Convergence or divergence? Immigrant wage assimilation patterns in Germany

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The assimilation of immigrants with respect to the social, cultural, and economic conditions in their host countries lies in the center of the debate of immigration policy in Europe. Kahanec and Zimmermann (2010) note that the “proper management of high-skilled immigration is of key importance for Europe,” and the OECD (2010a, 2010b) emphasizes the importance of policy reforms to close the prevalent employment gap especially in the highly skilled manufacturing sector. However, the question of whether their new host countries are in fact attractive for labor immigrants in the long run is open: what are the earnings opportunities of immigrants as compared to those of natives? Do immigrants catch up with natives given additional time spent in their new environment (as, e.g., Chiswick, 1978, finds for the United States) or do immigrants face persistent earnings disadvantages? Do they differ across skill groups, i.e., do highly skilled immigrants suffer greater wage penalties than low skilled immigrants as compared to their native counterparts? Moreover, do highly skilled immigrants face sufficiently dispersed returns to skills that make it attractive for them to come to Germany? The answers to these questions are particularly relevant in light of the ongoing global “Battle for Brains” (Bertoli et al., 2009) in which developed host countries with their highly skilled workforce is engaged.

I study how newly arrived immigrants to Germany, a major European destination country for labor migration, adjust to natives in terms of wages. I look at the effect of time spent in the host country on hourly wages, i.e., how years since migration influence the wage assimilation of immigrants. Furthermore, I investigate how differences in returns to experience between natives and immigrants affect the assimilation process of immigrants. As attracting full time working immigrants is a political and economic objective, I restrict my analysis to the group of full time working first generation immigrants and examine whether they assimilate in terms of wages. This study contributes to the literature by looking not only at immigrants and natives in general but by doing separate analyses for highly, medium, and low skilled workers. Additionally and in contrast to previous work that omits important variables (such as occupational and industry information) or does not take into account age at migration (Chiswick and Miller, 2003; Adsera and Chiswick, 2007), I control for an extensive array of socio-economic background information. Furthermore, allowing for differences in the effect of additional work experience between immigrants and natives yields less biased results for the measured effect of years since migration.

My analysis presents evidence that the assimilation pattern as measured by the effect of time spent in the host country is generally statistically significant in Germany. Nevertheless, substantial differences in the extent of wage convergence between immigrants and natives exist over the course of their working lives, especially with respect to their skill level. These
differences are partly driven by disparities in the returns to experience. At low values of work experience, additional work experience yields lower returns for immigrants than for natives. Yet, after 19 years of work experience, returns to additional experience are higher for immigrants than for natives. However, by that time the earnings gap has already widened too far, such that wage convergence can no longer be achieved. Results also differ by skill groups: immigrants are able to catch up with their native counterparts if they are low skilled and they face diverging wages if they are highly skilled. In the analysis, I test three central hypotheses:

Hypothesis 1: A positive effect of years since migration on earnings is expected for additional country-specific human capital given that immigrants start acquiring such host country-specific human capital once they arrive. I thus expect immigrants to catch up with natives in terms of earnings with additional years since migration.

Hypothesis 2: As natives may be able to move up the career ladder faster than immigrants, the returns to work experience are expected to be ceteris paribus higher for natives than for immigrants with otherwise comparable characteristics. I therefore expect the experience earnings profiles of immigrants to be flatter than those of natives, and a divergence of wages between immigrants and natives.

Hypothesis 3: Differences in the effect of work experience between immigrants and natives are expected to be more pronounced in case of highly skilled as compared to low skilled individuals. The productivity of highly skilled individuals is more closely tied to their level of experience, as they are typically employed in more complex working environments (see Constant and Massey (2005)). For highly skilled immigrants, the “glass ceiling” effect should thus be of greater importance. The cumulative advantages of natives may lead to greater discrepancies in the returns to experience than is the case for the low skilled, especially during the early years of the working career. I therefore assume the difference in the returns to experience to be the largest for highly skilled and the smallest for low skilled individuals.

Detailed results taken from this study are in particular: First, the time immigrants spend in their new host country is indeed significantly and positively correlated with their wages. This result confirms classic human capital theory, which suggests that immigrants acquire host country-specific human capital over time. Taken by itself, the result of a—ceteris paribus—positive correlation of years since migration with hourly wages might be considered as evidence for wage assimilation, i.e., a catching-up of immigrant earnings compared to natives. Second, compared to average natives, immigrants earn lower hourly wages at all levels of experience. Especially for low values of work experience, natives receive higher returns for additional experience. Even when the marginal effects of experience and years since migration are combined, immigrants are only able to reach the wage level of natives in the low (and partly the medium) skill group.

Third, as the difference in the returns to additional work experience is the greatest for highly skilled immigrants, issues such as cumulative advantages of natives, along with possible discrimination with respect to employment opportunities and earnings (glass ceilings) appear to be particularly relevant for this group. It remains for further research to quantify precisely how early employment prospects affect immigrants’ labor market outcomes differently from those of natives.

Summarizing the results I find that except for the low skilled, immigrants in Germany are generally not able to catch up with comparable natives with respect to wages. Even when the returns to additional work experience are higher for immigrants (especially when combined with the positive effect of years since migration) than for natives at high values of work experience, the initial divergence cannot be entirely overcome except in case of the low skilled immigrants.
Especially for highly skilled immigrants, i.e., those immigrants needed to close the employment gap in Germany’s knowledge society, the long term prospects are rather discouraging. The earnings gap between them and their native counterparts is not decreasing over the course of their professional careers—a fact that may repel potential immigrants when they look for a permanent new home and hope for full assimilation and immigration even given that their appears to be sufficient dispersion in the returns to skills among immigrants.

Even though the presented evidence rests upon retrospective data, assuming that the general observations are valid and remain so in the future should be of great concern for policy makers. If Germany is to adapt a policy of focusing on highly skilled immigrants as currently discussed in the political debate, extensive efforts need to be made by politicians as well as employers not to discourage these highly skilled immigrants direly needed at the German labor market. Future research should also center on the question to what extent differences in bargaining power drive the observed results, as a wider availability of outside options or different job offers might strengthen natives’ (wage) bargaining power relative to immigrants—especially in high skilled occupations.

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* For a closer analysis please refer to N. Surname, “Convergence or divergence? Immigrant wage assimilation patterns in Germany”, SOEPpaper, 479/2012. (http://www.diw.de/documents/publikationen/73/diw_01.c.408060.de/diw_sp0479.pdf). For further information contact Michael.Zibrowius@wiso.uni-erlangen.de.
References


