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**Amelie F. Constant, Annabelle Krause, Ulf Rinne and Klaus F. Zimmermann**

**Maastricht Economic and social Research institute on Innovation and Technology (UNU-MERIT)**

email: [info@merit.unu.edu](mailto:info@merit.unu.edu) | website: <http://www.merit.unu.edu>

**Maastricht Graduate School of Governance (MGSoG)**

email: [info-governance@maastrichtuniversity.nl](mailto:info-governance@maastrichtuniversity.nl) | website: <http://www.maastrichtuniversity.nl/governance>

Boschstraat 24, 6211 AX Maastricht, The Netherlands

Tel: (31) (43) 388 44 00

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# Reservation Wages of First- and Second-Generation Migrants\*

**Amelie F. Constant** (Princeton University and IZA),  
189 Wallace Hall, Princeton, NJ 08544, USA.

**Annabelle Krause** (IZA), Institute for the Study of Labor (IZA),  
Schaumburg-Lippe-Straße 5-9, 53113 Bonn, Germany.

**Ulf Rinne** (IZA), Institute for the Study of Labor (IZA),  
Schaumburg-Lippe-Straße 5-9, 53113 Bonn, Germany.

**Klaus F. Zimmermann** (Princeton University and UNU-MERIT),  
IRS, Firestone Library A-16-J-2, Princeton University, Princeton, NJ 08544, USA.

## **Abstract:**

We analyse the reservation wages of first- and second-generation migrants, based on rich survey data of the unemployed in Germany. Our results confirm the hypothesis that reservation wages increase over migrant generations and over time, suggesting that the mobility benefit of immigration may be limited in time.

**Keywords:** Migration; Unemployment; Job Search; Reservation Wages.

**JEL Codes:** J15, J61, J64.

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**Corresponding author:** Ulf Rinne, Institute for the Study of Labor (IZA), Schaumburg-Lippe-Straße 5-9, 53113 Bonn, Germany. Email: [rinne@iza.org](mailto:rinne@iza.org). Phone: +49-(0)228-3894528.

## 1 Introduction

Although one would expect migrant-native differences in economic outcomes to decrease from one generation to the next, this is generally not the case (Algan et al., 2010). The lack of migrant intergenerational progress even after controlling for human capital and other characteristics is puzzling. Potential explanations discussed in the literature are discrimination (Kaas and Manger, 2012); missing ethnic capital (Borjas, 1992) and human capital; segmented assimilation (Portes and Zhou, 1993) and a taste for isolation (Blackaby et al., 2005).

We concentrate on an important underlying mechanism determining economic outcomes; namely the process of job search of the unemployed, for which reservation wages are key. For migrants, there may be critical differences between the first and second generation (Constant et al., 2011a, 2011b). Heath and Li (2008) argue that the lack of intergenerational improvement in the UK may be explained by differences in the willingness to accept low-paid jobs or to work in the enclave economy, possibly due to lower reservation wages of first-generation migrants.

Our paper adds to the literature by analysing reservation wages of first- and second-generation migrants in Germany. The country provides an interesting example as it has received large migration inflows over a long period, which have become sizeable migrant stocks. In 2007, almost 19% of the German population had a migration background (Rühl, 2009). In what follows, we empirically test the hypothesis that second-generation migrants' reservation wages exceed those of first-generation migrants, with important implications for unemployment dynamics.

## 2 Data

Our empirical application is based on a representative inflow sample of the unemployed in Germany. We employ the *IZA Evaluation Dataset Survey* (IZA ED Survey; Arni et al., 2014). This is a survey of 17,396 Germans and immigrants entering unemployment between June 2007 and May 2008. Respondents were initially interviewed two months after unemployment entry. The added value of this dataset is the large variety of topics that it addresses. Most importantly, respondents report reservation wages and their migration background.

For our analysis, we select unemployed job seekers with a migration background aged between 18 and 55 years when entering unemployment. We exclude individuals with missing information. When furthermore dropping the top and bottom percentile of the reported net hourly reservation wage distribution, we end up with 776 first-generation migrants and 566 second-generation migrants (1,342 individuals). While first-generation migrants are individuals who are not German-born, second-generation migrants are a)

individuals who are German-born but do not have German citizenship or b) individuals who are German-born but at least one of their parents is not German-born.

Table 1 displays descriptive statistics by first- and second-generation migrants. Both generations have roughly the same age and gender distribution. The share of migrants with German citizenship is high in both groups. Less than 10% of first-generation migrants live in East Germany, whereas 18% of second-generation migrants do. The share of married individuals among first-generation migrants is higher than among second-generation migrants. Also the share of first-generation migrants without a vocational degree is higher, but more first-generation migrants have a university degree than second-generation migrants. Both groups earned similar average wages before becoming unemployed and the average duration of previous employment is also similar (40 months), indicating a rather strong attachment to the labour market.

Migrant-specific characteristics reflect two major developments in Germany's migration history. First, almost 60% of first-generation migrants are from Central and Eastern European countries. This can be explained by sizeable inflows around 1990. Second, more than 40% of second-generation migrants in our sample trace their lineage to guest worker countries. Moreover, on average, first-generation migrants have been in Germany for a long time, having arrived when they were rather young. About 30% of first-generation migrants completed a vocational degree abroad, while the corresponding share of second-generation migrants is virtually zero. Finally, the net hourly reservation wage is on average higher for second-generation (€7.25) than for first-generation migrants (€7.13).

### **3 Results**

To control for differences in characteristics between first- and second-generation migrants, we run OLS regressions of the individuals' reservation wage. These regressions include socio-demographic characteristics, household characteristics, educational and vocational attainment, unemployment benefits, previous employment, and other explanatory variables. Table 2 presents the results. Baseline results in column (1) show that second-generation migrants have conditional reservation wages which are 3.5% higher than those of the first generation. This difference is statistically significantly different from zero.

Importantly, reservation wages are related to years since migration. Figure 1 shows that the reservation wages of first-generation migrants are U-shaped, but generally increase with years since migration. Compared to second-generation migrants, first-generation migrants have lower reservation wages for the most part. Although their reservation wages increase over time, it takes more than 20 years of stay in Germany to cross the average reservation wage of second-generation migrants.

First-generation migrants are not a homogeneous group as some arrived as children and others as adults. But the age at which migration took place can be very important. In column (2) of Table 2, we thus split the first generation into two groups. The first group consists of individuals who have been in Germany for at least 15 years and who were younger than 13 years at arrival (“established first-generation migrants”). We expect this group to be closer to the second generation. The second group consists of the remaining individuals who either have been in Germany for less than 15 years or were at least 14 years old when they arrived (“recent first-generation migrants”). Results show – in line with Figure 1 – that second-generation and established first-generation migrants appear similar in terms of their reservation wages. Moreover, we find that the reservation wage gap between recent first-generation migrants and second-generation migrants increases to about 6%. These results thus align with our hypothesis that reservation wages increase over migrant generations, but also corroborate our finding that reservation wages increase with time spent in Germany.

Next, we expand our definition of second-generation migrants in column (3) of Table 2 to also include individuals who moved to Germany at very young ages. More specifically, we also include individuals who were at most six years old when they arrived, which is the mandatory school entrance age. Because of this definition change, the number of second-generation migrants increases by 166 individuals – at the cost of a corresponding decrease in the number of first-generation migrants. Results show that the conditional reservation wage gap increases to around 6%.

Finally, we want to know if the reservation wage gap is due to differences in characteristics and endowments (explained part) or coefficients (unexplained part). We thus perform a Blinder-Oaxaca decomposition with an interaction (Blinder, 1973; Oaxaca, 1973; Jann, 2008). Since we analyse differences in reservation wages and not in actual wages, the unexplained part represents differences in self-evaluations of given characteristics by the individuals rather than different rates of return in the market. Table 3 presents the results of our decomposition exercise. First, the unconditional reservation wage gap amounts to 2.3%. Second, we find a very small, but negative endowment effect. This effect is mainly related to the different distribution of first-generation and second-generation migrants across German states. Third, we find a statistically significantly positive coefficient effect which is even larger (5.4%) than the unconditional reservation wage gap. This suggests that second generation migrants evaluate the returns to their characteristics, such as the (expected) returns to education, substantially higher than first generation migrants do. Fourth, the interaction effect is small and negative.

## 4 Conclusions

When studying first- and second-generation unemployed migrants in Germany, we confirm the hypothesis that reservation wages increase from one migrant generation to the next and over time. Our paper thus contributes to the broader debate regarding migrants' flexibility and adaptability. As often suggested, migrants may accelerate the job matching process and may help improving labour market efficiency and functioning. However, we show that this mobility benefit of immigration may be limited in time due to economic assimilation, which is in our case reflected by increasing reservation wages. An explanation could be a switch of migrants' reference point – both over migrant generations and over time (Stark and Taylor, 1991; Akay et al., forthcoming).

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**TABLE 1: Descriptive Statistics of Selected Characteristics by Migrant Generation.**

	<b>1<sup>st</sup> Generation</b>	<b>2<sup>nd</sup> Generation</b>
<b>Sociodemographic characteristics</b>		
Age (in years)	34.942 (9.796)	35.002 (9.986)
Male	0.512 (0.500)	0.472 (0.500)
German citizenship	0.695 (0.461)	0.807 (0.395)
East Germany	0.081 (0.273)	0.182 (0.386)
Married	0.568 (0.496)	0.456 (0.498)
<b>Vocational attainment</b>		
No formal degree	0.224 (0.417)	0.127 (0.334)
Apprenticeship (dual system)	0.460 (0.499)	0.594 (0.492)
Specialised vocational school	0.142 (0.349)	0.157 (0.364)
University, technical college	0.174 (0.379)	0.122 (0.327)
<b>Previous employment</b>		
Net hourly wage (in euros)	7.239 (3.218)	7.246 (3.084)
Duration (in months)	40.406 (61.124)	40.251 (61.081)
<b>Country of origin (by region)</b>		
Guest worker countries	0.202 (0.402)	0.419 (0.494)
Central and Eastern European countries	0.579 (0.494)	0.148 (0.356)
Other countries	0.219 (0.414)	0.433 (0.496)
<b>Time in Germany</b>		
Years since migration	18.139 (9.756)	–
Age at migration	16.809 (10.883)	–
<b>Education abroad</b>		
Vocational degree abroad	0.305 (0.461)	0.016 (0.125)
<b>Reservation Wages</b>		
Net hourly reservation wage	7.129 (2.233)	7.251 (2.156)
No. of Obs.	776	566

**Source:** IZA ED Survey, wave 1, own calculations.

**Notes:** Standard deviations are in parentheses. First-generation migrants are not German-born; second-generation migrants are German-born, but not German citizens or at least one parent is not German-born.



**TABLE 2: OLS Regressions Results.**

	(1) Baseline Results	(2) Heterogeneity of First Generation	(3) Age at Migration
<b>Migration Background</b>			
First-generation migrants	reference (reference)		reference (reference)
Second-generation migrants <sup>a</sup>	0.035 (0.016)**	0.063 (0.019)***	0.062 (0.016)***
Recent first-generation migrants <sup>b</sup>		reference (reference)	
Established first-generation migrants <sup>c</sup>		0.062 (0.018)***	
<b>Additional Control Variables</b>			
R <sup>2</sup>	0.381	0.387	0.387
No. of Obs.	1,342	1,342	1,342

**Source:** IZA ED Survey, wave 1, own calculations.

**Notes:** Robust standard errors in parentheses. Dependent variable: (logarithm of) net hourly reservation wages. Additional control variables are male, age and age squared, married, partner's employment status, educational and vocational variables, duration of previous employment, logarithm of unemployment benefits, children in household, logarithm of previous earnings, dummies for country of origin, German federal states, month of entry into unemployment and time between unemployment entry and interview. First-generation migrants are not German-born; second-generation migrants are German-born, but not German citizens or at least one parent is not German-born.

<sup>a</sup> When assessing the sensitivity with respect to age at migration in column (3), second-generation migrants also include individuals who arrived in Germany at age six or younger.

<sup>b</sup> This definition only includes first-generation migrants who have been in Germany for less than 15 years and arrived in Germany at age 14 or older.

<sup>c</sup> This definition only includes first-generation migrants who have been in Germany for at least 15 years or arrived in Germany at age 13 or younger.

\*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

**TABLE 3: Blinder-Oaxaca Decomposition**

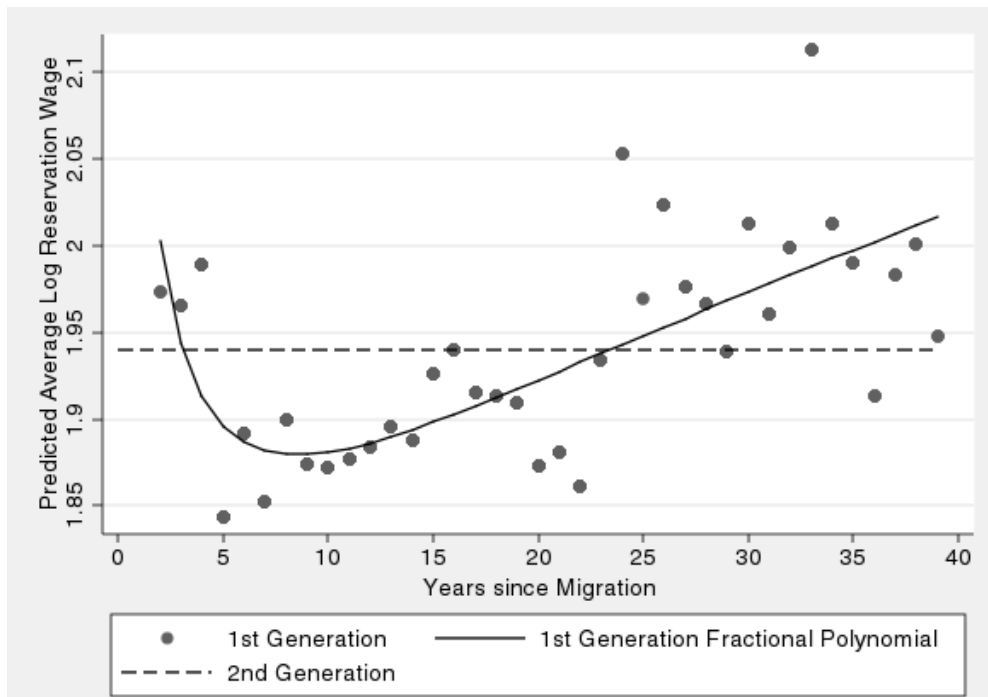
	2 <sup>nd</sup> vs. 1 <sup>st</sup> Generation
Difference	0.023
Endowments	-0.005
Coefficients	0.054**
Interactions	-0.025
No. of Obs. (group 1)	566
No. of Obs. (group 2)	776

**Source:** IZA ED Survey, wave 1, own calculations.

**Notes:** Dependent variable: (logarithm of) net hourly reservation wages. Control variables are male, age and age squared, married, partner's employment status, educational and vocational variables, duration of previous employment, logarithm of unemployment benefits, children in household, logarithm of previous earnings, dummies for country of origin, German federal states, month of entry into unemployment, time between unemployment entry and interview (7-14 weeks) and German language skills. Full estimation results are available upon request. First generation migrants are not German-born; second generation migrants are German-born, but not German citizens or at least one parent is not German-born.

\*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

**FIGURE 1: Reservation Wages and Years since Migration.**



**Source:** IZA ED Survey, wave 1, own calculations.

**Notes:** Predicted log reservation wages based on specification (1) in Table 2. Values are averaged over the entire sample for second-generation migrants and by years since migration for first-generation migrants.

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