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## Immigration and Work

### The Country of Origin, Family Structure and Return Migration of Germany's Guest-Workers

by Christoph M. Schmidt\*

Starting with the work of Chiswick (1978), researchers have investigated the labour market performance of immigrants on the basis of micro data. Most of these studies have been of the "classical" immigration countries — the United States, Canada and Australia — but recently Germany has become a focus of attention. In general, patterns of relative earnings growth differ markedly between migrants depending on their country of origin (Borjas 1987, Schmidt 1992). This is usually explained by differences in origin-country education systems and labour markets and by variations in the migrants' incentive to invest in host country specific education and job training. The investment incentive is smaller for migrants who intend to return to their country of origin and, thus, there is potentially a causal link between return behavior and labour market performance. This paper examines the return behavior of immigrants residing in Germany with a focus on differences in their country of origin, their position in the life-cycle and their family structure.

The issue of return migration has received only limited attention in the past. A theoretical model of return migration is provided by Djajic and Milbourne (1988) and Dustmann (1993b). Empirically, Warren and Peck (1980) use aggregate administrative data to demonstrate that a substantial fraction of immigrants to the United States leave. Schmidt (1993) employs similar data for Germany to illustrate that the return propensities of German guest-workers have decreased over time. The return propensities of German guest-workers are investigated on the micro level by Dustmann (1993b); who uses interview information on the intended duration of stay, not actual return behavior, as the dependent variable. Steiner and Velling (1992) extend this analysis to panel data. In contrast, Brecht and Michels (1991) smooth information on actual duration of stay among German guest-workers nonparametrically with a focus on nationality differences.

### Migration to Germany and Return Migration: Aggregate Data

Starting in the 1950s, the German government signed guest-worker recruitment treaties with Italy (1955), Spain (1960), Greece (1960), Turkey (1961), Portugal (1964) and Yugoslavia (1968). Table 1 summarizes the ethnic composition of foreign employment in West Germany from 1955 to 1984. Workers from Greece, Italy, Spain, Turkey and Yugoslavia taken together accounted for at least two-thirds of foreign employment since the middle of the 1960s. Between 1955 and 1970 the largest share in foreign employment was held by Italians (44% in 1960). Spain and Greece contributed to foreign employment significantly only from the early 1960s. While Spanish employment (with a share in total foreign employment of 15%) peaked around 1965, Italian and Greek employment peaked around 1970 (20% and 13%, respectively). In 1965 these three source countries together held 61% of foreign employment, but Yugoslav employment quickly ascended to a peak around 1970 (22%) and henceforth dominated Italian employment.

Finally, Turks, who comprised 18% of all foreign employers in 1970, rose to a peak in 1980 (29%) — and due to an overall decline in foreign employment — realized an even larger share (31%) in 1984. At the same time Italian and Greek employment dropped to about half their peak values, but still held shares of 13% and 7%, respectively. Spanish employment dropped to roughly a third of its 1965 value (with a share of 4%), and only Yugoslav employment stayed at a comparatively high level of 19%. In sum, at the time of the first wave of the GSOEP (1984), workers from five countries accounted for roughly three-quarters of foreign employment.

The ethnic composition of the stock of foreign employment has not only been determined by differences in the source and magnitude of the influx, but also by differences

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Table 1

## Shares in Foreign Employment in Germany 1955-1984 (%)\*

Year	Greek	Italian	Spanish	Turkish	Yugoslav	All Five Together
1955	0.8	9.4	0.6	—	—	10.8
1960	6.4	43.8	4.9	0.9	2.7	58.7
1965	15.4	30.6	15.0	10.9	5.3	67.2
1970	12.4	19.6	8.8	18.2	21.7	80.7
1975	9.6	14.3	6.1	26.6	20.4	77.0
1980	6.4	15.3	4.2	29.2	17.3	72.4
1984	6.6	13.3	4.3	31.0	18.5	73.7

\* Source: Institut der deutschen Wirtschaft (1992), own calculations. Foreign employment is measured as the number of "Sozialversicherungspflichtig beschäftigte Ausländer".

in return behavior. Table 2 documents the return migration history from 1984 to 1988 of the cohort of immigrants present in 1984 who had entered Germany between 1979 and 1980. Those who remained resided 6 to 7 years in Germany in 1986 and 8 to 9 years in 1988. The ratio of the number of individuals of a given immigrant cohort remaining in the host country after  $\tau$  years have elapsed,  $n_{t+\tau}$ , to the number of individuals of the same cohort in the base period,  $n_t$ , enables the estimation of annual return propensities by solving the formula

$$(1 - P_{t,t+\tau})^\tau = \frac{n_{t+\tau}}{n_t} \quad (1)$$

for  $P_{t,t+\tau}$ . Table 2 reports these estimated annual return propensities for  $\tau=2$  using the numbers of immigrants of the 1979/80 cohort from 1984 and 1986 and from 1986 and

1988, respectively, and for  $\tau=4$  using the figures from 1984 and 1988.

The estimated average annual return propensities of 5% display a substantial variation by time period and by country of origin. Greek individuals' estimated propensities are slightly above average, Yugoslav individuals' estimated propensities are slightly below average. Italian and Spanish migrants (7% and 8%, respectively) are considerably more likely to return to their home country, Turkish migrants (3%) are more likely to stay in Germany. These estimates ignore death as a factor and are, thus, biased upward. There is also an opposite, possibly offsetting bias, since the data only identify the cohort of migrants according to their time of first entry and, thus, implicitly abstract from re-entrants.

Table 2

## Immigration of Foreigners from Germany 1984 to 1988 ('000) and Estimated Annual Return Propensities (%)\*

Years of Residence	Foreign	Greek	Italian	Spanish	Turkish	Yugoslav
4 to 5 in 1984	498.2	13.8	50.4	5.5	223.3	36.7
P <sub>84,86</sub>	4.76 %	5.21 %	7.96 %	6.58 %	4.09 %	4.03 %
6 to 7 in 1986	451.9	12.4	42.7	4.8	205.4	33.8
P <sub>86,88</sub>	5.59 %	5.81 %	6.54 %	9.86 %	1.22 %	4.70 %
8 to 9 in 1988	402.8	11.0	37.3	3.9	200.4	30.7
P <sub>84,88</sub>	5.18 %	5.51 %	7.25 %	8.24 %	2.67 %	4.36 %

\* Source: Statistisches Bundesamt (1985, 1987, 1990), own calculations.  $P_{t,t+\tau}$  denotes the annual return propensity estimated from the stock of immigrants (of the cohort of migrants having entered in 1979 or 1980) observed at times  $t$  and  $t+\tau$ , respectively, according to the formula:  $(1 - P_{t,t+\tau})^\tau = \frac{n_{t+\tau}}{n_t}$

## Return Migration and Duration of Residence: Micro Data

The micro data are drawn from the first six waves of the German Socio-Economic Panel (GSOEP) 1984 to 1989. The GSOEP has also been the primary data source for all previous studies of the return behavior of immigrants to Germany mentioned in the introduction above. This study will concentrate on male individuals aged 16 to 64 from one of the five major countries of origin of German guest-workers — *Greece, Italy, Spain, Turkey, and Yugoslavia* — who had entered since beginning of German guest worker recruitment efforts in 1955 (implying a maximal duration of residence of 29 years), are employed (full-time) at survey time in 1984, and are not handicapped. Since 95% of these migrants are blue collar workers (Greek 97%, Italian 95%, Spanish 94%, Turkish 95%, Yugoslav 95%), this study concentrates on blue collar workers. Finally, some observations had to be dropped because of missing values.

The average worker in the resulting sample of 947 individuals had spent slightly less than 15 years in Germany by 1984. While Turkish and Yugoslav workers spent on average only 13 and 14 years in Germany, the average Italian was in Germany for 15 years, and the average Greek and Spanish workers for 17 years. For all foreigners taken as a whole the sample distribution peaks at 15 years, corresponding to immigration in 1969<sup>1</sup>. Roughly 50% of the foreign workers in the sample entered between 1969 and 1973, and only 15% since then. Only 4% of the Greek workers in the sample arrived after 1973. Most of them had stayed 14 (14%) or 15 (17%) years in Germany by 1984; they entered in 1969 or 1970. There is a smaller peak in the distribution of duration in Germany of around 21 years (entry in 1963) and almost 50% of the Greek sample entered Germany in the period between 1958 and 1967.

The distribution of duration of stay is most widely dispersed for the Italians. Not only had the Italian government agreed on a recruitment treaty with Germany very early (1955), but of the individuals in the sample, 26% had entered Germany after the recruitment ended in 1973. Italy, as one of the founding members of the EEC, did not face the same mobility restrictions as other sending countries. The distribution of years since migration has two peaks, corresponding to entry around 1966 and around 1970. The earliest members of the sample arrived in Germany in 1957. Less than 3% of the Spanish guest-workers in the sample entered Germany after 1973, none after 1981. The distribution of the duration of stay is bimodal, with peaks at 15 years (entering 1969) and 20 (1964), both at about 10% of the sample.

The Turkish guest-workers, on average, spent the least time in Germany. About 58% of the Turkish sample arrived between 1969 and 1973 (11 to 15 years of duration of residence) and the distribution of duration of residence displays a sharp drop after peaking at 11 years (entry 1973), although workers who entered between 1974 and 1981

amount to roughly 22% of the Turkish sample. None of the Turkish workers in the sample arrived after 1981. Finally, for the Yugoslav sample there is a large peak in the distribution of durations of residence at 14 and 15 years (entry 1969 and 1970), comprising about 38% of the individuals in the sample; 81% entered between 1968 and 1973 (11 to 16 years of duration of stay). Since 1973 entry fell sharply; less than 8% of the sample has a duration below 11 years of stay, and none arrived after 1982.

## Individual Return Migration: Descriptive Statistics

In order to avoid the confusion between influx variations and return behavior, this paper pursues a conditional approach. In the multivariate analysis, information on explanatory variables from the first wave are utilized to model the respondents' actual return migration behavior over the next five panel waves 1985 to 1989, conditional on their duration of residence in 1984. Within this period 12% of the foreign workers in the sample left Germany, which is interpreted as return migration. However, regular panel attrition is high (43%). Therefore, the sample used for empirical analysis is reduced to those migrants present in 1984 who either returned to their home country or who were still remaining in the sample in 1989. Attrition of 35% of the Spanish, 39% of the Yugoslav, 40% of the Italian, 47% of the Greek and 50% of the Turkish migrants reduces the sample to 537 individuals. Both ethnic representation and the distribution of duration of residence across ethnic groups in the analyzed sample are virtually identical to the full sample.

Table 3 reports the major descriptive statistics for the analyzed sample. The typical migrant in the analyzed sample had lived in Germany for 15 years by 1984. On average, migrants were aged 25 at the time of their immigration. Italians usually immigrated at a younger than average age (22 years), Yugoslavs (26 years) and Greek (28 years) at an older age. About 37% of all migrants indicated in the 1984 interview that they intended to return to their home country within the next five years. Return intentions were particularly common among Turkish (48%) and Greek (41%) men, while these intentions were apparently held by few Spanish migrants (26%).

On average, 21% of migrants returned. In contrast to the ranking derived from announced intentions, 29% of the Spaniards, 25% of the Italians and 24% of the Turks returned, while only 14% of the Greek and 11% of the Yugoslav workers moved home. About one out of three migrants behaved contrary to his expectations; three quarters of the

<sup>1</sup> Brecht and Michels (1991) incorrectly interpret sample distributions similar to those in the full sample as a reflection of the single-peaked or double-peaked shape of return hazard functions without controlling for influx differences. Instead, the pattern of relative frequencies in the sample appears to be dominated by fluctuations in immigrant influx.

Table 3

**Descriptive Statistics,  
Male Full-Time Blue Collar Workers (GSOEP 1984)**

	All Migrants	Individual Nationalities				
		Greek	Italian	Spanish	Turkish	Yugoslav
Sample Size	537	70	120	93	144	110
Fraction of the Sample	100.0 %	13.0 %	22.4 %	17.3 %	26.8 %	20.5 %
<b>Immigration History</b>						
Age at Immigration	25.22 (8.48)	28.46 (7.99)	21.93 (8.69)	25.31 (8.85)	25.52 (8.34)	26.30 (7.33)
Years Since Immigration	15.05 (5.09)	17.99 (4.41)	15.17 (6.19)	17.48 (4.33)	12.80 (4.43)	13.95 (3.62)
Return Intended 1984-89	36.5 %	41.4 %	33.3 %	25.8 %	47.9 %	30.9 %
Actual Return 1984-89	21.2 %	14.3 %	25.8 %	29.0 %	23.6 %	10.9 %
<b>Demographics</b>						
Age	40.28 (10.6)	46.44 (9.10)	37.09 (11.5)	42.80 (10.4)	38.32 (10.5)	40.25 (8.46)
Married	86.4 %	95.7 %	75.8 %	88.2 %	88.2 %	88.2 %
Household Head	88.1 %	94.3 %	86.7 %	93.6 %	78.5 %	93.6 %
Partner Living Abroad	8.4 %	5.7 %	5.0 %	8.6 %	11.8 %	9.1 %
Children Living Abroad	15.1 %	8.6 %	9.2 %	15.1 %	18.1 %	21.8 %
<b>Education</b>						
German School Degree	9.1 %	2.9 %	12.5 %	8.6 %	14.6 %	2.7 %
German School Attended	3.2 %	4.3 %	1.7 %	1.1 %	6.3 %	1.8 %
Foreign High School	7.5 %	2.9 %	1.7 %	6.5 %	15.3 %	7.3 %
Foreign Compulsory School	54.9 %	55.7 %	45.0 %	51.6 %	52.8 %	70.9 %
Vocational Training in Germany	8.2 %	2.9 %	11.7 %	8.6 %	9.7 %	5.5 %
Vocational Training Abroad	31.7 %	12.9 %	21.7 %	34.4 %	29.9 %	54.6 %
<b>Job Characteristics</b>						
Qualified Blue Collar Worker	27.9 %	12.9 %	27.5 %	29.0 %	22.9 %	43.6 %
ln(Gross Monthly Earnings)	7.859 (0.24)	7.873 (0.21)	7.839 (0.21)	7.838 (0.25)	7.829 (0.26)	7.931 (0.24)
<b>Country-of-Origin Characteristics</b>						
EEC Member 1984-89	—	yes	yes	yes	no	no
GDP Growth 1980-89	—	1.6 %	2.4 %	3.1 %	5.1 %	1.3 %
Population Growth 1980-89	—	0.4 %	0.2 %	0.4 %	2.4 %	0.7 %
For continuous variables, standard errors are given in parentheses. Sources: GSOEP 1984-89, World Bank (1991), own calculations.						

wrong predictions were made by migrants who intended to return but stayed. The discrepancy between interview based information on intentions and actual behavior is largest for Greek, Turkish and Yugoslav migrants. Whether these inconsistencies are due to the misrepresentation of intentions in the interview or to unpredictable shifts in behavioral determinants is not considered in this analysis.

Average return propensities across ethnic groups in the sample can also be compared to those observed in aggregate data. The tendency to return is highest for Italians and Spanish with about 6% and 7% in the sample and 7% and 8% ( $P_{84,88}$  in Table 2) in the aggregate, respectively. Greek and Yugoslav workers display moderate return propensities, 3% and 2% in the sample and 6% and 4% in the aggregate, respectively. A large divergence between the sample and aggregate information can be noticed for Turkish migrants. While the Turkish workers in the sample exhibit an average return probability of 5%, the aggregate figure is as low as 3%. As for the duration of residence, the high proportion of women and children among Turkish migrants appears to seriously affect the aggregate statistics.

The migrants in the sample are on average aged 40. The oldest are the Greek (46 years) and the Spanish (43 years) workers, who have the longest duration of stay in Germany, and the Yugoslav (40 years) workers, who enter at older ages. In contrast, Italian and Turkish workers are younger than average (37 and 38 years, respectively). Immigrant groups with higher than average ages are also the groups most likely to be married (the average is 86%): 96% of the Greek men are married, 88% of the Spanish, Turkish, and Yugoslav men, and only 76% of the Italian migrants.

Among Greek, Spanish and Yugoslav migrants, 94% are the household head. This is less frequently the case for Italian (87%) and Turkish (79%) workers. The partner of 8% of the foreign men in the sample lives abroad, as do 15% of the children. Both these circumstances are highly correlated. For 6% of the Greek and 5% of the Italian workers their partner is living abroad (9% have children living abroad), for Spanish workers this percentage is 9% (15%), for Turks 12% (18%), and for Yugoslavs it is 9% (22%).

The distribution of school and post-school education among male immigrants to Germany is discussed extensively in Schmidt (1992). Generally, only those migrants who entered at young ages hold some kind of German school degree (9%), while most migrants (62%) graduated from a school abroad. 8% of the workers received some form of vocational training in Germany. 32% of the workers received vocational training abroad. There are large educational differences between countries of origin. Regarding current job characteristics, only 28% of the blue collar workers are working in qualified jobs. The average gross monthly earnings of these migrants are 2,660 DM.

The last panel of Table 3 reports attributes characterizing the migrants' countries of origin. In 1984 there was com-

plete freedom of movement within the European Community for Italian workers and such freedom was anticipated for Greek and Spanish workers. In the period between 1980 and 1989, the GDP was growing most substantially in Turkey (5.1% per year on average), moderately in Spain (3.1%) and Italy (2.4%) and least in Greece (1.6%) and Yugoslavia (1.3%). Turkey was also the country of origin with the largest average population growth during this period (2.4% per year). The Yugoslav (0.7%), the Greek and the Spanish populations (both 0.4%) grew moderately and Italian population growth was lowest (0.2%).

### Individual Return Migration: Estimation Results

Table 4 reports the results of Probit estimations modelling the return of immigrants present in Germany in 1984 to their home country from 1984 to 1989. In the basic specification (column 1), return propensity is taken as a function of nationality, age and its square, and duration of residence. While comparable Italian, Spanish and Turkish workers are similar with respect to their return propensities, Greek and Yugoslav workers are significantly more likely to stay in Germany. On the individual level, the propensity to migrate is convex in age. The return propensity of young foreigners is quite high, it then drops at prime working age and rises again when retirement age is approached. Migrants displaying a large duration of residence in 1984 are significantly less likely to return to their home country within the observed five year period; however, the estimated coefficient is small.

Column 2 describes the estimation of a specification including further demographic variables. Married men are insignificantly more likely to return home; the position within the family does not appear to play any role. In contrast, the location of residence of the migrant's family is of importance. Both when the partner or the children are living abroad, return propensities are significantly higher. Thus, the position of the migrant in his life-cycle and the existence of close family members abroad are the major demographic determinants of return migration on the individual level.

The estimates documented in column 3 reveal the relevance of human capital variables for the return decision. Apparently, the relative reward of general skills has grown more in Germany than in the sending countries in the observation period. Migrants who enjoyed any form of school education were significantly less likely to return. This effect is smallest for foreign compulsory schooling. Vocational training received in Germany apparently affects potential wages in Germany and in the country of origin similarly, and, therefore, exhibits no effect on return behavior. In contrast, vocational training received abroad mainly improves potential earnings at home, and its coefficient is significantly positive.

Table 4

## Return Migration - Estimation of Probit Models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Nationality</b>							
Greek	-0.514 (2.13)	-0.529 (2.10)	-0.387 (1.49)	-0.378 (1.46)	—	—	-0.394 (1.47)
Spanish	0.132 (0.68)	0.097 (0.49)	0.162 (0.80)	0.153 (0.75)	—	—	0.293 (1.37)
Turkish	-0.130 (0.73)	-0.225 (1.21)	-0.046 (0.23)	-0.040 (0.20)	—	—	-0.101 (0.50)
Yugoslav	-0.606 (2.80)	-0.679 (3.05)	-0.621 (2.68)	-0.611 (2.62)	—	—	-0.551 (2.31)
<b>Immigration History</b>							
Years Since Immigration	-0.042 (2.56)	-0.035 (2.11)	-0.027 (1.48)	-0.025 (1.30)	-0.027 (1.49)	-0.027 (1.48)	-0.028 (1.45)
Return Intended 1984-89	—	—	—	—	—	—	0.713 (4.97)
<b>Demographics</b>							
Age	-0.141 (3.69)	-0.199 (3.92)	-0.253 (4.48)	-0.249 (4.38)	-0.253 (4.49)	-0.253 (4.49)	-0.243 (4.14)
Age <sup>2</sup> , 10 <sup>-2</sup>	0.203 (4.37)	0.262 (4.48)	0.314 (4.93)	0.308 (4.79)	0.313 (4.95)	0.314 (4.94)	0.297 (4.48)
Married	—	0.398 (1.54)	0.373 (1.38)	0.392 (1.44)	0.372 (1.38)	0.373 (1.38)	0.366 (1.33)
Household Head	—	-0.089 (0.34)	-0.221 (0.80)	-0.195 (0.70)	-0.220 (0.80)	-0.221 (0.80)	-0.300 (1.07)
Partner Living Abroad	—	0.600 (2.55)	0.608 (2.52)	0.613 (2.54)	0.609 (2.53)	0.608 (2.52)	0.560 (2.29)
Children Living Abroad	—	0.415 (2.12)	0.385 (1.92)	0.382 (1.90)	0.385 (1.92)	0.385 (1.92)	0.339 (1.66)
<b>Education</b>							
German School Degree	—	—	-0.740 (2.03)	-0.761 (2.07)	-0.740 (2.04)	-0.740 (2.04)	-0.732 (2.00)
German School Attended	—	—	-0.963 (1.97)	-0.943 (1.95)	-0.963 (1.98)	-0.963 (1.97)	-1.078 (2.10)
Foreign High School	—	—	-0.781 (2.47)	-0.791 (2.49)	-0.781 (2.47)	-0.781 (2.47)	-0.890 (2.70)
Foreign Compulsory School	—	—	-0.312 (2.02)	-0.322 (2.06)	-0.312 (2.03)	-0.312 (2.03)	-0.409 (2.53)
Vocational Training in Germany	—	—	0.212 (0.80)	0.166 (0.57)	0.213 (0.80)	0.212 (0.80)	0.247 (0.92)
Vocational Training Abroad	—	—	0.341 (2.15)	0.313 (1.81)	0.343 (2.22)	0.341 (2.15)	0.342 (2.09)
<b>Job Characteristics</b>							
Qualified Blue Collar Worker	—	—	—	0.093 (0.52)	—	—	—
ln(Gross Monthly Earn.)	—	—	—	-0.245 (0.79)	—	—	—
<b>Country-of-Origin Characteristics</b>							
EEC Member 1984-89	—	—	—	—	—	-0.020 (0.05)	—
GDP Growth 1980-89	—	—	—	—	0.359 (3.75)	0.366 (2.17)	—
Pop.Growth 1980-89	—	—	—	—	-0.462 (3.03)	-0.479 (1.20)	—
<b>Constant</b>							
	2.128 (3.00)	2.959 (3.56)	4.358 (4.27)	6.149 (2.48)	3.587 (3.43)	3.595 (3.39)	4.069 (3.85)
-2 log(Likelihood)	508.12	485.92	468.99	468.19	468.99	468.99	443.74
McFadden's R <sup>2</sup>	0.085	0.125	0.155	0.157	0.155	0.155	0.201
Note: Absolute t-statistics in parentheses.							

When information on education is included in the estimated specification, the coefficient of Greek nationality loses importance as well as that of previous duration of residence. Apparently, years since immigration and entry at a young age are correlated, and, thus, so are years since immigration and German schooling. These estimates suggest that a longer residence in the host country does not lead to a reduction of return propensities. However, the other variables that have been identified above as consequential for return decisions remain significant. The addition of current job characteristics (column 4) does not improve the predictive ability of the estimated model, indicating that unobserved match specific components of current wages are not essential.

In a second set of estimations (column 5 and column 6) the nationality indicators are replaced by economic characteristics of the countries of origin. The growth of the GDP can be viewed as an indicator of prosperity in the home country and is indeed identified as an important positive determinant of return behavior. In contrast, a large population growth at home will lead to labour market crowding and is found to exert a negative influence on return migration. Thus, demographic developments on the aggregate level evidently influence individual return behavior as well as individual demographic determinants. The restriction of repeated migration for non-EEC countries of origin does not appear to be important for observed returns. In sum, aggregate economic characteristics are able to explain a large amount of country-of-origin differences in return migration.

If aggregate economic developments in the home country relative to the host country are as important for return decisions as is suggested by these estimates, and these economic conditions are subject to considerable fluctua-

tions, the inconsistency of actual behavior with the interview-based information on intentions may be reconcilable. In a final specification (reported in column 7), return intentions appear to improve the prediction of return migration significantly despite the disparities between individual statements and actual behavior that have been discussed above. To answer the question whether interview information truthfully reveals actual intentions, time series data on the aggregate economic variables would be needed as well as a model capturing the migrants' formation of expectations.

This study is restricted to an analysis of male full-time blue collar workers. Although these workers are the core of the immigrant work force, the omission of women, and of unemployed and part-time working men might limit the generality of the conclusions. Furthermore, due to the nature of the micro data, ethnic samples are small. Another potential problem lies in the treatment of attrition. The estimations presented here have implicitly assumed that the stochastic process governing panel attrition is orthogonal to that governing return migration. The validity of this assumption should be investigated in a further econometric analysis.

What are the consequences of these results for Germany's future immigration experience? One cannot expect that immigrants from different countries of origin will display a uniform pattern of return migration, even controlling for observable individual differences. A major determinant of migration flows will be the development of the German economy itself. If the economic attractiveness of Germany in comparison to the migrants' sending countries is retained, migration will be of a more permanent nature. If it fades, large emigration streams can be expected.

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