

## Economic Status of Older German Immigrants

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### Summary

*The income of married couples in which the husband is an immigrant aged 50 and older is compared to that of native-born Germans for the period 1995 to 1997. Immigrants are divided into households that arrived in Germany before and after 1984. Using Samples A, B, and D of the GSOEP, the income of immigrants is shown to be significantly lower than that of the native-born German population for households aged 50 to 59 as well as those aged 60 and older. Differences in income appear to be the result of lower earnings for the younger households and lower retirement benefits for the older households.*

### 1. Introduction

Immigrants played a significant role in the economy of Germany during the last half of the twentieth century. Labor shortages appeared in West Germany following World War II, and a large number of temporary or guest workers were invited into the country to supply the labor needed for rapid economic growth. When direct recruitment of guest workers ceased in 1973 there were 4 million foreigners in West Germany.<sup>1</sup> Despite changing attitudes toward immigration, the number of foreign-born residents in West Germany continued to increase.<sup>2</sup> By 1996, the resident population of foreign or foreign-born persons reached 7.3 million or almost 9 percent of the population (OECD 1998).<sup>3</sup> Many of the guest workers were young men when they arrived. Today, they are over age 50 and are nearing or have already entered retirement.

We use the German Socio-Economic Panel for the years 1995 to 1997 to examine the economic status of three groups of people aged 50 and over: immigrants who entered Germany prior to 1984 (Sample B), native-born Germans (Sample A), and more recent immigrants who entered the country after 1984 (Sample D).<sup>4</sup> Sample B includes individuals in private households in the western states of Germany in 1984 where the head of the household was of Turkish, Greek, Yugoslavian, Spanish, or Italian nationality.<sup>5</sup> Sample D includes people living in private households in 1994 or 1995 containing an immigrant who came to the western states of Germany after 1984.

We look at intact households of married couples, in which the husband was age 50 or older in 1995.<sup>6</sup> Information is reported separately for households with husbands age 50 to 59 and with husbands aged 60 and older. There were 380 households in the 50-to-59 age category: 254

native-born German households, 95 households of pre-1984 immigrants, and 31 households of post-1984 immigrants. There were 420 households in the 60 and over age category, including 344 native-born German households, 54 with pre-1984 immigrants, and 22 with post-1984 immigrants. The income of these households is reported for all three years, and we can observe changes in income as the families remain in Germany, grow older, and reduce their work effort.

### 2. Relative Income of Immigrants

#### Households Aged 50 to 59

Table 1 presents mean total household income, mean income by source, and income shares for each year for the three groups in the 50-to-59 age category. Mean income by source is the average income from this source for all households, including those that do not have income from that source. The results show that the mean monthly household income of pre-1984 immigrants aged 50 to 59 was 4,817 DM in 1995 compared to 6,326 DM for native-born Germans and 4,985 DM for more recent immigrants. This pattern of relative income for the three groups is also observed for 1996 and 1997. The income for the pre-1984 immigrants declined by almost 10 per-

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<sup>1</sup> Immigrants increased as a percent of the total population from 1.2 percent in 1960 to 4.9 percent in 1970 and 7.9 percent in 1980. Most of the immigrants moved to the major cities in Germany. As a result, immigrants represent about one-quarter of the population of Frankfurt and Munich (Martin 1994).

<sup>2</sup> Collinson (1993) describes post-war immigration as having three phases. First, 1945 to 1973 was a period marked by policies designed to encourage large numbers of foreign workers to enter Germany. Second, 1973 to 1980 saw the adoption of policies designed to halt immigration. In the 1980s and 1990s, more restrictive immigration policies were adopted and there was a growing concern over illegal immigration.

<sup>3</sup> Ethnic Germans who were born outside Germany are not included in this analysis. National policy has been to grant citizenship to all ethnic Germans but severely limit citizenship to other immigrants (Rittstieg 1994). Thus, most of the immigrants have not become German citizens. Recent changes in national policy are making it easier for immigrants to qualify for citizenship (Cohen 1999, *The Economist* 1999).

<sup>4</sup> The analysis is limited to these years because Sample D began in 1994 and was substantially increased in 1995. Therefore, the use of the years 1995 to 1997 allows us to compare the pre- and post-1984 immigrants with the largest possible sample.

<sup>5</sup> Approximately, one-third of the pre-1973 guest workers were Turks, one-quarter were Yugoslavs, and one-quarter were Italians (Rudolph 1994).

<sup>6</sup> The advantage of following intact households is that we avoid the problems caused by attrition and changes in household composition. The disadvantage of focusing on this group is that we ignore the impact of divorce and widowhood on these households and we do not include single women and men in the analysis.

cent by 1997, while that for the native-born population declined by only 5 percent and the income of the more recent immigrants was basically unchanged. As a result, the relative income of the pre-1984 immigrants fell from 76 percent of the income of the native-born Germans in 1995 to 73 percent in 1997.

In comparison with the more recent immigrants, the pre-1984 immigrants had only slightly lower incomes in 1995, but their 1997 income was only 88 percent that of the post-1984 immigrants. Virtually the entire difference in income is due to the lower earnings of the pre-1984 immigrants compared to both the native-born population and the more recent immigrants. While lower earnings of immigrants relative to native-born workers is to be expected, the finding that more recent immigrants have higher labor earnings than long-term immigrants is somewhat surprising and merits further investigation.

Table 1 also shows that the share of income from earnings is almost 90 percent for all three samples in 1995. The earnings share declines for each group over time, but it falls the most for the pre-1984 immigrants. By 1997, earnings account for only 80 percent of household income for the pre-1984 immigrants. As earnings decline in importance, the share of income from retirement programs for each group increases from about 5 percent in 1995 to 10 percent in 1997. These changes reflect the aging of

the cohort and the increased likelihood that the husbands are retired. On average, asset income is relatively unimportant for households aged 50 to 59; moreover, this type of income primarily accrues only to those at the highest income levels. Unemployment insurance is not a substantial source of income for these households, except for the pre-1984 immigrants.

#### Households Aged 60 and Over

Table 2 presents mean total household income, mean income by source, and income shares for each year for each of the three groups in the 60 and over age category. Once again, the income of the pre-1984 immigrants is about 75 percent of that of the native-born population. For this cohort, the lower relative income is primarily attributable to significantly lower retirement benefits. Average pension income for the immigrants ranges from 42 percent of that for the native-born Germans in 1995 to 49 percent in 1997. Lower pension income is typically the result of fewer years of credited service and lower earnings while working.<sup>7</sup> The pre-1984 immigrants have higher average earnings than the native-born population, reflecting an in-

<sup>7</sup> Participation in the German social security system is mandatory for most workers excluding only the self-employed and workers with earnings below the official minimum earnings threshold of

Table 1

**Mean Monthly Household Income and Income Share for Immigrant and Native-Born Households, Age Category 50 to 59**

	Mean Income (DM)			Income Share (%)		
	1995	1996	1997	1995	1996	1997
Native-Born						
Labor Earnings	5,684	5,619	5,074	89.9	88.9	84.2
Pension Income	286	338	564	4.5	5.3	9.4
Unemployment Insurance	182	192	204	2.9	3.0	3.4
Asset Income	173	174	182	2.7	2.8	3.0
Total Average Income	6,326	6,324	6,025			
Pre-1984 Immigrants						
Labor Earnings	4,196	3,788	3,527	87.1	83.8	80.3
Pension Income	222	295	403	4.6	6.5	9.2
Unemployment Insurance	329	374	417	6.8	8.3	9.5
Asset Income	70	65	45	1.5	1.4	1.0
Total Average Income	4,817	4,522	4,393			
Immigrants After 1984						
Labor Earnings	4,474	4,548	4,363	89.8	90.9	87.6
Pension Income	366	329	518	7.4	6.6	10.4
Unemployment Insurance	95	39	7	1.9	0.8	0.1
Asset Income	49	87	92	1.0	1.7	1.8
Total Average Income	4,985	5,002	4,981			
P-value for null hypothesis of equality of mean total income for the three groups of natives and immigrants	.0002	.0000	.0002			
Sample Sizes: Native-born: 254 households; Pre-1984 Immigrant: 95 households; Post-1984 Immigrant: 31 households.						
Source: Authors' calculations from German Socio-Economic Panel.						

Table 2

**Mean Monthly Household Income and Income Share for  
Immigrant and Native-Born German Households, Age Category 60 and Over**

	Mean Income (DM)			Income Share (%)		
	1995	1996	1997	1995	1996	1997
Native-Born						
Labor Earnings	1,127	991	877	27.1	24.0	20.7
Pension Income	2,798	2,891	3,118	67.1	70.0	73.4
Unemployment Insurance	48	51	37	1.1	1.2	0.9
Asset Income	194	198	215	4.7	4.8	5.1
Total Average Income	4,167	4,130	4,247			
Immigrants Before 1984						
Labor Earnings	1,809	1,738	1,512	56.6	55.2	46.8
Pension Income	1,179	1,234	1,542	36.9	39.2	47.7
Unemployment Insurance	128	116	98	4.0	3.7	3.0
Asset Income	82	61	79	2.6	2.0	2.4
Total Average Income	3,199	3,149	3,231			
Immigrants After 1984						
Labor Earnings	536	244	150	19.6	9.4	5.4
Pension Income	2,092	2,193	2,498	76.6	84.3	90.0
Unemployment Insurance	84	141	105	3.1	5.4	3.8
Asset Income	20	24	23	0.7	0.9	0.8
Total Average Income	2,733	2,601	2,776			
P-value for null hypothesis of equality of mean total income for the three groups of natives and immigrants	.0015	.0003	.0009			
Sample Sizes: Native-Born: 344 households; Pre-1984 Immigrant: 54 households; Post-1984 Immigrant: 22 households. Source: Authors' calculations from German Socio-Economic Panel.						

creased proportion of that cohort who remain in the labor force. The more recent immigrants aged 60 and older have even lower household income than the pre-1984 immigrants and they rely more heavily on pension income.

Also shown in Table 2 are the income shares for these families. For the native-born households, the proportion of income attributable to pension income increases from 67 percent in 1995 to 73 percent in 1997, while earnings decline from 27 to 21 percent. The more recent immigrants are even more dependent on pension income; the share of income from retirement programs rises from 77 percent in 1995 to 90 percent in 1997. In contrast, the pre-1984 immigrants have much higher earning shares and receive a much lower proportion of their income from pension benefits. The share of income from unemployment benefits for this cohort has the opposite pattern from that of the 50-to-59 age groups. The proportion of income from unemployment benefits for these native-born Germans and pre-1984 immigrants is lower, while it is higher for the post-1984 immigrants.

One-way ANOVA tests of the equality of the population mean of total income for the three groups is rejected in all cases, as seen by the p-values in Tables 1 and 2. However, confidence interval tests for mean differences in total income show that there are statistically significant differences only for the native-born and pre-1984 immigrants

in the 50-to-59 age category. For those aged 60 and over, there are statistically significant differences between both the native-born and pre-1984 immigrants and native-born and post-1984 immigrants. There is no statistically significant difference in mean total income for the two immigrant groups in either age category.

### Types of Income

The data presented in Tables 1 and 2 reflect differences in the proportion of households with various types of income and the difference in average income among those with a particular type of income. Table 3 helps to disentangle these effects by reporting the proportion of husbands and wives in each type of household who have labor earnings and pension income. Among native-born Germans age 50 to 59, the proportion of husbands who had labor earnings during the year declined from 80 percent to 67 percent. The proportion of men with labor earnings in the native-born cohort is 4.5 to 8.4 percentage points higher than the proportion of pre-1984 immigrants with earnings. The lower participation rate for immigrants explains much of the difference in income shares de-

15 percent of average monthly gross wage. Börsch-Supan and Schnabel (1999) provide a detailed description of the economic incentives of the German retirement system.

Table 3

**Percent of Native-Born and Immigrants with Labor Earnings  
and Pension Income**

	Labor Earnings			Pension Income		
	1995	1996	1997	1995	1996	1997
Husbands						
Native-Born, 50–59	80.3	74.4	67.3	9.4	11.4	19.3
Pre-1984 Immigrants, 50–59	75.8	66.3	58.9	12.6	14.7	17.9
Post-1984 Immigrants, 50–59	71.0	71.0	64.5	12.9	9.7	22.6
Native-Born, 60+	17.2	16.3	13.4	84.0	87.5	91.0
Pre-1984 Immigrants, 60+	31.5	27.8	22.2	64.8	63.0	79.6
Post-1984 Immigrants, 60+	9.1	0	0	77.3	77.3	86.4
Wives						
Native-Born, 50–59	54.7	53.1	51.6	5.1	6.7	8.7
Pre-1984 Immigrant, 50–59	50.5	42.1	40.0	4.2	5.3	7.4
Post-1984 Immigrants, 50–59	61.3	64.5	58.1	16.1	16.1	19.4
Native-Born, 60+	18.9	17.2	15.4	56.1	59.6	66.0
Pre-1984 Immigrants, 60+	35.2	29.6	27.8	18.5	25.9	29.6
Post-1984 Immigrants, 60+	18.2	13.6	4.5	40.9	54.5	59.1

Source: Authors' calculations from German Socio-Economic Panel

scribed earlier. Among these earlier immigrants actually working in 1995, the average earnings was only 71 percent of the native-born men while the average earnings of more recent immigrants was 84 percent of the native-born Germans.

Among households aged 60 and over, native-born men were much less likely to be in the labor force than the pre-1984 immigrants. This work-retirement pattern is influenced by the higher retirement benefits available to the native-born Germans, reflecting more years of covered employment and higher lifetime earnings. Interestingly, virtually no post-1984 male immigrant age 60 and older is in the labor force in any of the sample years. Average earnings for older pre-1984 immigrants who were working was 77 percent of the mean earnings for working native-born men.

Among the younger cohort, married women are less likely to have labor earnings than their husbands. Slightly over half of the women married to native-born German men aged 50 to 59 were in the labor force. A somewhat lower proportion of the pre-1984 immigrant women had labor earnings, and the proportion of these women who were working declined somewhat faster in the mid-1990s. The highest rate of women working is found for the wives of the more recent immigrants; about 60 percent of these women had labor earnings. Over one third of the wives of the pre-1984 immigrants had labor income in 1995 compared to less than 20 percent of the women married to native-born Germans and more recent immigrants.

Table 3 also shows that only an average of 11 percent of the men in the household groups aged 50 to 59 had pension income in 1995. However, the incidence of receipt

of retirement benefits increased to about 20 percent by 1997. The proportion of men receiving pension income is much higher for those age 60 and older. By 1997, over 90 percent of the native-born men were receiving retirement benefits, while the proportion of pre-1984 immigrants with pension income was much lower. The mean pension amount for pre-1984 immigrants in 1997 was only 57 percent of the average pension for native-born men receiving a retirement benefit, while the average pension for the newer immigrants was 77 percent of native-born Germans. Among the women, only 5 to 9 percent of the wives of native-born and pre-1984 immigrant men aged 50 to 59 were receiving a pension, while a much higher proportion of the wives of more recent immigrants had pension income. In the older cohort, two-thirds of native-born women had pension income in 1997, compared to about one-half of the more recent immigrants and only about one-quarter of the pre-1984 immigrants.

### 3. Earnings Differentials among Working Men

Monthly earnings vary across households with differences in labor force participation, human capital, and types of jobs. Differences in the proportion of men and women with labor earnings have been described. In this section, we examine the differences in earnings among men who are working. GSOEP respondents are asked, "What type of training is usually necessary for the type of job that you do?" Possible answers are: no particular training, quick introduction to job training, on-the-job training, taking certain courses, vocational training, technical school, and college. Responses are transformed into four

human capital variables: no training, some training or courses, technical or vocational school, and college. The employment distribution of men aged 50 to 59 who were working in 1995 is:

Cohort	No Training	Some Courses	Technical, Vocational	College
Native-born	2.5	30.6	42.6	24.4
Pre-1984 Immigrants	9.1	63.6	25.5	1.8
Post-1984 Immigrants	4.3	36.6	22.7	36.4

These data provide further explanations for the differences in earnings among these three population groups. The pre-1984 immigrants are much more likely to be in jobs that require considerably less training and education than either the native-born men or the more recent immigrants.

Earnings equations are estimated for men aged 50 to 59.<sup>8</sup> Data for 1995, 1996, and 1997 are pooled and hourly earnings are estimated as a function of age, age squared, three human capital variables (*no training* is the omitted variable), company size, years of job tenure, two year dichotomous variables, and whether the man was a pre-or post-1984 immigrant. In general, the results conform to expectations. The two age coefficients indicate that earnings increase until age 54 and then decline. The estimated tenure effect indicates a modest increase of 0.3 percent per year of service for these men on the verge of retirement. The year effects indicate that nominal earnings were approximately 7 percent higher in 1997 than in 1995. Employees in large companies also have significantly higher earnings than men working in smaller establishments.

The human capital requirements of the job are very interesting in light of our previous results. For comparison purposes, Table 4 shows the estimated equation both with and without the education/training variables. Only employees in jobs that require college education have significantly higher earnings than those in jobs that require no training. In the presence of these human capital variables, pre-1984 immigrants have approximately 14 percent lower earnings than native-born men, while more recent immigrants have approximately 21 percent lower earnings than do the natives. If these human capital variables are

excluded from the equation, the more recent immigrants appear to be doing better than the pre-1984 immigrants. Estimated coefficients are  $-0.30$  for the pre-1984 immigrants and  $-0.19$  for immigrants entering Germany after 1984. Thus, one of the reasons that newer immigrants tend to have higher earnings than those who immigrated prior to 1984 is that they are much more likely to be in jobs that require more education and training. But when education and training are taken into account, they earn even less compared to the native-born Germans.

#### 4. Conclusions

Older immigrants in Germany have lower incomes than do native-born Germans. Among households with husbands aged 50 to 59, incomes of pre-1984 immigrants were 24 to 27 percent lower in the mid-1990s, with differences in income primarily the result of lower earnings. In contrast, the average household income of post-1984 immigrants was only 17 to 21 percent lower than that of native-born Germans, as these newer immigrants had higher average earnings than the pre-1984 immigrants. Much of this difference appears to be due to the greater prevalence of higher quality of jobs that the newer immigrants have found.

Among households with husbands aged 60 and older, the relative income of the two immigrant groups is reversed. The mean income of newer immigrants is only two-thirds of the income of native-born households, while the pre-1984 immigrant households had an average income of three-quarters that of the native-born households. The primary difference observed for the older households is that relatively few of the more recent immigrants work and thus their incomes are lower than the pre-1984 immigrant households, who have a much higher incidence of labor earnings. However, the higher quality jobs that the post-1984 immigrants have obtained result in much higher pension income than the pre-1984 immigrants receive.

<sup>8</sup> Men with no earnings during the three years are deleted from the sample. Thus, the sample includes from one to three observations for each respondent. Three-fourths of all men have earnings in all three years. No corrections have been made for correlations over time in these observations.

Table 4

**Earnings Equation for Married Men, Aged 50–59**

	Parameter	Standard Error	Parameter	Standard Error
Intercept	–6.80	6.24	–6.44	5.31
Year 1996	0.07**	0.03	0.06**	0.03
Year 1997	0.09**	0.04	0.07**	0.03
Age	0.38***	0.23	0.35***	0.19
Age Square	–0.004***	0.002	–0.003***	0.002
Job requires some training or courses			–0.08	0.06
Job requires technical or vocational school			0.08	0.06
Job requires college education			0.48*	0.07
Work for Large Company	0.11*	0.03	0.07*	0.03
Years of Tenure, Current Job	0.004**	0.001	0.003*	0.001
Immigrant Before 1984	–0.30*	0.04	–0.14*	0.03
Immigrant After 1984	–0.19*	0.06	–0.21*	0.05
Adjusted R <sup>2</sup>	16.01%		39.36%	

N = 635  
 Dependent variable is natural log of hourly wage rate.  
 \* Indicates statistical significance at 0.01 level of significance.  
 \*\* Indicates statistical significance at the 0.05 level of significance.  
 \*\*\* Indicates statistical significance at the 0.10 level of significance.  
 Source: Authors' calculations from German Socio-Economic Panel.

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