the high educated, more women than men migrated over the whole life course for job reasons. But in total in the later life course (panel A1), we find a balance of men and women who have went West for job reasons.

Net, slightly more women than men migrated for job reasons (see again panel A1 in figure 5). If we look again at the panels for the lowly (A2) and the highly educated (A3), we find that the cumulative net migration of lowly educated men is higher than that of lowly educated women. In contrast, there are net some more highly educated women than men who went West for a job.

Panel B1 in figure 5 presents gross and net-migration for educational reasons. Until an age of 28, about 87.000 men born in East Germany but 239.000 women (thin lines) have gone West to start a new track of their educational career (or because they just finished one). If we include East to West migrations of those who were born in West Germany (they resided in West Germany in 1989), it is 105.000 men vs. 265.000 women (thick lines). Thus, at this age, there were by far less men who left for educational reasons than for job reasons, but there were much more women who went West for educational than for job reasons. Therefore, the greatest part of the gap between (young) women and men in gross migration from East to West stems from educational migration and not from job migration. Looking at net-migration numbers, men's educational migration from East to West is nearly balanced by migration from West to East, whereas less women go from West to the East for educational reasons than from East to the West, thus increasing the gender gap in net educational migration.

Migration for educational reasons for both sexes is a bit higher for the highly compared to the lowly educated (figure 5, panels B2 and B3).⁷ For lowly educated women, it is more concentrated at ages 18 to 20, because vocational training for lower educated starts earlier in the life course and young men might have better chances to find an apprenticeship in the East whereas young women more often might have to move West to attend a vocational school. Looking at net-migration again, we find for both highly and lowly educated men that educational migration from East to West is balanced out by respective migration in the opposite direction. And we find for both highly and lowly educated women a significant net-migration from East to West.

⁷ Actually, this finding is due to comparing absolute projected numbers. The cumulative risk to migrate for educational reasons is much higher for the highly educated, especially the highly educated women. We find a more or less similar absolute level of educational migration, simply because there are more low than high educated people.

Panels C1 to C3 in the third column of table 5 reveal no significant gender differences in migrations linked to a partner.

4.3 Gross West-to-East migration

Figure 6 allows better to compare the quantitative relevance of motives for West-to-East migration. The thick lines refer to the gross number of re-migrating East Germans (residing in East Germany in 1989). Most East Germans re-migrate to the East for job reasons (losing a job in the West or finding a new one in the East, panel A1 vs. B1 and C1). Moving with or for a partner is least important (panel C1). For all three motives, we find more women than men migrating back.⁸ The gender gap is largest for educational migrations. Re-migration for job reasons is clearly dominated by the lowly educated (panels A2 vs. A3).

Finally, what are the main motives for West German men and women to go East? Figure 4a revealed that West German men move East at a higher extent than women. Now, figure 6 shows that this is not mainly motivated by finding a new job there (panel A1). During early life course, there were even some more women than men, who went East for a job. The larger part of the surplus of West German men over West German women in going East stems from educational migration.

5 Discussion

In contrast to observations on net-emigration rates, official statistics show that East German women migrate to the West earlier in the life-course than East German men, but that the latter catch up in the later life-course. It further shows that the higher net migration numbers of women compared to men stems from a lack of moves of women from West to East Germany. Therefore, in this paper, I tried to shed some light on (1) why East German women move West earlier in their life course than respective men and (2), why there were so few women moving from West to East Germany.

A new job in the respective other part of Germany is the most frequent reason for internal migration in both directions. Thus, previous research has done right to concentrate on explaining internal migration by labor market issues. However,

⁸ At first glance, this seems to contradict the finding from figure 4 that men and women have a similar cumulative risk to re-migrate. But, if more young women have gone West originally, they will dominate re-migration, even though they have the same risk as men to go back to the East.

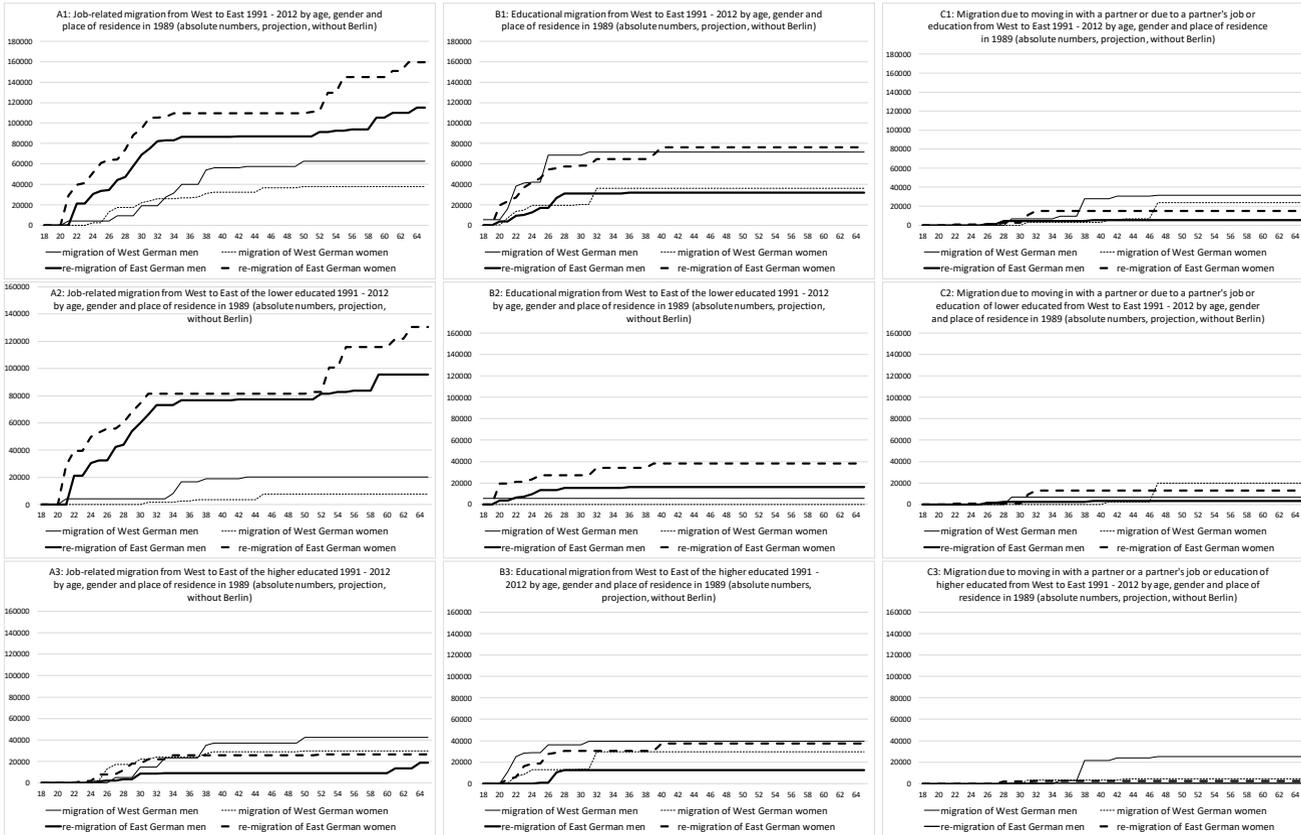


Figure 6: Source: GSOEP waves 1991–2012, own calculations

one main result of the current description is that gender *differences* in East-West-migration do *not* mainly result from job- (or partner) related moves. In later life, there were actually more or less the same number men and women who have left East Germany for a job. Only for the selective group of highly educated women, I found a higher number of migrations from East to West due to starting or ending a job then for men. Among the lowly educated, I found more men than women who went West with labor market motives. Gender differences in East-to-West-migration stem mainly from migration with educational motives, and this holds for both, lowly and highly educated women and men, but the difference is a bit stronger for the lowly educated. These findings contradict speculations about a stronger discrimination of women on the Eastern compared to the Western labour market (Kröhnert and Vollmer 2012). In contrast, findings encourage that future research on the gender difference in East-to-West-migration should try to develop more sophisticated models to explain educational migration, for instance by the regional supply of gender specific educational tracks. And, why do these excess women do not come back after having finished their studies?

Official statistics revealed that less women than men went from West to East Germany and, hence, contributed most to the gender gap in net migration from East to West Germany. The findings above show that this is not the result of gender selective re-migration of born East Germans who went back to their home region. By contrast, in absolute numbers, more women than men went *back* East – mainly for educational reasons (i.e. having finished an educational track). The gender gap in West-to-East-migration, thus, results from less women than men born in West Germany going East. Again, the gender gap in the first line stems from educationally motivated moves: By far more West German men than women went East for an educational track, especially among the highly educated.

The statistical description of internal migration above is limited by biases due to panel attrition in the GSOEP. Excess numbers of women over men will be over-estimated, whereas excess numbers of men over women will be underestimated. And this bias will be strongest for the 18 to 25 years old, i.e. the only age group in which actually more women than men migrated from East to West. Therefore, we do not exactly know, whether there actually is a surplus of East German women going West for a job at younger ages. But the number of women who left for education is nearly three times the number of men and it is not appropriate to explain this high difference merely by a gender selective bias. Another limitation of the description arises from interpreting bundles of events in the context of migration as motives for moving. I did not use more differentiated events – for example

separating moving for a new educational track and moving because an educational track has been finished – because doing so resulted in very low frequencies in the sample.

In total, the description encourages future research on internal migration in Germany with more attention to education as a pull-factor in the migration from West to East Germany.

References

- Abraham, Martin, Kathrin Auspurg and Thomas Hinz*, 2010: Migration decisions within dual-earner partnerships: A test of bargaining theory. *Journal of Marriage and Family* 72: pp 867-892.
- Alecke, Björn, und Gerhard Untiedt*, 2000: Determinanten der Binnenwanderung in Deutschland seit der Wiedervereinigung – Eine makroökonomische Analyse mit Paneldaten für die Bundesländer und den Zeitraum 1991 bis 2007. *Volkswirtschaftliche Diskussionsbeiträge Universität Münster* Nr. 309.
- Beck, Grit*, 2011: Wandern gegen den Strom. West-Ost-Migration in Deutschland seit 1990. *Geowissenschaften*. Berlin: Freie Universität.
- Brücker, Herbert, and Parvati Trübswetter*, 2004: Do the best go west? An analysis of the self-selection of employed east-west migrants in Germany.
- Burda, Michael, and Jennifer Hunt*, 2001: From reunification to economic integration: Productivity and the labour market in East Germany. *Brookings Papers on Economic Activity*: pp 1–92.
- Burda, Michael C.*, 1993: The determinants of East-West German migration. *European Economic Review* 37: pp 452–461.
- Burda, Michael C., Wolfgang Härdle, Marlene Müller and Axel Werwatz*, 1998: Semiparametric analysis of German East-West migration intentions: Facts and theory. *Journal of Applied Econometrics* 13: pp 525–541.
- Dienel, Christiane, Antje Gerloff und Loreen Lesske*, 2004: Zukunftschancen junger Frauen in Sachsen-Anhalt. *Sachsen-Anhalt, Landesregierung*.
- Fuchs-Schündeln, Nicola, and Matthias Schündeln*, 2009: Who stays, who goes, who returns? East-West migration within Germany since reunification. *Economics of Transition* 17: pp 703–738.
- Hansch, Winfried*, 1992: Die Migration aus den alten Bundesländern in die Region Berlin-Brandenburg. Kurzstudie für die Kommission zur Erforschung des sozialen und politischen Wandels in den neuen Bundesländern (Graue Reihe 1106). Halle: KSPW.

- Hansch, Winfried*, 1996: Wanderungsbewegungen aus den alten Bundesländern in die Region Berlin/Brandenburg: Zustrom aus der Gruppe der Eliten., pp. 47–67 in: *Bertram, Hans, Stefan Hradil und Gerhard Kleinhenz* (Hg.), KSPW: Transformationsprozesse, Band 6.
- Heiland, Frank*, 2004: Trends in East-West German migration from 1989 to 2002. *Demographic Research* 11: pp 173–194.
- Helbig, Marcel*, 2012: Die Umkehrung - Geschlechterungleichheiten beim Erwerb des Abiturs im Wandel. pp. 375-392 in: *Becker, Rolf, und Heike Solga* (Hg.), *Soziologische Bildungsforschung - Sonderheft 52 der Kölner Zeitschrift für Soziologie und Sozialpsychologie*. Wiesbaden: Springer VS.
- Herfert, Günter*, 2007: Regionale Polarisierung der demographischen Entwicklung in Ostdeutschland - Gleichwertigkeit der Lebensverhältnisse? *Raumforschung und Raumordnung* 65: pp 435–455.
- Hunt, Jennifer*, 2000: Why do people still live in East Germany? Working paper no. 7645. Cambridge: National Bureau of Economic Research.
- Jain, Angela, und Jenny Schmithals*, 2009: Motive für die Wanderung von West- nach Ostdeutschland und Rückkehrtypen. pp. 313–333 in: *Cassens, Insa, Marc Luy und Rembrandt Scholz* (Hg.), *Die Bevölkerung in Ost- und Westdeutschland. Demografische, gesellschaftliche und wirtschaftliche Entwicklungen seit der Wende*. Wiesbaden: VS.
- Klein, Thomas*, 1996: Der Altersunterschied zwischen Ehepartnern. Ein neues Analysemodell. *Zeitschrift für Soziologie* 25: pp 346–370.
- Klein, Thomas, und Johannes Stauder*, 2008: Partnermärkte in Deutschland im Spiegel eines neuen Erhebungsinstruments. pp. 78–113 in: *Huinink, Johannes, und Michael Feldhaus* (Hg.), *Neuere Entwicklungen in der Beziehungs- und Familienforschung. Vorstudien zum Beziehungs- und Familienentwicklungspanel (PAIRFAM)*. Würzburg: Ergon.
- Klein, Thomas, und Ingmar Rapp*, 2014: Die altersbezogene Partnerwahl im Lebenslauf und ihr Einfluss auf die Beziehungsstabilität. pp. 203–223 in: *Steinbach, Anja, Marina Hennig und Oliver Arránz Becker* (Hg.), *Familie im Fokus der Wissenschaft*. Wiesbaden: Springer VS.
- Klemm, Felicitas, und Ina Thomas*, 2010: Bildungsentscheidungen 2009 von Mädchen und Frauen in Sachsen. *Statistik in Sachsen* 3: pp 50–54.
- Kroh, Martin*, 2011: Documentation of sample sizes and panel attrition in the German Socio Economic Panel (SOEP) (1984 until 2010). Berlin: DIW.
- Kröhnert, Steffen, und Reiner Klingholz*, 2007: Not am Mann. Von Helden der Arbeit zur neuen Unterschicht? Lebenslagen junger Erwachsener in wirtschaftlichen Abstiegsregionen der neuen Bundesländer. Berlin: Berlin-Institut für Bevölkerung und Entwicklung.

- Kröhnert, Steffen, and Sebastian Vollmer*, 2012: Gender-specific migration from Eastern to Western Germany: Where have all the young women gone? *International Migration* 50: pp 95–112.
- Kubis, Alexander*, 2007: SSag mir, wo die Mädchen sind..."Regionale Analyse des Wanderungsverhaltens junger Frauen. *Wirtschaft im Wandel* 8: pp 298–307.
- Kubis, Alexander, and Lutz Schneider*, 2007: Determinants of female migration. The case of German NUTS 3 regions. *Wirtschaftsforschung*, Institut Für Halle.
- Kühntopf, Stephan, and Susanne Stedtfeld*, 2012: Wenige junge Frauen im ländlichen Raum: Ursachen und Folgen der selektiven Abwanderung in Ostdeutschland. *BiB Working Paper*. Wiesbaden: Bundesinsitut für Bevölkerungsforschung 3.
- Leibert, Tim, and Karin Wiest*, 2010: Ist die ländliche Peripherie männlich? *Nationalatlas aktuell* 4.
- Mai, Ralf*, 2006: Die altersselektive Abwanderung aus Ostdeutschland. *Raumforschung und Raumordnung* 5: pp 355–369.
- Mai, Ralf, Juliane Roloff und Frank Micheel*, 2007: Regionale Alterung in Deutschland unter besonderer Berücksichtigung der Binnenwanderungen.
- Melzer, Silvia Maja*, 2013: Reconsidering the effect of education on East-West migration in Germany. *European Sociological Review* 29: pp 210–228.
- Parikh, Ashok, and Michiel Van Leuvensteijn*, 2002: Internal migration in regions of Germany: A panel data analysis. Working Paper No. 12. Institutes, European Network of Economic Policy Research.
- Pischner, Rainer*, 2006: Die Querschnittsgewichtung und die Hochrechnungsfaktoren des Sozio-oekonomischen Panels (SOEP) ab Release 2007 (Welle W). Berlin: DIW.
- Raffelhüschen, Bernd*, 1992: Labor migration in Europe. Experiences from Germany after unification. *European Economic Review* 36: pp 1453–1471.
- Roesler, Jörg*, 2003: "Äbgehauen". Innerdeutsche Wanderungen in den fünfziger und neunziger Jahren und deren Motive. *Deutschland Archiv* 36: pp 562–574.
- Schneider, Lutz*, 2005: Ost-West-Binnenwanderung: Gravierender Verlust an Humankapital. *Wirtschaft im Wandel* 10: pp 309–314.
- Schneider, Lutz, Alexander Kubis and Delia Wiest*, 2010: Selektivität, soziale Bindung und räumliche Mobilität. Eine Analyse der Rückkehrpräferenz für Ostdeutschland. Halle: Institut für Wirtschaftsforschung.
- Schultz, Andrea*, 2009: Brain drain aus Ostdeutschland. Ausmaß, Bestimmungsgründe und Folgen selektiver Abwanderung. Leipzig: Deutsche Akademie für Länderkunde.
- Schwarze, Johannes*, 1996: Beeinflusst das Lohngefälle zwischen Ost- und Westdeutschland das Migrationsverhalten der Ostdeutschen? Eine

- mikroökonomische Untersuchung mit Daten des Sozio-oekonomischen Panels 1991 bis 1994. *Allgemeines Statistisches Archiv* 80: pp 50–68.
- Steiner, Christine*, 2004: Bleibst du noch oder gehst du schon? *Berliner Debatte Initial* 14: pp 42–55.
- Stickney, Lisa, and Alison Konrad*, 2007: Gender-role attitudes and earnings: A multinational study of married women and men. *Sex Roles* 57: pp 801–811.
- Wagner, Joachim*, 1992: Firm size, firm growth, and persistence of chance: Testing GIBRAT's law with establishment data from Lower Saxony, 1978–1989. *Small Business Economics* 4: pp 125–131.
- Weiss, Karin, and Katrin Isermann*, 2003: Der Übergang ostdeutscher Jugendlicher von der Schule in den Beruf. Geschlechtsspezifische Besonderheiten bei Berufseintritt und Berufseinschätzung. *Potsdamer Studien zur Frauen- und Geschlechterforschung* 7: pp 87–111.
- Wiest, Karin, and Tim Leibert*, 2013: Wanderungsmuster junger Frauen im ländlichen Sachsen-Anhalt - Implikationen für zielgruppenorientierte Regionalentwicklungsstrategien. *Raumforschung und Raumordnung* 71: pp 455–469.
- Windzio, Michael*, 2007: Regionale Arbeitslosigkeit und Distanz zur Grenze: Individual- und Kontexteffekte auf die Abwanderung von Arbeitskräften von Ost- nach Westdeutschland. *Schmollers Jahrbuch* 127: pp 553–583.
- Wolff, Sascha*, 2010: Ost-West-Wanderungen im wiedervereinten Deutschland. Göttingen: Optimus.
- Wolff, Sascha*, 2006: Migration und ihre Determinanten im ost-westdeutschen Kontext nach der Wiedervereinigung: Ein Literaturüberblick. Göttingen: Universität Göttingen.
- Zaiceva, Anzelika*, 2007: East-West migration and gender: Is there a "Double Disadvantage" vis-à-vis stayers? Bonn. IZA.

Über den Autor

Johannes Stauder, 1971, Dr. phil., Privatdozent und Akademischer Oberrat für Methodenausbildung, Statistik und EDV am Max-Weber-Institut für Soziologie der Universität Heidelberg. Forschungsgebiete: Partnermarkt, Freundschaftsbeziehungen, Migration, Familien- und Bevölkerungssoziologie, Sozialstrukturanalyse, quantitative Methoden. **Veröffentlichungen:** Migration and the pPartner Market: How gender-selective relocations affect regional mating chances in Germany. *European Journal of Population* 34 (1), 2018: 59-86 (mit Jan Eckhard). – Unemployment, unemployment duration, and health: Selection or causation? *European Journal of Health Economics*, 2018 (online first). – Friendship networks and the social structure of opportunities for contact and interaction. *Social Science Research* 48C, 2014. – *Der Partnermarkt und die Gelegenheiten des Kennenlernens*. Wiesbaden 2014 (hrsg. mit A. Häring, Th. Klein und K. Stoye).

Correspondence:

PD Dr. Johannes Stauder
Max Weber-Institut für Soziologie
Universität Heidelberg
Bergheimer Straße 58
69115 Heidelberg
E-Mail: johannes.stauder@mwi.uni-heidelberg.de
Homepage: <https://www.soz.uni-heidelberg.de/dr-johannes-stauder/>