Emigration of the Highly Skilled from Germany to the US: "Brain Drain" or "Brain Circulation"?

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Background and research question

Our paper tackles the question of whether emigration of highly skilled Germans to the US resembles a "brain circulation" rather than a "brain drain." Since Germany's reunification, there has been a heated debate about whether or not highly skilled professionals are leaving the country in increasing numbers for better economic opportunities in the United States. Fueling the debate is Germany's lagging economy. The widespread interest in highly skilled individuals leaving the country to work and live abroad notwithstanding, the simple yet crucial question whether Germany is in fact encountering a "brain drain" is still unsettled. This is because an emigration process resembles a "brain drain" when it shows two features: 1) The skill level of the emigrants is higher than the skill level of those staying behind and 2) emigration is permanent. It is those very features that we investigate in our analyses.

Data

We consult different data sources in order to describe the development and characteristics of emigration processes of the highly skilled from Germany to the US during the last 15 years:

Emigration data from the German local registration offices are compiled and published by the German Federal Statistical Office and give information on the long-term trends of emigration flows from Germany to the US. However, emigration data do not provide information on the skill level of those leaving the country nor on the duration of their stay abroad.

The 5 percent public-use sample of the US Census known as the Integrated Public Use Microdata Series (IPUMS) allows us to asses changes over time in the educational and occupational composition of the recent arrivals from Germany — and to compare it to the development of the skill level in their country of origin.

In order to examine the question of permanence, it is necessary to consult data from the US agencies dealing with the admittance of foreigners. Information on the number and characteristics of "immigrants" admitted for lawful permanent residence is collected by US Citizenship and Immigration Services (USCIS), part of the Department of Homeland Security (DHS). In order to exclude those who immigrated as close family members of US citizens or

who were resettled in the US as refugees, only those immigrants who adjusted from the status of a highly educated or highly skilled temporary visitor or who entered as new arrivals under categories subject to numeric limitations or restrictive caps are included in our analyses. The number of visas issued to different categories of temporary visitors, or "non-immigrants," is published by the Office of Visa Services of the US Department of State. We limit our analyses to certain nonimmigrant visa types associated with the "highly skilled".

Results

Combined, these data sources allow an assessment of the size and characteristics of both temporary and permanent migration flows into the US from Germany. Our results show that huge numbers of Germans left the country for the US from 1950 on, when post WWII restrictions of emigration from Germany imposed by the allies were removed. After the mid-1950s, these numbers dropped substantially and Germany was about to become an immigration country itself. It was only after the mid-1970s that emigration figures of Germans rose again, though on a much smaller scale than before.

Census analyses show that recently arrived Germans were much more likely to hold higher educational degrees in 2000 than in 1990. In 1990, just over a third held at least a Bachelor's degree whereas today, this holds true for more than half of the German born. This increase is larger than the according change found in Germany itself. Things look similar with regard to the occupational composition of the German born who arrived in the US recently.

However, the census questionnaire refers to all people living in the US at a given point in time. It can thus be assumed to include many temporary migrants as well. Data on the number of temporary and permanent immigrants admitted between 1990 and 2000 sheds light on the question of whether these growing numbers of Germans living in the US finally return to their home country with their newly acquired skills and experience. Data from the Department of State shows that almost all groups of temporary visitors under consideration increased in size. This increase was most pronounced between the mid- and late 1990s. While there were only about 25,000 highly skilled temporary visitors from Germany in 1990, this figure had risen to more than 40,000 in 2000. Other groups grew in size as well, though the absolute numbers are much smaller.

The numbers of immigrants admitted did increase as well: The absolute numbers of selected groups of "adjusters" have been rising, especially since the late 1990s. Even though a clear pattern is not easy to detect since the absolute numbers of "adjusters" are small and change from

year to year, the increase seems to be roughly proportional to the increase in the number of temporary visa holders. The numbers of "new arrivals subject to numerical limitations" more than doubled since the mid-1990s. It is, however, important to note that for both groups, "adjusters" and "new arrivals," the absolute numbers are very small.

Conclusion

There is little evidence of permanent, large-scale emigration of highly skilled Germans to the US, though the phenomenon did gain momentum, especially in the mid- to late 1990s. The increase in German immigration is probably the result of various factors, but is mainly attributed to those Germans who went abroad temporarily for work or study. This kind of temporary mobility increased substantially over the last decade. Since the number of Germans who entered the US on temporary visas increased, the number of those who decided to stay permanently increased as well. During their time abroad, some "non-immigrants" built up social and institutional ties and abandoned their plans to return home. There is, however, no evidence that the "risk" of highly skilled, temporary visitors becoming permanent resident aliens increased substantially. Although push factors in the country of origin, such as a high tax burden and limited opportunities for upward mobility, play a prominent role in the public debate on this topic, their contribution to explaining rising numbers of Germans settling in the US seem to be limited.