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Weekly Report

Considering Emigration: German university graduates are moving abroad—but only temporarily

Much of the current German debate about the integration of immigrants overlooks the fact that Germany is not solely a country of immigration, but also—and to a substantial degree—a country of emigration. One of the largest groups of emigrants is made up of Germans themselves. The percentage of German natives in the total population of emigrants has risen substantially over the last few years. In 2009, of the almost 750,000 individuals who emigrated from Germany, 155,000 were German citizens.

Data from the Socio-Economic Panel (SOEP) show that in 2009, one in every eight German citizens seriously considered moving abroad. Of these, one in three considered leaving Germany permanently and one in eleven considered leaving within the next twelve months.

Of the factors that tend to favor emigration, previous experiences and friends abroad play a crucial role. University graduates are more inclined to move abroad temporarily. Concerns that Germany is suffering a "brain drain," losing its best and brightest to other countries, are therefore unjustified at the present time.

Demographic change and the shortage of specialized labor in Germany have raised concerns that highly skilled workers with above-average earnings potential will leave the country. A series of studies, among them studies by the Socio-Economic Panel (SOEP), confirm the finding that German emigrants are younger and more educated on average than non-German emigrants. People with an immigration history, on the other hand, tend to emigrate or return to their home country when they do not find employment or when they retire. In the most recent annual report of the German Council for Integration and Migration (Sachverständigenrat für Integration und Migration), it states that the high rate of emigration may simply be the expression of a broader increase in international mobility.

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¹ See H. Brücker, "Deutschland leidet unter einem Brain Drain," Wirtschaftsdienst 3 (2010): 138–139.

² M. Erlinghagen, T. Stegmann, and G. G. Wagner, "Deutschland ein Auswanderungsland?" Wochenbericht des DIW Berlin 39 (2009). See also the recently published study on the international emigration of German citizens by A. Ette and L. Sauer: Auswanderung aus Deutschland (Wiesbaden: 2010).

³ Der Sachverständigenrat deutscher Stiftungen für Integration und Migration: Einwanderungsgesellschaft 2010 (Berlin: 2010).

Table 1

Emigration and immigration or return migration of Germans

_	_				
	Immigration or return migration	within that number: ethnic Germans	Emigration	Net migration (including ethnic Germans)	Net migration (without ethnic Germans)
1998	196956	103 080	116403	80 553	-22 527
1999	200 150	104916	116410	83 740	-21176
2000	191909	95615	111244	80 665	-14950
2001	193958	98 484	109 507	84451	-14033
2002	184202	91416	117 683	66519	-24897
2003	167216	72885	127 267	39949	-32936
2004	177 993	59 093	150667	27 326	-31767
2005	128051	35 522	144815	-16764	-52 286
2006	103 388	7747	155 290	-51 902	-59 649
2007	106014	5 7 9 2	161 105	-55091	-60883
2008	108331	4362	174759	-66428	-70790
2009 ¹	115 000	3 3 6 0	155 000	-40 000	-43 360

1 provisional figures.

Sources: Federal Statistical Office, Federal Office of Administration statistics from 2009 on the late immigration of

DIW Berlin 2010

The negative net migration balance among Germans has declined significantly in the last year after rising steadily in the previous four years.

Migration balance in 2009 less negative than in previous years

Provisional migration figures from the Federal Statistical Office suggest that approximately 155,000 Germans moved abroad in 2009, and that approximately 115,000 Germans living abroad moved (back) to Germany during the same period (Table 1). Although this still meant that in total, approximately 40,000 more Germans emigrated than immigrated, the rising negative migration balance since 2005 declined substantially in 2009 for the first time relative to previous years.

The decline in Germany's negative migration balance is not just the result of a lower rate of emigration among Germans in 2009 than in 2008, but also of a constant increase since 2006 in immigration by Germans—and no longer mainly *Spätaussiedler* (ethnic German repatriates).⁴

Under European Regulation No. 862/2007, member states have been required since 2008 to submit population and immigration figures by country of birth to the Statistical Office of the European Commission (Eurostat). Initial estimates show that in 2008, the large majority of German immigrants (68 percent) had been born in Germany and had returned again

after a period living abroad.⁵ Another 12 percent of Germans moving or returning to Germany had been born in another country of the EU. These findings show that the majority of German emigrants return to their home country after living abroad.

The migration statistics of the Federal Statistical Office do not include information on the duration of residence in the destination country or provide indications as to future migration. This information is important, however, for estimating how migration movements will affect Germany's population in the future. These questions can be investigated in detail using data from DIW Berlin's Socio-Economic Panel (SOEP), which contains questions asking respondents whether they are currently considering emigration, and also—through repeated interviews with the same individuals—provides information as to whether their emigration plans were actually carried out.

One in eight Germans seriously considers emigrating—but twothirds only temporarily

According to the SOEP data, in 2009, one in every eight Germans (Table 2) and more than one in every four foreign citizens living in Germany seriously considered moving abroad. But while only 29 percent of Germans considering emigration wanted to

⁴ According to the Federal Statistical Office, emigration figures have been inflated since 2008 due to corrections made to the population register following the introduction of tax ID numbers, although the degree of these distortions cannot be quantified. Federal Statistical Office, "Wanderungen 2009: wieder mehr Personen nach Deutschland gezogen" Press Release 185 (May 26, 2010).

⁵ R. Mundil and C. Grobecker, "Aufnahme des Merkmals 'Geburtsstaat' in die Daten der Bevölkerungs- und Wanderungsstatistik 2008." Wirtschaft und Statistik 7 (2010): 615–627.

Box

The collection of data on immigration plans and actual immigration in the SOEP

The Socio-Economic Panel (SOEP), which is carried out annually on behalf of DIW Berlin by the survey institute TNS Infratest Sozialforschung in Munich, has been collecting data on the emigration of survey participants since 1984 for West Germany and since 1990 for East Germany. The data allow for research not only on planned emigration but also on actual emigration behavior.

The 2009 wave of the SOEP survey included a special module on emigration plans among Germans that had been pretested extensively in advance. The module contains items on the strength of the respondent's connection to his or her current place of residence in Germany, on social ties abroad, on personal experiences abroad, and questions designed to estimate the level of emigration.

All household members 16 and older were asked:

Have you recently given serious consideration to moving abroad, either for an extended period or permanently?

The answer options were: yes / no.

Those who answered yes were then asked further questions on how long they planned to stay (a few months / a few years / forever), what country they would like to move to, and whether they planned to move there within the next 12 months.

As a longitudinal study, SOEP also offers the possibility to study actual cases of emigration. Since the SOEP also investigates "panel dropouts," that is, former survey participants who stop responding, those who have left Germany can be identified. This makes it possible to

1 See G. G. Wagner, J. R. Frick, and J. Schupp: "The German Socio-Economic Panel Study (SOEP)—Scope, Evolution, and Enhancement," Schmollers Jahrbuch, Journal of Applied Social Studies 127(1) (2007): 139-169 test the "forecasting accuracy" of previously expressed emigration intentions.

In 1993, 1996, 1997, and 1998, SOEP included the following indicator of intentions to emigrate.

Could you imagine moving to another country, either for an extended period or permanently?

The answer options were: yes, definitely / yes, possibly / probably not / absolutely not.

To analyze the realization of intentions to emigrate, we also incorporated data from 1998 into the study. We considered those respondents who selected either of the first two options as "willing to emigrate."

On the multivariate analyses

The simultaneous estimations of different factors influencing the existence of intentions to emigrate were carried out using logistic regression models. The influence of the explanatory variables is reflected in the regression coefficients which are reported as odds ratios. These can be interpreted as relative probabilities. Coefficients below 1 indicate a lower probability of considering emigration than the reference group, while parameters above 1 indicate a higher probability.

One model was run for each of the following thoughts regarding emigration:

- a) for the existence of serious thoughts about emigrating,
- b) for the existence of serious thoughts about moving abroad temporarily,
- c) for the existence of serious thoughts about moving abroad permanently, and
- d) for the intention to move abroad in the next twelve months.

stronger role, as could be expected, among foreigners than among Germans.

The most recent SOEP data confirm previous findings showing that the primary features distinguishing Germans with emigration plans from those without such plans are social ties abroad and previous experiences living abroad. ¹¹ One in four Germans who did not consider emigrating had friends abroad. Slightly more than half of those who seriously considered emigrating (54 percent) had regular contact with friends abroad. Among those with concrete plans

11 See C. Diehl, S. Mau, and J. Schupp, "Auswanderung von Deutschen: kein dauerhafter Verlust von Hochschulabsolventen," Wochenbericht des DIW Berlin 5 (2008).

Table 2

Levels of intentions to emigrate¹

in percent

	Total			Germans			Foreigners		
		Percentage of			Percentage of			Percentage of	
	extrapolated to 1,000 persons	all respondents	respondents considering emigration	extrapolated to 1,000 persons	all respondents	respondents considering emigration	extrapolated to 1,000 persons	all respondents	respondents considering emigration
respondents considering emigration	9 4 7 0	14	100	7873	13	100	1 597	27	100
of these: with a planned duration of stay abroad									
of several months	2934	4	31	2 608	4	34	326	5	21
of several years	3 1 6 9	5	34	2 8 9 9	5	37	270	4	17
forever	3 2 5 0	5	35	2 2 7 5	4	29	976	16	62
Intention to emigrate within the next 12 months	759	1	8	661	1	9	98	2	6

¹ Weighted estimation.

Sources: SOEP, v26; estimations of DIW Berlin.

DIW Berlin 2010

One in every eight Germans and one in four foreigners seriously consider emigrating.

leave Germany forever, 62 percent of foreigners had permanent emigration in mind (box).

Of those respondents who seriously considered emigration, only one in twelve stated having plans to leave within the next twelve months—that is, only around one percent of the population had *concrete* plans to emigrate. For adult Germans, this adds up to potential emigration of over 660,000 individuals in the second half of 2009 and first half of 2010.⁶ This figure is four times higher than the 155,000 emigrants actually registered in 2009, and thus clearly shows the large gap that exists between emigration plans and their realization.⁷

Experiences and contacts abroad act as a catalyst for emigration plans

There are numerous reasons why people begin thinking about emigration.8 The theoretical literature

- **6** The SOEP study is regularly conducted in the first six months of every year. Thus, emigration plans relate to the second half of 2009 and the first half of 2010.
- **7** The opposite is true for foreigners living in Germany. With just under 100,000 persons stating plans to leave Germany in the next twelve months, the figure of 579,000 persons actually registered as moving abroad in this period was underestimated almost six-fold. One possible reason is that the group of new immigrants to Germany may be underrepresented in the SOEP study due to the panel design. Another is that persons without German citizenship may show a generally weak association between emigration plans and actual emigration behavior.
- 8 There is an action theory model capable of explaining migration decisions that treats migration decisions as sequential processes. The actual migration behavior is preceded first by the idea to emigrate and then by a decision for this option. The emergence of an idea to emigrate thus constitutes a decisive element in explaining actual migration behavior. This underscores the importance of analyzing migration intentions. See

reports adverse economic conditions as well as close relationships to people abroad (*transnational ties*)⁹ as important motivating factors. It is to be expected that these connections will reduce the threshold of inhibitions (knowing someone in the destination country) as well as the material costs (easily obtaining information on the destination country from contacts there or having already obtained this information during a previous stay).

In 2009, around one-third of the population had friends abroad—nearly 90 percent of all Germanborn foreigners but also more than 30 percent of all respondents with German citizenship (Table 3).¹⁰

Another indicator of transnational ties, along with having family members abroad, is past experience living abroad. One in nine Germans and almost half of all foreigners living in Germany have lived abroad for a period of more than three months. Among all subgroups of the population, the majority of these experiences took place more than ten years ago.

Family contacts abroad as well as financial support to family members play an important role when considering transnational ties. These aspects play a

- F. Kalter, Wohnortwechsel in Deutschland (Opladen: 1997); as well as F. Kalter, Theorien der Migration, in Handbuch der Demographie 1 Modelle und Methoden, ed. W. Müller et al. (Berlin: 2000), 438–475.
- **9** See S. Mau, Transnationale Vergesellschaftung. (Frankfurt am Main: 2007).
- **10** The percentage is thus significantly lower than in the 2006 "Transnationalization Survey" (46.5 percent), which, however, is based on a much smaller sample.

to emigrate, this figure was as high as 58 percent. Furthermore, one in four (26 percent) individuals with intentions to emigrate had already lived abroad for an extended period. This was true for only one in eleven (nine percent) of those who did not consider emigrating. In the group of Germans who planned to emigrate in the next year, 40 percent had already lived in a foreign country at some point in the past (Figure 1).

We used multivariate analysis to determine the extent to which transnational ties, in connection with other factors, explain the emergence of plans to emigrate. 12 In our analysis, we took socio-demographic characteristics (gender, age, educational level, and regional origins) into account as well as the individual willingness to take risks, which must also play a role in risky emigration decisions. We also took local ties and home ownership into consideration. For someone with strong ties to the place where they live, the psychological impacts and financial costs of moving abroad can be expected to decrease the probability of emigration. Since emigration plans usually affect the entire household, we took marital status and the presence of children into account, as well as the spouse or partner's responses to the emigration questions. Furthermore, we considered available net income and the respondent's level of satisfaction with that income as possible economic motives for emigration. We also considered occupational status and, if relevant, the duration of unemployment (Table 4).

The results of the overall model, which we used to examine the probability of considering emigration (whether temporarily or permanently) confirm the strong influence of transnational relationships: individuals with personal experience living abroad are twice as likely to seriously consider emigrating as individuals without such experience. Having friends abroad further increases this likelihood by a factor of 2.5.

In addition, the spouse or partner's interest in emigration shows a clearly positive effect: if one partner seriously considers emigrating, this increases the other partner's tendency to consider emigrating, just as one partner's lack of interest in emigration reduces the other partner's interest. Although high-income-earners more frequently entertain thoughts of emigrating, it is not so much the level

Table 3

Transnational ties in Germany¹

	Total	Germans	Foreigners
Regular contact with friends abroad			
yes	36	31	88
no	64	69	12
Lived abroad for more than three months			
within the last 10 years	5	4	14
more than 10 years ago	9	7	32
no	86	89	53
Family abroad			
no, no one	86	92	20
yes, partner	0	0	0
yes, children	1	1	0
yes, other relatives	13	7	79
Financial support to relatives abroad within the last year			
yes	2	2	10
no	98	98	90

1 weighted estimation.

in percent

Sources: SOEP, v26; estimations of DIW Berlin.

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More than one in three residents of Germany had friends abroad in 2009.

Figure 1

Experiences and contacts abroad by levels of the intention to emigrate among Germans¹

Share in percent

60

50

40

30

No thoughts of emigrating emigrating lintention to emigrate in the next 12 months

Regular contacts abroad
Lived abroad in the past

Weighted estimation.

Sources: SOEP, v. 26; estimations of DIW Berlin.

DIW Berlin 2010

More than half of all Germans who consider emigrating have contacts abroad.

¹² Logistic regression models were used.

¹³ Here one can assume a mutually reinforcing effect. In 90 percent of all couples, the two partners share the same desires regarding emigration. In 85 percent of all cases, both partners have no desire to emigrate, and in five percent of cases both partners would like to emigrate. In the cases where the two partners' desires differ, around twice as many men as women are alone in their desire to emigrate.

Table 4 What factors raise the likelihood among Germans of considering emigration?

Variables ¹	Overall model	Temporary emigration	Permanent emigration	Emigration within the next 12 months
Sociodemographic characteristics				
Sex (reference: women)				
men	1.43***	1.21**	1.71***	0.95
Age (reference: 35-49-year-olds)				
17-34-year-olds	1.45***	1.79***	0.74*	1.32
50-64-year-olds	0.60***	0.55***	0.88	0.38**
65-year-olds and older	0.15***	0.17***	0.19***	0.15***
Level of education (reference: without completed education, lower or intermediate secondary school without completed vocational training)				
Completed lower or intermediate secondary school with occupational training	0.87+	0.77**	1	0.87
Academic-track secondary school without completed occupational training	1.19+	1.42**	0.59**	1.47
University degree	1.08	1.42**	0.50***	1.33
Region (reference: West Germany)				
East Germany	0.72***	0.78**	0.68**	1.31
Psychological predisposition				
Willingness to take risks (0-10)	1.13***	1.13***	1.06**	1.25***
Local ties				
Perceived local ties (reference: strong, not so strong, basically none)				
Very strong	0.54***	0.60***	0.51***	0.42**
Housing situation (reference: tenant)				
Homeowner	0.96	1.13+	0.70**	1.07
Household decision				
Marital status (reference: married)				
Unattached (separated, single, widowed, divorced)	1.13	1.15	1.02	1.3
Children under the age of 16 within the household (reference: childless)				
1 child	0.89	0.80*	1.19	0.49*
2 children	0.83*	0.80*	1.03	0.47*
Partner's intention to emigrate (reference: partner not considering emigration)				
No partner in the household	2.43***	2.42***	2.04***	4.75***
Partner considering emigration	11.59***	6.38***	10.80***	11.74***
Economic situation				
Occupational position (reference: not employed)				
Employee	0.89	0.93	0.97	0.72
Self-employed	1	0.87	1.50*	0.64
Other paid employment	0.73***	0.71**	0.95	0.43**
Unemployed (up to 12 months)	1.13	1.08	1.23	1.69
Long-term unemployed (more than 12 months)	0.61*	0.44**	0.99	1.18
Income (2nd and 3rd quartile)				
Lower quartile	0.98	1.07	0.83	0.79
Upper quartile	1.15*	1.23**	0.92	1.07
Satisfaction with income (0-10)	0.91***	0.96**	0.85***	0.97
Transnational ties		2.30	2.00	2.07
Experience abroad (reference: none)				
Experience abroad	2.09***	1.96***	1.55**	3.09***
Contacts to friends or acquaintances abroad (reference: none)	2.03	1.30	1.55	5.09
Contacts to friends or acquaintances abroad Contacts to friends or acquaintances abroad	2.55***	2.37***	2.06***	1.87**
Pseudo R2	0.26	0.24	0.20	0.24
Number of observations (N)	16724	16706	16706	16700

¹ Results of a logit estimation with 0/1 dummies. Dependent variable: seriously considering moving abroad for a long period or forever; intention to emigrate within the next 12 months.

Probability of error: +<10%, *<5%, **<1%, ***<0.1%.

Sources: SOEP, v26; estimations of DIW Berlin.

of income as it is the level of satisfaction with net available household income that influences thoughts of emigration. Increasing satisfaction with one's income reduces the probability of considering a move abroad.

University graduates are more inclined to consider moving abroad—but only for a temporary period

If we incorporate the specific results—the consideration of temporarily emigration, permanent emigration, or emigration in the near future—into the model, clear differences immediately appear between people of different educational levels. Highly educated people (graduates from a University of Applied Sciences or higher) consider moving abroad temporarily much more frequently than people with lower levels of education (lower or intermediate secondary school graduates and dropouts). The highly educated are underrepresented, however, among those who consider moving abroad permanently. In the overall model, where we do not distinguish according to duration of stay abroad, the two effects cancel each other out.

Whereas thoughts of temporary emigration from Germany are very rare among the long-term unemployed and especially among individuals employed in manual labor, the self-employed show a much stronger tendency to consider permanent emigration.

When children under the age of 16 live in the household, people are less likely to consider temporary emigration from Germany and emigration in the near future. Children play no role, however, when considering permanent emigration.

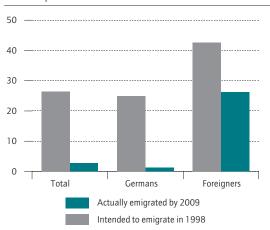
Only a small percentage of Germans who consider emigrating actually follow through

In the 1990s, the participants in the SOEP survey were asked repeatedly (in 1993, 1996, 1997, and 1998) about their intentions to emigrate. ¹⁴ The indicator of emigration intentions compiled from the 1998 SOEP survey data shows a significantly stronger interest in emigration than the indicator from 2009. In 1998, one in four Germans could conceive of leaving Germany forever, and 43 per-

Figure 2

Desire to emigrate in 1998 and the realization of this desire by 2009¹

Shares in percent



1 Weighted estimation

Sources: SOEP, v26; estimations of DIW Berlin.

DIW Berlin 2010

A large percentage of potential emigrants do not end up leaving.

cent of all foreigners were considering moving away (Figure 2).¹⁵

Using longitudinal data from the SOEP study, we can reconstruct whether or not those who had expressed a desire to emigrate in 1998 had actually done so by 2009. 16 And indeed, just above five percent of Germans who considered moving abroad in 1998 actually did emigrate. The figure for foreign citizens who followed through on their desire to emigrate was higher, at 34 percent. Extrapolating these figures to the total population from 1998, barely two percent of Germans and less than 27 percent of foreigners had left Germany by 2009.

These rates of realization may appear low. Yet the analysis of the SOEP data reveals that for Germans, even this very vague emigration indicator shows an almost six times higher likelihood of realization for those who answered yes to the question about potential emigration in 1998 than those who answered no. In the group of foreigners, the likelihood

¹⁴ Due to the revision of the survey module Emigration intentions and transnational experience, the current survey results are limited in their comparability to the results from the 1990s.

¹⁵ Among Germans, in 1993, 1996, and 1997, the share of around 24–25 percent of the survey population with emigration intentions was almost the same as in 1998.

¹⁶ For a similar study from the 1990s analyzing a shorter period for the realization of emigration intentions, see M. Niefert, N. Ott, K. Rust, "Willingness of Germans to Move Abroad," in Econometrics Studies (Empirische Wirtschaftsforschung und Ökonometrie, Bd. 8), ed. R. Friedmann et al., (Münster: 2001), 317–333.

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ISSN 1860-3343 Translated from the German. All articles are protected by copyright. is twice as high. The questions about intentions to emigrate can therefore clearly be judged to possess reasonable predictive power.

Conclusion

From an economic perspective, the high willingness among Germans to be internationally mobile should be evaluated as positive. After all, many people gain valuable skills and training by working abroad. When these highly skilled emigrants return to Germany later, the results work to Germany's advantage in a variety of respects. Transnational ties and their social and (multi-)cultural impacts are therefore in no way detrimental to a country like Germany that is strongly export-oriented and poor in natural resources, where the population's own skills and abilities are the real capital; rather, such ties make good economic sense.

Only if more university graduates and skilled workers leave Germany permanently, and if fewer qualified workers immigrate to Germany from other countries will the domestic economy suffer. The analysis shows that such a substantial and permanent loss of knowledge is not a danger at present due to the temporary nature of many emigrants' stays abroad. In particular, the group of university graduates seldom considered leaving Germany permanently. Thus, for Germany, the term *brain circulation*—that is, the temporary emigration of highly skilled labor—appears more appropriate than *brain drain*, the permanent loss of highly skilled labor. Since a large percentage of emigrants intend to return to Germany again, their moves can be expected to produce positive effects for the German economy in the long term.

What is more important than addressing concerns about brain drain is the need to improve the integration of immigrants and individuals with a foreign background, and to create opportunities for the immigration of highly skilled labor that are transparent and tailored to the economy's current demands.

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