

THE ECONOMIC PERFORMANCE OF GERMANY'S EAST EUROPEAN IMMIGRANTS

Christoph M Schmidt

Discussion Paper No. 963
May 1994

Centre for Economic Policy Research
25-28 Old Burlington Street
London W1X 1LB
Tel: (44 71) 734 9110

This Discussion Paper is issued under the auspices of the Centre's research programme in **Human Resources**. Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as a private educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions. Institutional (core) finance for the Centre has been provided through major grants from the Economic and Social Research Council, under which an ESRC Resource Centre operates within CEPR; the Esmée Fairbairn Trust; the Baring Foundation; the Bank of England; and Citibank. These organizations do not give prior review to the Centre's publications, nor do they necessarily endorse the views expressed therein.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

CEPR Discussion Paper No. 963

May 1994

ABSTRACT

The Economic Performance of Germany's East European Immigrants*

Germany has experienced a substantial influx of German immigrants from Eastern Europe after World War II and expects several million more as a consequence of the demise of socialism. This paper analyses the economic performance of ethnic German migrants to West Germany in comparison with native born West Germans. Ethnic German immigrants from Eastern Europe display lower levels of education, lower rates of self-employment and higher unemployment rates than natives and immigrants from East Germany. Similar to foreign guest-workers, German immigrants are more likely to work in blue collar jobs; they do, however, eventually reach earnings parity with native Germans. This study therefore demonstrates, in contrast to analyses of the economic performance of guest-workers, that despite substantial persistence in economic stature, the German economy does not exclude immigrants from economic prosperity.

JEL classification: J15, J24, J31, J61

Keywords: migration, refugees, expellees, assimilation, segmented labour markets, Germany

Christoph M Schmidt

SELAPO

Universität München

Ludwigstr. 28 RG

80539 München

GERMANY

Tel: (49 89) 2180 2128

*This paper is produced as part of a CEPR research programme on *The Economics of European Migrations*, supported by a grant from the Commission of the European Communities under its SPES Programme (no. ERB SPESCT910094). A preliminary version was presented at the CEPR Workshop *The Economics of European Migrations*, Paris, 26/27 November 1993. I am grateful to the Deutsche Forschungsgemeinschaft (DFG) for financial support, to John De New for his help with the data and to Thomas Bauer, Ira Gang, John De New, Albrecht Ritschl, Ralph Rotte, Rolf Tschernig, Michael Vogler and Klaus F Zimmermann for helpful comments.

Submitted 6 April 1994

NON-TECHNICAL SUMMARY

The West German immigration experience after World War II has been focused on two sources: ethnic Germans emigrating from their traditional areas of settlement in Eastern Europe in the years directly following the war; and guest-workers originating from a small set of sending countries at Europe's southern border during the last three decades. Several million ethnic Germans still residing in Eastern Europe are expected to exercise their right to migrate to Germany in the years ahead. Little is known about the relative economic position of previous ethnic German immigrants – the existing accounts are scarce and controversial.

Average guest-worker earnings have consistently been found to be lower than those of average natives; this difference is a result of the concentration of foreign immigrants in unskilled blue collar jobs. Several problems impede sensible inference from these studies to the labour market assimilation of ethnic German immigrants. Most important, immigrants of distinct origins have generally performed very differently in their host country. Moreover, for Germany, differences in planned duration of stay have been demonstrated to influence assimilation patterns. In contrast to foreign guest-workers, past and prospective future waves of German immigrants can be viewed as permanent immigrants.

Using two West German cross-sectional data sets collected in 1982 and 1990, this paper analyses the performance of ethnic German immigrants from Eastern Europe – sub-divided into two groups; those from the Former German Territories (FGT) and those from Other Territories (OT) – in the West German labour market, both in comparison to natives and to immigrants from East Germany. In comparison with the regional disparities in the distribution of immigrants in the immediate post-war years, the micro data do not reveal any strikingly different regional and city size structure among native Germans and immigrant Germans. This result is remarkable given the widely perceived immobility of Germans. One might speculate that the high mobility of ethnic German immigrants has in fact contributed to Germany's economic success in the post-war era.

German migrants from Eastern Europe have a significant disadvantage in terms of *both* schooling and post-school training. Migrants from the former East Germany, on the other hand, display about average schooling, but a significant advantage in post-school training. The labour market participation behaviour of German migrants is generally quite similar to that of native born Germans, conditional on age and education. It is often hypothesized that via the creation of small businesses, immigrants are a driving force in aggregate economic growth. Here, migrants from the FGT in Eastern Europe are demonstrated to be less likely to be self-employed. Migrants from East Germany and from the OT are not different from native Germans, however. It is apparently mainly the

difference in asset holdings that generates the native advantage in business foundations.

German migrants display a higher probability to be unemployed at survey time than natives. Since reservation wages generally increase with asset holdings, it is unlikely that the higher unemployment rates among migrants are the result of high reservation wages while residing in unemployment. Rather, these figures suggest that migrants experience a higher unemployment incidence.

German workers perform in almost insulated labour market segments as civil servants, white collar workers and blue collar workers. These segments are characterized by different wage-setting mechanisms, institutional arrangements governing working time, work characteristics and retirement, and access requirements in terms of education. Estimations modelling the selection into civil servant or white collar positions as opposed to blue collar positions demonstrate that German migrants are less likely to be selected into the more attractive civil servant and white collar positions. This unfavourable pattern is most pronounced for migrants from the FGT. Over their duration of residence, migrants are able to improve their labour market position. According to these estimations, migrants achieve parity in terms of distribution into labour market segments only after more than three decades of staying in Germany.

Perhaps the most investigated aspect in the migration literature is the assimilation of the earnings of immigrants to that of observationally equivalent native workers over the migrants' duration of residence in the host country. Holding education constant, the regressions performed here document that migrants and natives achieve earnings parity. This parity is remarkable given the persistent over-representation of ethnic German immigrants in low-paying blue collar jobs. When we distinguish migrants according to their duration of residence in Germany, their earnings are found to rise by about one-half of a percent per year of residence. The initial earnings disadvantage of migrants at the time of their entry is measured at about 9% for migrants from East Germany and at roughly 16% for migrants from Eastern Europe. Most of the differences in the initial earnings position of individual migrants and part of the subsequent catch-up process is generated by status selection. When restricting the analysis to full-time working men, the key results are unchanged.

These results have implications for Germany as an immigration country that contrast with the conclusions emerging from the analysis of the economic performance of foreign guest-workers. Economic success is apparently facilitated by several characteristics that distinguish ethnic German immigrants from foreign guest-workers. Most of the ethnic German migrants in the sample have entered young. One might only speculate that migrants who were older at immigration did not perform as well. In contrast to foreign workers, ethnic Germans already possessed the necessary language skills at their time of entry

into West Germany. For the same reason, the comparability of previous and future ethnic German migrants is limited, since many recent immigrants from Eastern Europe do not speak German. Moreover, ethnic German immigrants acquired German citizenship immediately. Ethnic German immigrants have shared in Germany's economic prosperity to a much greater extent than foreign guest-workers.



*There's a feeling I get when I look to the West
and my spirit is crying for leaving.*

R. Plant, "Stairway to Heaven"

1. Introduction

The West German immigration experience after World War II has mainly been the history of Germans emigrating from their traditional areas of settlement in Eastern Europe in the years directly following the war and of guest-workers originating from a small set of sending countries at Europe's southern border in the last three decades. However, the immigrant composition has shifted again in recent years and is destined to change even more in years to come. While for all developed economies, migration pressure from the Third World has generally increased, for Germany the consequences of the disintegration of the Socialist economies in Eastern Europe will be particularly relevant. Several million ethnic Germans still residing in these countries are expected to exercise their rights to migrate to Germany in the years ahead.

This paper analyzes the performance of ethnic German immigrants from Eastern Europe in the West German labor market, both in comparison to natives and to immigrants from East Germany. Little is known about the relative economic position of German immigrants. Their integration had been an issue of considerable political interest up to the first oil crisis, but attention has faded in recent years. Some evidence of limited applicability to their case exists on the labor market performance of foreign guest-workers. Average guest-worker earnings have consistently been found to be lower than those of average natives; this difference is a result of the concentration of foreign immigrants in unskilled blue collar jobs (Pischke, 1993, Schmidt, 1992b).

Using two German cross-sectional data sets collected in 1982 and in 1990, it is demonstrated here that ethnic German immigrants from Eastern Europe display lower levels of education, lower rates of self-employment and higher unemployment rates than natives and immigrants from East Germany. Similar to foreign guest-workers, German immigrants are more likely to work in blue collar jobs; they do, however, eventually reach earnings parity with native Germans. Thus, the German economy is able to integrate immigrants much better than analyses of guest-worker assimilation indicate.

Section 2 surveys the historical development of the German immigration stream, section 3 introduces the micro data and compares the structure of the migrant population in the sample to aggregate information. Section 4 discusses the econometric approach and

presents the estimation results. Section 5 discusses the implications of these findings for future immigration to Germany.

2. Immigration of Ethnic Germans

German Migration Flows

After the capitulation in May 1945, Germany lost several of its Eastern provinces (Silesia, East-Brandenburg, Pommerania and the South of East-Prussia to Poland and the North of East-Prussia to the Soviet Union) and the rest of its area was partitioned into 4 occupation zones. The British Zone (in the North) and the American Zone (in the South, plus the city-state of Bremen in the North) then formed the *United Economic Territory (Vereinigtes Wirtschaftsgebiet)* from September 1946 until 1949, when the French Zone (in the Southwest) joined the other two Western zones to constitute the *Federal Republic of Germany* (henceforth *West Germany*) that was joined by the *Saargebiet* in 1957. In 1949, the Soviet Zone was transformed into the *German Democratic Republic GDR* (henceforth *East Germany*).

Figure 1

At the beginning of the war, in 1939, about 18 million Germans lived in the Eastern provinces and the traditional areas of settlement in East and Southeast Europe. The final stages of the war, 1944/45, already saw a large number of German refugees from the East. Then in August 1945 the Allies (excluding France) decided at the *Potsdam Conference* that Germans settling in East and South-East Europe had eventually to resettle in mainland Germany, starting another large migration stream from these areas to the four occupation zones by the fall of 1945. These decisions legally affected the refugees that had resettled during the war as well and, thus, together with the new migrants they constituted the population of *expellees (Vertriebene)*. The description of this immigrant influx has been the matter of an extensive literature, for example Fleischer and Proebsting (1989), Lemberg and Edding (1959), Reichling und Betz (1949), Reichling (1986b) and Statistisches Bundesamt (1958).

A period of individual migration and organized "transport migration" was since 1947 followed by organized and spontaneous family re-unification. This stream of migrants lasted until about the end of 1950. The external movements have been complemented by internal

migration both of the indigenous population and of the immigrants themselves. This relocation was a consequence of denied housing, of the return of evacuated city inhabitants or POWs, and of the search for relatives or for work. After 1948 the migration from Eastern Europe was dominated by the migration from the Soviet zone to the West and by internal migration from the countryside to the city that was made possible by the liberalization of housing.

Table 1

For this period, the regional distribution of the population of native born Germans is contrasted with that of German immigrants in Table 1. Until the end of 1950, roughly more than 12 million Germans originating from Eastern Europe migrated to Germany, about 8 million of them to West Germany. Individual regions were affected quite differently by this influx. Generally, the rural areas received a disproportionately large share of immigrants, for reasons of geographic proximity and since there was not much housing available in the destroyed cities. The 1946 census revealed that in the Soviet Zone, for example, more than 40% of the population of the rural state of *Mecklenburg* were immigrants, and only 12% of the population of the urbanized state of *Sachsen*, whereas the zone's average was over 20%. While the French Zone experienced almost no immigrant influx, according to the 1946 census approximately one out of seven individuals in the British Zone or the American Zone was an immigrant. But even almost one third of the population of *Schleswig-Holstein*, and about a fifth of that of *Niedersachsen* and of *Bayern* were immigrants. All these three states were rural in character. The census data of 1949 demonstrate that those regional disparities were typical for the complete post-war period.

At the end of 1950, slightly more than 4 million Germans still lived in Eastern Europe. Of these Germans, 40% lived in Poland and about one third in the Soviet Union. Figure 2 displays the development of immigration from Eastern Europe after 1950. Ethnic German immigrants from Eastern Europe were henceforth called *Aussiedler*. In contrast to the almost 8 million Germans that had migrated from Eastern Europe to West Germany until 1950, between 1950 and 1987, on average only 40,000 migrants per year led to an accumulated influx from these regions of under one and a half million people. Since 1988, more than 200,000 East European Germans have entered West Germany every year, almost 400,000 in each of the peak years 1989 and 1990. Until 1989, most of these immigrants originated in

Poland, but in recent years, immigrant influx has been dominated by migrants from the former Soviet Union.

Figure 2

Between 1949 and August 1961, almost three million Germans migrated from East Germany to West Germany, i.e. more than 200,000 per year. These migrants were henceforth called *Übersiedler*. This large East-West migration was reduced to a trickle by the erection of the Berlin Wall in August 1961. Figure 3 displays the development of this immigration flow between August 1961 and 1990, when official data collection on East-West migration was terminated as a consequence of unification. In the 27 years between August 1961 and 1988, on average about 20,000 East Germans moved to the West per year. Only since the demise of the Socialist regimes in Eastern Europe in 1987 has German East-West migration picked up considerably (Schmidt and Zimmermann, 1992). In 1989, more than 300,000 East German migrants entered West Germany, and about another 200,000 until official unification in June 1990.

Figure 3

Integration: The Early Years and the Success Story

Looking back at the initial post-war years, the situation of the German immigrants had been relatively dismal and integration seemed all but impossible. The structural economic and social change in rural areas had already started during the war, as industries reallocated production from the cities, that were in danger of being bombed, to the countryside and the villages filled with evacuated city inhabitants, with foreign hard-labor prisoners and the first refugees. Nevertheless, when the main bulk of the migrant stream fell outside the urban areas, the new arrivals disturbed the religious, cultural and demographic composition of the receiving villages.

Moreover, most migrants came without physical assets and had lost proof of their insurance and pension claims which was particularly problematic for the retirees. Therefore, many immigrants had to rely on welfare. The currency reform of 1948 and the resulting conversion of savings again weakened the immigrants' economic position disproportionately.

since they owned little physical wealth. They were also the first to suffer from the ensuing employment cuts and, if self-employed, from credit restrictions. Most problematic was the provision of housing for the new citizens. When the peak wave of the migrant stream arrived in 1946, housing was provided in schools, plants, military camps or castles. At the end of 1948, about 400,000 individuals lived in camps, while about 1.5 million individuals lived in inadequate individual housing and about 2.3 million immigrants had to live in shared housing. Even in 1949, this situation had not improved dramatically (Reichling and Betz, 1949).

Retrospectively, the apparent integration of these immigrants has been viewed as an *integration miracle* paralleling the *economic miracle* by which the German economy recovered from its dismal post-war situation. The West German post-war history has been marked by extreme structural change. While the employment share of the agricultural sector almost shrank to non-existence, the industrial sector gained a leading position in international markets and economic recovery led to unprecedented levels of economic growth. Regarding aspects of the social fabric of the German society, the post-war period provided - notwithstanding the apparent confirmation of old power structures - a unique potential for the formation of new elites and the decline of incumbent advantages.

In contrast to the founding years of West Germany, by the end of the 1960s, the economic situation of German immigrants was not a matter of concern. The state and federal statistical offices stopped keeping track of the relative economic performance of expellees and the social sciences did not pay attention to the issue of the German immigrant integration. In 1969, the Federal Ministry for Expellees and Refugees was dissolved, reflecting the idea that the social and economic integration of these immigrants was felt to be completed, measured by the protracted state of full employment. Moreover, the original immigrant population had been reduced substantially by the ageing process by that time. During the following two decades, the only public discussions involving the expellees were of political nature, as their representatives persistently demanded a correction of Germany's border to the East.

Certainly part of this perceived integration has been genuine. The massive economic growth in the post-war era allowed all members of society to participate in the economic recovery. The military governments apparently played a substantial role in the integration process as they insisted on equal treatment of the native and immigrant population in everyday administration and in the formulation of the law. Legislation aimed at the creation of a permanent basis for the economic and social existence of the new citizens via welfare

eligibility, housing and voting rights, and labor market regulation. It is unclear, however, whether a persistent relative disadvantage has been covered by the general rise in welfare and wealth.

Existing accounts of the relative economic position of German immigrants are controversial. Using data on job status and education from the 1971 *Mikrozensus*, Lüttinger (1986) concludes that the economic stature of these immigrants has persistently lagged behind that of natives. He finds, in particular, a higher fraction of the immigrants from Eastern Europe to be working (as unskilled workers) in production. Since the original aim of German immigrant legislation was the restitution of the migrants' economic status quo and many of these migrants had been self-employed farmers or craftsmen, these results demonstrate the failure of this strategy. However, while they illustrate the persistent effects of the loss of physical assets, they are quiet about participation, unemployment and labor earnings. In contrast, Reichling (1986a) argues that the integration of the German refugee population has been achieved successfully. He demonstrates disproportionately large investments into education by the younger German migrants, but counts second generation immigrants among the immigrant population as well. It is, however, the economic integration of first generation immigrants that is at issue here.

Previous Assimilation Studies

The process of the assimilation of immigrants into their host country has many dimensions, most prominently cultural aspects, questions of family formation and reproductive behavior, consumption, savings and remittance patterns, and labor market outcomes. Among the latter, economic research has focused on the empirical modeling of the relative earnings performance of immigrant workers compared to native workers. As a general result of these studies, immigrant workers experience an initial earnings disadvantage against observationally equivalent natives, but subsequently tend to reduce this gap during the residence in their host country. The current debate in the literature concentrates mainly on empirical issues concerning the proper measurement of quality differences in the vintages of immigrants the United States have received during this century (Chiswick, 1978, Borjas, 1987).

While no comparable study investigates immigrants of German nationality, a number of papers analyzes the earnings assimilation of foreign guest-workers to West Germany (Dustmann, 1993, Licht and Steiner, 1992, Pischke, 1993, Schmidt, 1992a, Schmidt, 1992b).

All these analyses have used a single data set, the first (1984) and subsequent waves of the *German Socio-Economic Panel GSOEP*. The GSOEP only surveys immigrants from the five major sending countries in the South of Europe (Spain, Italy, Yugoslavia, Greece and Turkey). As a general conclusion, these immigrants realize, on average, lower earnings throughout their life-cycle than the average native German, because they are mainly working in unskilled blue collar jobs. In a comparison of foreign immigrant and German blue collar workers, however, one detects a pattern of initial earnings disadvantage and subsequent recovery that is comparable to that observed in US studies: Schmidt (1992b) demonstrates that foreign immigrants to Germany experience, on average, an initial earnings disadvantage of about 12% compared to observationally equivalent native workers, but reduce this earnings gap by about 0.7% per year.

Several problems impede sensible inference from these studies on the labor market assimilation of ethnic German immigrants. Most importantly, immigrants of distinct origins have generally performed very differently in their host country. These differences pertain both to earnings levels and to assimilation patterns and are associated with observable discrepancies in education, language skills and labor market preparation and with a self-selection of entrants according to unobservable intrinsic characteristics (Borjas, 1987, Schmidt, 1992b). Moreover, for Germany, differences in planned duration of stay have been demonstrated to influence assimilation patterns (Dustmann, 1993, Schmidt, 1992a and 1992b). In contrast to foreign guest-workers, past and prospective future waves of German immigrants can be viewed as permanent immigrants.

From a methodological perspective, the need for the integration of a large number of immigrants arriving for purely exogenous reasons within a limited period can be viewed as a uniquely uncontaminated natural experiment: While the population of immigrants from East Germany and the migrants arriving from Eastern Europe after 1950 might potentially be self-selected according to perceived labor market opportunities, the population of post-war immigrants originating in Eastern Europe only deviates from a randomly selected group to the extent that labor market ability is correlated with the survival of the exodus.

3. Data and Structural Comparisons

This analysis uses a micro survey that comprises two cross-sections of individuals from the *Allgemeine Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS)* that were sampled

randomly from the West German population in the years 1982 and 1990, respectively. This data set resembles the *General Social Survey* in the United States. It samples only German nationals and contains information on demographic and labor market characteristics, and on the duration of residence in Germany for those who immigrated.

In my analysis, I restrict the sample to men and women between 18 and 65 years of age who have lived in West Germany throughout their lifetime or who migrated from East Germany or from Eastern Europe after 1939. It contains more than 4500 individuals, approximately 3900 of whom are native West Germans. In Figure 4, the sample distribution of the time of entry is displayed separately for immigrants from East Germany and Eastern Europe. Even although the older entry cohorts have been reduced by mortality more than the younger entry cohorts, the peaks in the influx in the years directly following the war and at the end of the last decade that are documented in Figures 2 and 3 clearly dominate the micro data.

Figure 4

Table 2 documents the large disparities in demographic characteristics between natives and immigrants in the sample. These differences have to be taken into account when comparing labor market status and other economic outcomes. The analysis will generally distinguish between the roughly 200 immigrants from East Germany, the approximately 300 immigrants from former German territories in Eastern Europe (henceforth denoted as *Former German Territories*) and the about 100 immigrants who originate in some other region of Eastern Europe or the former Soviet Union (henceforth denoted as *Other Territories*). These regions of origin are expected to be distinctive in their provision of educational background and labor market preparation, but the classification is also highly correlated with entry cohorts.

Among East European immigrants we find more women than among native West Germans and among Germans originating in East Germany, mainly because of the prevalence of the war cohort (entry between 1940 and 1950) among these immigrants. The dominant role of the war cohort in the sample also generates large differences in average age and, consequently, in marital status. While the average age among natives is 39, it is 47 among East German immigrants and among immigrants from the Other Territories, and even 51 among immigrants from the Former German Territories. In contrast to these stock figures,

according to Fleischer and Proebsting (1989), at the end of the last decade, the inflowing migrants from Eastern Europe are rather younger than natives and recent migrants from East Germany.

There are large disparities in education between immigrants and natives and among different immigrant groups. They presumably reflect a secular trend to improved education in the younger cohorts. In the sample, individuals were asked to state final degree received, independent of the school system in which this degree was awarded. The actual calculation of years of schooling input identifies standardized curriculae with final degrees received. While the minimum amount of schooling attributed to individuals is 8 years, most of the individuals in the sample graduated from the *Hauptschule* (9 years). Most students receiving higher level school education start to attend advanced schools at about 10 years of age and graduate with *Mittlere Reife* (10 years), *Fachabitur* (12 years) or *Abitur* (13 years).

On average, immigrants from the Former German Territories display the lowest amount of school education, whereas immigrants from the Other Territories display the highest amount of schooling. The fraction of immigrants with *Abitur* from these parts of Eastern Europe is twice that of immigrants from the Former German Territories. Only a small fraction of the sample did not receive any post-school education or only attended minor vocational training schemes (1 year). Most individuals received a three year vocational training (*Lehre*), some graduated from a *Fachhochschule* (4 years) or from a university (6 years). In contrast to years of schooling, East German immigrants display even more years of post-school education than natives, while East European immigrants and particularly those originating in the Other Territories have lower amounts of post-school education.

Of the migrants in the sample, only 30% were older than 23 at immigration, and only 12% were older than 30. More than half of them arrived after the typical school leaving age of 16. The average age at immigration for migrants in the sample is 19 for migrants from East Germany, 17 for migrants from the Former German Territories and 20 for individuals originating in the Other Territories. Thus, the fundamental behavioral question of migration research of whether there large differences in the assimilation of immigrants arriving at childhood age and arriving as adults will be difficult to answer with these data. Similarly, most of the foreign guest-workers in the GSOEP were young adults upon arrival in Germany, leading to the same problem.

Of the ethnic German immigrants from the Other Territories, slightly less than half had arrived in Germany until 1950, and about two third by 1961. Three out of four migrants from the Former German Territories had arrived before 1951, nine out of ten before 1962. About 80% of the migrants from East Germany had arrived before 1962, but only one third before 1951. Thus, the data provides almost no observations on migrants during their crucial first years in the host country, and the sample average of the duration of residence in Germany is high. It is 28 years for East German migrants and for migrants from the Other Territories, and it is even 34 years for migrants from the Former German Territories. More than two thirds of all migrants taken together have stayed in Germany for longer than 20 years. Consequently, the empirical analysis performed here will hardly be able to identify the development of the differences in labor market outcomes between recent German migrants and native Germans.

In comparison with the regional disparities in the distribution of immigrants documented in Table 1, the micro data do not reveal any strikingly different regional and city size structure among native Germans and immigrant Germans. This result is remarkable given the widely perceived immobility of Germans. One might speculate that the high mobility of ethnic German immigrants has in fact contributed to Germany's economic success of the post-war era. Starting in the 1950s there was a movement from the countryside to the cities, as more housing became available in urban areas. More importantly, the immigrant population apparently has resettled in different parts of Germany, presumably as a consequence of the search for economic success.

4. Econometric Results

This section employs multivariate methods to study differences in labor market outcomes between ethnic German immigrant and native Germans. In particular, I investigate the determinants of educational attainment and of labor market participation for the full sample. For individuals in the work force, I analyze whether the individual is self-employed and the incidence of unemployment, and for workers in dependent employment, I study the selection of jobs status. Finally, for those working and reporting income, I examine earnings.

All empirical analysis follows the general strategy to model the labor market outcome of interest as

$$\begin{aligned}
 y_i^* &= X_i \beta + Z_i \gamma + u_i \\
 y_i &= \Gamma(y_i^*)
 \end{aligned}
 \tag{1}$$

where y^* denotes a latent variable describing the distribution of the labor market outcome in the sample, X is a vector of demographic characteristics for all individuals in the sample, including an indicator of survey time, and Z is a vector of migrant characteristics. The observation rule $\Gamma(\cdot)$ maps the latent variable into an observable entity. For example, it is translated into a dichotomous variable when analyzing labor market participation and it is left unchanged when studying the acquisition of years of schooling.

In a first step of analysis, I always try to explain raw differences in the labor market outcome of interest between native Germans and German immigrants by controlling for demographic characteristics such as age and marital status. Remaining differences will then be captured by the coefficients of indicator variables for the different immigrant groups. Note that in all following tables, the point estimates of the coefficients for migrants from the Other Territories have to be calculated from the table entries as the sum of the coefficient for East European origin and of the coefficient of the interaction term of East European origin with origin in the Other Territories.

In a second step, I then introduce the duration of residence as an additional explanatory variable for migrants only. This variable has been central to the migration literature. It is generally hypothesized that as time of residence proceeds, immigrants acquire those country-specific aspects of productivity they were lacking initially, allowing them to perform similar to natives. Since most of the German migrants present in the sample have entered in the brief period following the war, there is hardly any information on the migrants' performance during their first years in the host country and complex assimilation patterns will be difficult to detect in the data. Consequently, I allow the duration of residence to enter the estimations only linearly.

A third step controls for two further immigrant characteristics, the age at immigration and the immigrant cohort. Neither of these attributes is found to be relevant for any of the labor market outcomes under study. The adaptability of immigrants to the new environment is likely to be higher among young than among old migrants, and, thus, age at immigration might affect economic performance negatively. Given sufficient variation, this characteristic can be identified in cross-sectional data. Since the samples used here mainly contain migrants

that have entered young, I will distinguish migrants according to whether they entered before or after the most prevalent school leaving age of 16.

Chiswick's seminal paper (1978) on immigrant assimilation rested on a cross-sectional analysis. This approach has been criticized for the omission of vintage effects in the immigrants' entry cohorts, most prominently by Borjas (1987). If average immigrant productivity has been declining over time, older entry cohort will perform better in the host country's labor market, and a cross-sectional analysis will mistake this development for the manifestation of assimilation during the time of residence. Similarly to Borjas' work, the individual data underlying the analysis in this paper are collected in two independent cross-sections being eight years apart. Thus, entry cohort effects (not to be confused with birth cohorts) will be identified separately from the effects of duration of residence. However, since most of the immigrants in the sample entered in the post-war years, I will only distinguish immigrants of the post-war entry cohort (1940-1950) from all other entrants (1951-1990).

Educational Attainment

Several aspects of educational attainment are analyzed in Table 3. Columns (1) and (2) study the dichotomous variable indicating the acquisition of serious post-school training (either *vocational training* or *Fachhochschule* or *university degree*), columns (3) and (4) consider years of schooling, and columns (5) and (6) investigate years of post-school education. According to all these measures, men realize a higher educational attainment. This holds particularly for post-school training. Columns (2), (4) and (6) allow for a trend in education levels across birth cohorts. We can clearly identify such a positive trend in average education, starting with the cohort born 1940 to 1949.

Some of the individuals in younger birth cohorts will still be investing in education as of the time of the surveys, 1982 and 1990, respectively. Therefore, one might restrict the sample to individuals over, say, 30 years of age to eliminate life-cycle effects from the analysis. Here I report estimates following an alternative approach: the interaction of the indicators for the 1950 to 1959 birth cohort and the cohort born 1960 or later with the indicator of survey time demonstrates that the former cohort gains in average post-school education between 1982 and 1990. This confirms the positive trend in educational attainment already observed for previous birth cohorts. The latter cohort improves schooling and post-school average training over this eight year period substantially. Since in 1990, the period of

investment might not be finished for all individuals in this cohort, no general statements are possible about the continuation of the principal trend.

Table 3

In the estimations controlling for sex only, presented in columns (1), (3) and (5), German migrants from Eastern Europe are documented to realize a significant disadvantage in terms of both schooling and post-school training. For migrants from the Other Territories, we observe a larger disadvantage in post-school education, but no disadvantage in terms of schooling. In contrast to East Europeans, migrants from East Germany display about average schooling, but a significant advantage in post-school training. Due to the presence of the overall trend in education, one would expect the comparison of schooling levels conditional on birth cohort to be more favorable to immigrants. In fact, this intuition is only confirmed for years of schooling. The migrant's relative position in terms of years of post-school training is even worsened by the introduction of birth cohort controls. This phenomenon reflects the relative large disparity between the educational attainment of male and female immigrants and the relatively high fraction of women among the younger migrants. Both age at immigration and entry cohort do not affect educational attainments independent of sex and birth cohort.

Labor Market Participation

The determinants of individual labor market participation are analyzed in the estimations documented in Table 4. In the probit estimation omitting age and education reported in column (1), single men are found to be participating more than single women. The family structure is crucial for the participation decision: throughout, married women are found to participate less and married men are seen to participate more than single individuals. The sex-specific age profiles in column (2) reveal that, on average, men display a steeper participation profile due to their higher investment into post-school education. These profiles also demonstrate that men reach higher participation levels during their prime years. Participation is demonstrated in column (3) to increase in post-school education, but for both men and women, it is decreasing in years of schooling. This regularity is at least partly due to the fact

that younger workers with substantial schooling are still investing in post-school education at the time of the survey.

Table 4

The participation behavior of German migrants is generally quite similar to that of native born Germans, conditional on age and education. The lower participation rate among migrants of East European origin that is reported in column (1) is merely a reflection of the immigrants' age structure, whereas the high participation rate of migrants from East Germany conditional upon age that is documented in column (2) is revealed in column (3) as a result of their superior post-school training. Immigrants with advanced schooling are less likely to invest in post-school education than native Germans with advanced schooling, and one can expect the current labor force to be augmented by highly trained native Germans in the post-survey period.

The results of column (4) show that the duration of residence does not exert any separate influence on participation behavior. The coefficient of age at immigration in column (5) is not significant as well, but its negative sign indicates that immigrants immigrating at higher ages might find it difficult to integrate in the new labor market. Unfortunately, the sample does not allow us to infer on the integrative success of the post-war immigrants who arrived as mature adults forty years before survey time. The contemporary accounts of the dismal situation of immigrants together with the indicative estimates presented here suggest the conjecture that the older entrants were never able to become net contributors to the post-war economy. Column (6) documents that there is no entry cohort effect in the participation behavior of ethnic German immigrants.

Self-Employment

The analysis will now be restricted to the labor market success of labor market participants. The remaining sample after eliminating non-participants contains approximately 2700 observations, more than 400 of whom are German immigrants. First, I will analyze the determinants of the incidence of self-employment (9% of the native Germans and 8% of the immigrant Germans are self-employed) and of unemployment (4% and 6% among natives and migrants, respectively) among labor force participants. Then, I will investigate the selection

of workers in dependent employment into one of the prevalent German labor market segments.

It is often hypothesized that via the creation of small businesses, immigrants are a driving force in aggregate economic growth. Despite the declared German policy to aim at the restitution of the pre-war status of German immigrants and the high percentage of previous farmers in the immigrant population, immigrants to Germany have generally had little opportunity to work as farmers in their receiving region, due to the scarcity of land and to the declining role of agriculture in the German economy. This labor market status will not be analyzed further. The question asked here is whether in the highly regulated and equity-demanding German economy, immigrants have managed over time to own businesses to the same extent as native Germans.

The entrepreneurial activities of German immigrants have been observed with a lot of interest in the post-war era, since many of the new entrants had owned businesses in their region of origin. Special legal provisions for migrant businesses were designed to help business formations, but between 1945 and 1949 they were hardly successful. Since 1949 one could observe a rising number of new small businesses, mainly in crafts, as special provisions aimed at the restoration of credit for migrant businesses that had been curbed as a result of currency reform. Furthermore, after 1949 licensing restrictions were lifted facilitating a rapid growth of business formations.

Empirically, the decision to become self-employed is notoriously difficult to model. The estimations performed here are plagued by the same problem. In column (1) of Table 5, men are found to be more likely to be self-employed. In column (2) we see this arising mainly for mature men. Column (3) demonstrates that for both men and women, an additional year of schooling and post-school education raises the probability of self-employment. From the apparent low explanatory power of these estimates and the large relative importance of shareholders' equity for German businesses, one can conjecture that the omission of the value of assets owned by the individual is the driving force behind business foundation.

Table 5

Throughout, migrants from the Former German Territories in Eastern Europe are demonstrated to be less likely self-employed. Migrants from East Germany and from the Other Territories

are not different from native Germans, however. Columns (4) to (6) document that duration of residence, age at immigration and entry cohort do not exert any influence on this labor market outcome. Given the low explanatory power of all other individual characteristics, the importance of the difference between natives and migrants suggests that it is mainly the difference in asset holdings that generates the native advantage in business foundations.

Unemployment

The literature on immigrant assimilation has concentrated on the development of migrants' labor earnings during their duration of residence in the host country relative to those of natives. A low position in the earnings hierarchy is generally associated with a higher likelihood of unemployment and welfare dependence, but unemployment incidence is not investigated more closely. An analysis of this labor market state cannot be omitted in German labor market studies that easily.

The occurrence of unemployment in the sample is investigated in the estimations reported in Table 6. Conceptually, the probability of being unemployed at survey time is the joint result of the risk of falling into unemployment, *unemployment incidence*, and unemployment duration that is itself influenced by the formation of reservation wages. These different aspects of unemployment will not be disentangled here. Column (1) shows that married individuals, in particular married men, are less likely to be unemployed. According to the results of column (2), workers display a convex unemployment profile over their life-cycle, with the lowest unemployment incidence at prime working age. The results in column (3) demonstrate that, while aggregate years of schooling do not exert any influence on unemployment incidence, workers are significantly less likely to experience unemployment with any additional year of post-school education.

Table 6

Despite their long mean duration of residence, German migrants display a higher probability to be unemployed at survey time than natives. For East German migrants and for immigrants originating in the Other Territories, this disadvantage is insignificant, but it is significant for migrants from the Former German Territories. Columns (4) to (6) document that more detailed migrant characteristics do not improve the explanatory power of the estimations.

Since reservation wages generally increase in asset holdings, it is unlikely that the higher unemployment rates among migrants are the result of high reservation wages while residing in unemployment. Rather, these figures suggest that migrants experience a higher unemployment incidence, even after a substantial duration of residence in Germany.

Occupational Status

German workers perform in almost insulated labor market segments as civil servants, white collar workers and blue collar workers. These segments are characterized by different wage setting mechanisms, institutional arrangements governing working time, work characteristics and retirement, and access requirements in terms of education. For example, civil servants' pay is set by the legislature, while for blue and white collar workers, there is a network of minimum wages for each type of job specified along industry and regional lines by bargaining between industry unions and employer associations. Transitions between these labor market segments are quite infrequent. Generally, workers in blue collar jobs earn substantially less than those in white collar jobs and civil servants.

Previous studies on the labor earnings of foreign guest-workers to Germany have detected a persistent unfavorable earnings position of immigrants compared to the average native worker, because these migrants almost exclusively work in unskilled blue collar jobs, even after a substantial duration of residence in Germany (Pischke, 1993, Schmidt, 1992b). For the German immigrants of the post-war era, new employment was at first primarily found in blue and white collar employment in industry, trade and crafts, almost irrespective of the type of former job. Lüttinger (1986) still finds a disproportionate share of German migrants in blue collar positions in the 1970s.

The question asked here is whether one can recognize such an unequal and persistent pattern of status selection even when focusing on those workers who are working outside self-employment. Therefore, the estimations reported in Table 7 model the selection into civil servant or white collar positions as opposed to blue collar positions for the roughly 2300 individuals in the sample who work in dependent employment. Almost 400 of these workers are migrants. In the estimations omitting education variables from the set of controls reported in columns (1) and (2), the significance of survey time indicates a shift in the composition of German labor supply to more educated labor and away from blue collar jobs.

Table 7

In all specifications, men are found to be more likely to work as blue collar workers, presumably a reflection of the high opportunity cost of foregoing household production for potential blue collar women. Married women are less likely to work as civil servants or as white collar workers, but column (3) demonstrates that this effect vanishes upon controlling for education: women who plan to work primarily in the household after marriage presumably invest less into their education. Married men, however, are at best less likely to work as blue collar workers than single men, even upon controlling for education. The insignificance of the age variables indicates that there are hardly any systematic transitions from blue collar work to the other labor market segments during the life-cycle, and vice versa. Education is an important ingredient of the selection process into labor market segments. Schooling is even more important for men than for women, while post-school education is less important for men.

Throughout all specifications, German migrants are demonstrated to be less likely to be selected into the more attractive civil servant and white collar positions. This unfavorable pattern is most pronounced for migrants from the Former German Territories. Thus, while German migrants contrast foreign guest-workers in their ability to enter other than blue collar positions, they are, in principle, experiencing disadvantages generated by the same mechanism of selection into the less lucrative labor market segments. While controlling for age at immigration and for entry cohort does not seem to be important, over their duration of residence, migrants are able to improve their labor market position (columns (4) to (6)). According to these estimations, migrants achieve parity in terms of distribution into labor market segments after over three decades of staying in Germany.

Earnings

Perhaps the most investigated aspect in the migration literature is the assimilation of the earnings of immigrants to that of observationally equivalent native workers over the migrants' duration of residence in the host country. Since virtually all of the Southern-European guest-workers to Germany work in unskilled blue collar jobs, their earnings are persistently below those of the average German worker. Within the group of blue collar workers, however, they are apparently able to achieve earnings parity after one to two decades of residence. Since

guest-workers do not speak German as a native language and due to their limited horizon of staying in Germany presumably invest less into host-country specific skills, one would expect immigrants of German nationality to perform better.

The regressions reported in Table 8 investigate the determinants of average net monthly earnings of workers who report to earn more than 300 DM and less than 9500 DM. The number of observations available for analysis drops to approximately 1700, including about 300 migrants. Men are generally found to realize between 13% and 15% higher earnings than women; married women experience an earnings disadvantage of about 16%, while married men enjoy an earnings premium of about 12% to 13%. These disparities by gender and family status are primarily the consequence of special provisions regarding the taxation of a family's labor income, and of the distribution of labor and household production within marriage (compare De New and Schmidt, 1994, and Schmidt, 1994).

During their life-cycle, workers are estimated here to experience the typical concave experience-earnings profile. An additional year of schooling implies an estimated earnings premium of about 8%, whereas an additional year of post-school education raises earnings by about 7%. Part-time workers realize monthly earnings that are roughly half of those of full-time workers. In terms of intertemporal change, workers in the 1990 survey receive earnings that exceed those of the workers in the 1982 survey by roughly 4% in real terms.

Table 8

In column (1), German migrants from East Germany are demonstrated to realize an earnings advantage of about 10% over native workers of the same experience and family structure. The estimation reported in column (2) reveals this discrepancy to be driven by the superior post-school education of East German immigrants. According to this regression, holding education constant, migrants and natives achieve earnings parity. This parity is remarkable given the persistent over-representation of ethnic German immigrants in low-paying blue collar jobs.

When we distinguish migrants according to their duration of residence in Germany as in column (3), their earnings are found to rise by about half a percent per year of residence. The initial earnings disadvantage of migrants at the time of their entry is measured at about 9% for migrants from East Germany and at roughly 16% for migrants from Eastern Europe. Thus, these estimations suggest that the former will achieve earnings parity after about 21

years, whereas the latter will receive the same earnings as natives after about 36 years. Age at immigration and affiliation with a particular entry cohort are not found to have any separate influence on this process (columns (4) to (5)).

The effect of the selection of job status on labor earnings is considered in column (6). These estimates uncover substantial earnings advantages from working as self-employed (an earnings premium over blue collar work of over 30%), and as civil servants (14%) or white collar workers (11%). Controlling for job status, the coefficient of all migrant variables loose in significance, although one can still observe a small and significant positive effect of duration of residence on earnings. Thus, most of the differences in the initial earnings position of individual migrants and part of the subsequent catch-up process is generated by status selection. Moreover, whereas immigrants' economic success is inhibited by an unfavorable selection into job status, additional regressions (not in the tables) reveal that within segments immigrants tend to be quite successful. For example, migrants from East Germany command an earnings premium of 10% over comparable workers in white collar or civil servant jobs.

All previous analyses on the earnings assimilation of foreign guest-workers to Germany followed the bulk of the immigration literature and concentrated on male workers. The earnings regressions documented above might be criticized, because the inclusion of female workers could lead to a confusion of aspects of labor supply and participation with wage determination. Yet when restricting the analysis to full-time working men, the fundamental results are retained. Controlling for observable differences in marital status, schooling and experience, male immigrant workers achieve earnings parity with native German workers as of the sampling date.

The final regression reported in column (7) demonstrates an initial disadvantage for immigrants from East Germany of 17%, for immigrants from the Former German Territories of 20%, and for immigrants from the Other Territories of 9%, and subsequent rates of earnings assimilation of 0.6% per year. Thus, the same process of initial disadvantage and subsequent catch-up can be observed for men and women. However, the implied duration of residence to reach earnings parity of 29 years is larger for the male East German immigrants than suggested by the combined sample of men and women. It is 34 years for immigrants from the Former German Territories, but only 16 years for immigrants from the Other Territories.

These results indicate that a substantial fraction of the strong earnings position of East German immigrants is due to the superior labor market preparation of East German women, and that female immigrants from the Other Territories perform particularly poorly in the West German labor market. The superior earnings performance of male immigrants from both East Germany and the Other Territories also suggests that they are positively selected. This argument is consistent with the differences in the success of female immigrants from these origins, if the decision to migrate tends to be made jointly by spouses in East Germany, but is primarily made by the men in the Other Territories.

5. Conclusions

Motivated by the current expectations of a stream of migrants of German nationality originating in Eastern Europe, this paper analyzes the labor market performance of previous ethnic German immigrants from Eastern Europe in the West German labor market, both in comparison to natives and to immigrants from East Germany. Although West Germany has experienced substantial immigration by ethnic Germans emigrating from their traditional areas of settlement in Eastern Europe in the years directly following the war, there is hardly any evidence on their economic performance. Instead, the German migration literature concentrated on the analysis of guest-worker earnings. These studies indicate that most immigrants work as blue collar workers. Over time, they are able to improve their earnings position within this labor market segment, but they are unable to achieve earnings parity with the average native worker.

In this analysis, German migrants are identified in two German cross-sectional data sets collected in 1982 and in 1990. Due to the long time elapsed between the time of entry and sampling time, the stock of migrants in the sample displays a high duration of residence and consists mainly of individuals who have immigrated at low ages. The empirical analysis distinguishes between immigrants from East Germany, from former German territories in Eastern Europe and from other territories in Eastern Europe. Generally, the economic performance of these immigrants is superior to that of foreign guest-workers. Nevertheless, one can identify significant differences between the immigrant and the native population.

It is demonstrated here that immigrants from Eastern Europe tend to display lower levels of education, lower rates of self-employment and higher unemployment rates than natives and immigrants from East Germany. This persistence in the labor market position is

also evident in the job segment the workers are selected into. Similar to foreign guest-workers, German immigrants are more likely to work in blue collar jobs; they do, however, perform quite strong within each labor market segment, and eventually reach earnings parity with native Germans. The estimates presented here suggest that male immigrants from East Germany and from other territories in Eastern Europe are positively selected according to their labor market ability.

These results have implications for Germany as an immigration country that contrast the conclusions emerging from the analysis of the economic performance of foreign guest-workers. Despite substantial persistence in economic stature, Germany is not a country excluding immigrants forever from economic prosperity. After a considerably long duration of residence in Germany, ethnic German immigrants have achieved parity in job status and labor earnings. This success was apparently facilitated by several characteristics distinguishing ethnic German immigrants and foreign guest-workers.

Most of the ethnic German migrants in the sample have entered young. One might only speculate that migrants who were older at immigration did not perform as well. In contrast to foreign workers, ethnic Germans have had the necessary language skills already at their entry into West Germany. For the same reason, the comparability of previous and future ethnic German migrants is limited, since many Germans recently immigrating from the East do not speak German. Ethnic German immigrants generally received more education than foreign guest-workers and attended curriculae that were closer to that of native Germans. Moreover, they acquired the German citizenship immediately. Finally, East Germany and other Socialist economies in Eastern Europe tried to prevent emigration and succeeding migrants might have been positively selected according to unobserved characteristics such as motivation and energy.

References

- Borjas, George J. (1987); Self-Selection and the Earnings of Immigrants; *American Economic Review*, 77, 531-553
- Bundesministerium des Innern (1993); *Info-Dienst Deutsche Aussiedler. Zahlen-Daten-Fakten*, Bonn
- Chiswick, Barry S. (1978); The Effect of Americanization on the Earnings of Foreign-Born Men; *Journal of Political Economy*, 86, 897-921
- De New, John and Christoph M. Schmidt (1994); The Industrial Structure of German Earnings 1980 to 1990; *University of Munich Discussion Paper No.94-04*
- Dustmann, Christian (1993); Earnings Adjustment of Temporary Migrants; *Journal of Population Economics*, 6, 153-168
- Fleischer, Henning and Helmut Proebsting (1989); Aussiedler und Übersiedler - Zahlenmäßige Entwicklung und Struktur, *Wirtschaft und Statistik*, 9/1989, 582-589
- Lemberg, Eugen and Friedrich Edding (eds., 1959); *Die Vertriebenen in Westdeutschland*, vol. I - III, Kiel: Ferdinand Hirt
- Licht, Georg and Viktor Steiner (1993); Assimilation, Labour Market Experience, and Earnings Profiles of Temporary and Permanent Immigrant Workers in Germany; *ZEW Mannheim Discussion Paper No.93-06*
- Lüttinger, Paul (1986); Der Mythos der schnellen Integration. Eine empirische Untersuchung zur Integration der Vertriebenen und Flüchtlinge in der Bundesrepublik Deutschland bis 1971, *Zeitschrift für Soziologie*, 15, 20-36
- Pischke, Jörn-Steffen (1993); Assimilation and the Earnings of Guestworkers in Germany, mimeo., MIT
- Reichling, Gerhard (1986a); Die soziale und wirtschaftliche Eingliederung der Vertriebenen in der Bundesrepublik Deutschland nach statistischen Ergebnissen; *AWR-Bulletin. Quarterly on Refugee Problems*, 24, 43-47
- Reichling, Gerhard (1986b); *Die deutschen Vertriebenen in Zahlen. Teil I: Umsiedler, Verschleppte, Vertriebene, Aussiedler 1940 bis 1985*, Bonn
- Reichling, Gerhard and F. H. Betz (1949); *Die Heimatvertriebenen*; Frankfurt/Main: Wolfgang Metzner Verlag
- Schmidt, Christoph M. (1992a); The Earnings Dynamics of Immigrant Labor; *CEPR Discussion Paper No.763*

Schmidt, Christoph M. (1992b); Country-of-Origin Differences in the Earnings of German Immigrants *University of Munich Discussion Paper*, No.92-29

Schmidt, Christoph M. (1994); Relative Wage Effects of German Unions: *CEPR Discussion Paper*, No.918

Schmidt, Christoph M. and Klaus F. Zimmermann (1992); Migration Pressure in Germany: Past and Future; in: Zimmermann, Klaus F. (ed.); *Migration and Economic Development*, Berlin: Springer-Verlag, 207-236

Statistisches Bundesamt (1958); *Die Deutschen Vertreibungsverluste*, Wiesbaden: Kohlhammer

Table 1: German Immigrants From Eastern Europe 1946 and 1949

	Population ('000)		Immigrants ('000)			
	1939	1946	1946	%	1949	%
Schleswig-Holstein	1589.0	2650.5	833.7	31.5	913.7	33.3
Hamburg	1711.9	1424.1	55.2	3.9	83.5	5.4
Niedersachsen	4539.5	6432.8	1467.8	22.8	1792.6	25.9
Nordrhein-Westfalen	11945.1	11797.1	698.6	5.9	1044.6	8.2
British Zone	19785.5	22304.5	3055.3	13.7	3834.4	16.0
Bremen	562.9	486.5	25.3	5.2	29.5	5.4
Hessen	3479.1	4064.1	552.5	13.6	652.3	15.1
Württemberg-Baden	3217.4	3675.2	509.3	13.9	691.1	17.6
Bayern	7037.6	9029.1	1657.8	18.4	1913.4	20.4
American Zone	14297.0	17254.9	2744.9	15.9	3286.3	18.1
Rheinland-Pfalz	2962.1	2761.1	30.6	1.1	77.0	2.7
Baden	1229.7	1197.9	19.9	1.7	56.2	4.4
Württemberg-Hohenzollern	1075.9	1118.8	27.8	2.5	59.2	5.1
French Zone	5267.7	5077.8	78.3	1.5	192.4	3.6
Bundesrepublik	39350.2	44637.2	5878.5	13.2	7313.1	15.5
Brandenburg	2413.9	2527.5	540.7	21.4	-	-
Mecklenburg	1405.4	2139.6	903.2	42.2	-	-
Sachsen-Anhalt	3442.0	4160.5	899.6	21.6	-	-
Thüringen	2430.6	2927.5	571.0	19.5	-	-
Sachsen	5465.2	5558.6	683.9	12.3	-	-
Soviet Zone	15157.1	17313.7	3598.4	20.8	-	-
Groß-Berlin	4338.8	3199.9	116.9	3.7	-	-
Saargebiet	908.2	851.6	-	-	-	-

Source: Reichling and Betz (1949), own calculations

Table 2: German Migrants and Natives - Demographic and Regional Structure

	Natives			Migrants from		
	East Germany	Former Germ. Terr.	Other Territories	East Germany	Former Germ. Terr.	Other Territories
Observations	229	289	119	229	289	119
Demographics:						
Men (%)	48.91	44.29	44.54	48.91	44.29	44.54
Age	39.33 (13.15)	47.38 (11.14)	47.21 (12.66)	47.38 (11.14)	50.78 (9.68)	47.21 (12.66)
Married (%)	69.87	72.32	73.11	69.87	72.32	73.11
Education:						
Schooling	10.03 (1.54)	10.03 (1.50)	10.18 (1.62)	10.03 (1.50)	9.68 (1.31)	10.18 (1.62)
Abitur (%)	17.90	17.03	18.49	17.03	9.34	18.49
Post-School Education	2.51 (1.69)	2.93 (1.70)	2.14 (1.94)	2.93 (1.70)	2.28 (1.69)	2.14 (1.94)
Voc. Training or Better (%)	73.06	80.79	58.82	80.79	67.82	58.82
Migrants:						
Age at Immigration	-	19.16 (11.10)	19.69 (12.30)	19.16 (11.10)	16.79 (11.16)	19.69 (12.30)
Over 16 at Immigration (%)	-	60.26	59.66	60.26	49.48	59.66
War Cohort (1940 - 1950)	-	31.00	47.06	31.00	74.74	47.06
Duration of Residence	-	28.24 (11.63)	27.52 (13.32)	28.24 (11.63)	34.00 (10.49)	27.52 (13.32)
Dur. over 20 Years (%)	-	84.28	68.91	84.28	90.31	68.91
City Size:						
under 5,000 (%)	14.76	5.68	14.29	5.68	11.76	14.29
5,000 to 100,000 (%)	47.06	51.09	51.26	51.09	49.83	51.26

100,000 and more (%)	38.18	43.23	38.41	34.45
State:				
Schleswig-Holstein (%)	4.49	6.55	6.57	2.52
Hamburg (%)	3.17	1.31	1.73	2.52
Niedersachsen (%)	10.88	13.10	17.99	5.88
Bremen (%)	1.25	2.18	2.08	0.00
Nordrhein-Westfalen (%)	28.52	28.82	31.14	16.81
Hessen (%)	8.89	14.85	9.00	11.76
Rheinland-Pfalz (%)	5.64	2.18	4.15	6.72
Baden-Württemberg (%)	13.64	8.73	10.38	22.69
Bayern (%)	17.95	13.54	14.19	24.37
Saar (%)	1.81	0.87	1.04	1.68
Berlin (%)	3.75	7.86	1.73	5.04

Table 3: German Migrants and Natives - Education

	(1)	(2)	(3)	(4)	(5)	(6)
Origin:						
East German	0.2669** (0.100)	0.1921 (0.141)	-0.0741 (0.102)	0.0883 (0.137)	0.4074** (0.112)	0.2455* (0.152)
East European	-0.1277 (0.081)	-0.1615 (0.153)	-0.3529** (0.091)	-0.1805 (0.156)	-0.1934* (0.101)	-0.3206* (0.173)
East European *	-0.2556* (0.143)	-0.2835* (0.149)	0.4598** (0.163)	0.3777** (0.160)	-0.1505 (0.180)	-0.1568 (0.178)
Other Territories						
Immigration History:						
Over 16 at Immigration	-	0.0248 (0.123)	-	0.1422 (0.126)	-	0.1384 (0.140)
War Cohort (1940 - 1950)	-	0.0859 (0.128)	-	0.1568 (0.132)	-	0.1905 (0.146)
Demographics:						
Men	0.6004** (0.041)	0.6400** (0.043)	0.2954** (0.044)	0.2753** (0.043)	0.7784** (0.049)	0.7820** (0.047)
Birth Cohort:						
1930 - 1939	-	0.1023 (0.069)	-	0.0381 (0.074)	-	0.1624** (0.082)
1940 - 1949	-	0.5996** (0.071)	-	0.2849** (0.073)	-	0.6988** (0.081)
1950 - 1959	-	0.4919** (0.082)	-	0.7228** (0.084)	-	0.6108** (0.093)

1960 and over	-	-0.5541** (0.101)	-	0.7290** (0.113)	-	-0.7872** (0.126)
(1950 - 1959)* Sample 1990	-	0.3428** (0.096)	-	0.1207 (0.088)	-	0.4924** (0.097)
(1960 and over)* Sample 1990	-	0.4779** (0.100)	-	0.7748** (0.113)	-	0.7732** (0.125)
Sample 1990	0.0458 (0.041)	-	0.4961** (0.044)	-	0.1700** (0.049)	-
Constant	0.3322** (0.034)	0.1086** (0.054)	9.7046 (0.039)	9.4091** (0.059)	2.0573** (0.043)	1.7889** (0.066)
Adj. R ²	-	-	0.0396	0.1163	0.0593	0.1262
Log-Likelihood	-2546.65	-2394.32	-	-	-	-

Columns (1) and (2) Probit estimations, dep. variable completed vocational training or higher; columns (3) to (6) OLS regressions, dep. variables years of schooling in (3) and (4) and years of post-school training in (5) and (6), respectively. 4553 observations, standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Table 4: German Migrants and Natives - Labor Market Participation (1=yes)

	(1)	(2)	(3)	(4)	(5)	(6)
Origin:						
East German	0.1109 (0.095)	0.2236** (0.107)	0.1664 (0.109)	0.0934 (0.185)	0.2958 (0.238)	0.2906 (0.259)
East European	-0.1837** (0.082)	0.0327 (0.094)	0.0477 (0.096)	-0.0400 (0.204)	0.1546 (0.250)	0.1525 (0.253)
East European * Other Territories	0.1272 (0.146)	0.1231 (0.160)	0.2551 (0.164)	0.2716 (0.168)	0.2690 (0.168)	0.2680 (0.169)
Immigration History:						
Over 16 at Immigration	-	-	-	-	-0.1890 (0.139)	-0.1890 (0.139)
War Cohort (1940 - 1950)	-	-	-	-	-	-0.0102 (0.198)
Duration of Residence	-	-	-	0.0026 (0.005)	-0.0004 (0.006)	-0.0001 (0.008)
Demographics:						
Men	0.3507** (0.062)	-3.1202** (0.468)	-0.3417 (0.607)	-0.3371 (0.607)	-0.3572 (0.608)	-0.3576 (0.608)
Married	-0.5233** (0.054)	-0.8205** (0.063)	-0.8816** (0.066)	-0.8811** (0.066)	-0.8798** (0.066)	-0.8798** (0.066)
Married * Men	1.0801** (0.082)	1.3537** (0.112)	1.2505** (0.120)	1.2508** (0.120)	1.2463** (0.120)	1.2464** (0.120)
Age	-	0.1958** (0.016)	0.1563** (0.017)	0.1563** (0.017)	0.1533** (0.017)	0.1533** (0.017)

Age ² *10 ⁻²	-	-0.2620** (0.020)	-0.2138** (0.020)	-0.2139** (0.020)	-0.2097** (0.021)	-0.2097** (0.021)
Age*Men	-	0.1822** (0.026)	0.1914** (0.028)	0.1913** (0.028)	0.1919** (0.028)	0.1919** (0.028)
Age ² * Men*10 ⁻²	-	-0.2118** (0.031)	-0.2421** (0.033)	-0.2421** (0.033)	-0.2426** (0.033)	-0.2426** (0.033)
Years of Schooling	-	-	-0.0749** (0.022)	-0.0747** (0.022)	-0.0746** (0.022)	-0.0746** (0.022)
Years of Post-School Education	-	-	0.2099** (0.018)	0.2098** (0.018)	0.2106** (0.018)	0.2106** (0.018)
Years of Schooling * Men	-	-	-0.2578** (0.033)	-0.2582** (0.033)	-0.2571** (0.033)	-0.2571** (0.033)
Years of Post-Sch. Educ. * Men	-	-	0.0258 (0.030)	0.0259 (0.030)	0.0254 (0.030)	0.0254 (0.030)
Sample 1990	-0.0275 (0.040)	-0.0520 (0.044)	-0.0122 (0.046)	-0.0127 (0.046)	-0.0134 (0.046)	-0.0136 (0.046)
Constant	0.1598** (0.047)	-2.8564** (0.296)	-1.8290** (0.394)	-1.8274** (0.394)	-1.7852** (0.395)	-1.7849** (0.395)
Log-Likelihood	-2650.87	-2223.61	-2032.39	-2032.27	-2031.34	-2031.34

Probit estimations, 4553 observations, standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Table 5: German Migrants and Natives - Self-Employment (1=Yes)

	(1)	(2)	(3)	(4)	(5)	(6)
Origin:						
East German	-0.0520 (0.151)	-0.1877 (0.154)	-0.2284 (0.157)	-0.2241 (0.303)	-0.3502 (0.411)	-0.1618 (0.420)
East European	-0.3945** (0.180)	-0.5751** (0.184)	-0.5528** (0.186)	-0.5711 (0.354)	-0.6718 (0.441)	-0.5544 (0.441)
East European * Other Territories	0.5410** (0.264)	0.6169** (0.266)	0.5850** (0.270)	0.5879** (0.275)	0.5815** (0.275)	0.5957** (0.276)
Immigration History:						
Over 16 at Immigration	-	-	-	-	0.0915 (0.237)	0.1151 (0.242)
War Cohort (1940 - 1950)	-	-	-	-	-	0.4848 (0.319)
Duration of Residence	-	-	-	0.0005 (0.009)	0.0025 (0.010)	-0.0117 (0.014)
Demographics:						
Men	0.1936* (0.114)	-1.4112 (0.960)	-1.0275 (1.136)	-1.0259 (1.137)	-1.0282 (1.137)	-1.0133 (1.139)
Married	0.0450 (0.121)	-0.0294 (0.127)	0.0158 (0.129)	0.0157 (0.129)	0.0164 (0.129)	0.0187 (0.129)
Married * Men	0.0571 (0.150)	-0.1650 (0.162)	-0.2253 (0.165)	-0.2253 (0.165)	-0.2260 (0.165)	-0.2261 (0.165)
Age	-	0.0214 (0.039)	0.0109 (0.040)	0.0110 (0.040)	0.0123 (0.040)	0.0138 (0.040)

Age ² * 10 ⁻²	-	-0.0027 (0.047)	0.0120 (0.048)	0.0118 (0.048)	0.0099 (0.049)	0.0077 (0.049)
Age * Men	-	0.0804* (0.049)	0.0847* (0.051)	0.0846 (0.051)	0.0847 (0.051)	0.0839 (0.051)
Age ² * Men * 10 ⁻²	-	-0.0878 (0.058)	-0.0930 (0.060)	-0.0929 (0.060)	-0.0929 (0.060)	-0.0917 (0.060)
Years of Schooling	-	-	0.0896* (0.049)	0.0895* (0.049)	0.0891* (0.049)	0.0892* (0.049)
Years of Post-School Education	-	-	0.0858* (0.047)	0.0858* (0.047)	0.0853* (0.047)	0.0835* (0.047)
Years of Schooling * Men	-	-	-0.0377 (0.059)	-0.0377 (0.059)	-0.0378 (0.059)	-0.0391 (0.059)
Years of Post-Sch. Educ. * Men	-	-	-0.0221 (0.060)	-0.0220 (0.060)	-0.0212 (0.060)	-0.0199 (0.061)
Sample 1990	-0.0008 (0.068)	-0.0170 (0.070)	-0.0670 (0.071)	-0.0672 (0.071)	-0.0666 (0.071)	-0.0573 (0.072)
Constant	-1.5012** (0.096)	-2.2293** (0.743)	-3.2306** (0.895)	-3.2312** (0.895)	-3.2452** (0.896)	-3.2667** (0.897)
Log-Likelihood	-822.01	-794.60	-780.78	-780.78	-780.70	-779.50

Probit estimations, sample restricted to labor market participants (2729 obs.), standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Table 6: German Migrants and Natives - Unemployment (1=yes)

	(1)	(2)	(3)	(4)	(5)	(6)
Origin:						
East German	0.1856 (0.182)	0.2660 (0.184)	0.2693 (0.188)	0.5285* (0.287)	0.5139 (0.403)	0.5546 (0.422)
East European	0.4057** (0.160)	0.4988** (0.167)	0.4728** (0.167)	0.7946** (0.320)	0.7793* (0.436)	0.7935* (0.438)
East European *	-0.4968 (0.345)	-0.5059 (0.345)	-0.4904 (0.343)	-0.5765 (0.356)	-0.5773 (0.357)	-0.5684 (0.358)
Other Territories						
Immigration History:						
Over 16 at Immigration	-	-	-	-	0.0142 (0.274)	0.0148 (0.275)
War Cohort (1940 - 1950)	-	-	-	-	-	0.1080 (0.340)
Duration of Residence	-	-	-	-0.0104 (0.009)	-0.0101 (0.011)	-0.0128 (0.014)
Demographics:						
Men	0.1534 (0.116)	-0.8739 (0.927)	-0.4566 (1.156)	-0.4919 (1.157)	-0.4899 (1.158)	-0.4763 (1.159)
Married	-0.2277* (0.132)	-0.0927 (0.141)	-0.1039 (0.144)	-0.1134 (0.144)	-0.1133 (0.144)	-0.1144 (0.144)
Married * Men	-0.5212** (0.177)	-0.6534** (0.195)	-0.5947** (0.199)	-0.5858** (0.199)	-0.5857** (0.199)	-0.5830** (0.199)
Age	-	-0.1019** (0.040)	-0.0824** (0.041)	-0.0821** (0.041)	-0.0818** (0.041)	-0.0811** (0.041)

Age ² * 10 ⁻²	-	0.1075** (0.051)	0.0833 (0.052)	0.0838 (0.052)	0.0834 (0.053)	0.0825 (0.053)
Age * Men	-	0.0434 (0.051)	0.0473 (0.053)	0.0470 (0.053)	0.0469 (0.053)	0.0464 (0.053)
Age ² * Men * 10 ⁻²	-	-0.0329 (0.065)	-0.0371 (0.067)	-0.0365 (0.067)	-0.0365 (0.067)	-0.0359 (0.067)
Years of Schooling	-	-	0.0446 (0.053)	0.0422 (0.054)	0.0423 (0.054)	0.0425 (0.054)
Years of Post-School Education	-	-	-0.1155** (0.046)	-0.1152** (0.046)	-0.1153** (0.046)	-0.1161** (0.046)
Years of Schooling * Men	-	-	-0.0413 (0.069)	-0.0377 (0.069)	-0.0378 (0.070)	-0.0385 (0.070)
Years of Post-Sch. Educ. * Men	-	-	-0.0263 (0.063)	-0.0274 (0.063)	-0.0273 (0.063)	-0.0268 (0.063)
Sample 1990	0.0038 (0.087)	0.0107 (0.088)	0.0045 (0.090)	0.0017 (0.091)	0.0018 (0.091)	0.0043 (0.091)
Constant	-1.5496** (0.101)	0.4953 (0.699)	-0.0091 (0.885)	0.0018 (0.885)	-0.0026 (0.889)	-0.0161 (0.891)
Log-Likelih.	-475.40	-466.59	-457.17	-456.50	-456.50	-456.45

Probit estimations, sample restricted to labor market participants (2729 obs.), standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Table 7: German Migrants and Natives - Civil Servant or White Collar (1=yes)

	(1)	(2)	(3)	(4)	(5)	(6)
Origin:						
East German	-0.1384 (0.121)	-0.1207 (0.122)	-0.2836** (0.144)	-1.4182** (0.276)	-1.3886** (0.371)	-1.5015** (0.389)
East European	-0.3133** (0.113)	-0.2589** (0.115)	-0.2320* (0.130)	-1.5961** (0.306)	-1.5652** (0.400)	-1.5877** (0.906)
East European *	0.1499 (0.205)	0.1849 (0.205)	0.1824 (0.246)	0.4543* (0.418)	0.4563* (0.259)	0.4392* (0.260)
Other Territories						
Immigration History:						
Over 16 at Immigration	-	-	-	-	-0.0263 (0.220)	-0.0770 (0.226)
War Cohort (1940 - 1950)	-	-	-	-	-	-0.2919 (0.274)
Duration of Residence	-	-	-	0.0415** (0.008)	0.0408** (0.010)	0.0482** (0.012)
Demographics:						
Men	-0.9244** (0.099)	-2.4418** (0.799)	-3.5884** (1.385)	-3.4603** (1.395)	-3.4570** (1.396)	-3.4558** (1.397)
Married	-0.3204** (0.102)	-0.3011** (0.109)	-0.1927 (0.125)	-0.1909 (0.125)	-0.1908 (0.125)	-0.1917 (0.125)
Married * Men	0.4180** (0.126)	0.3447** (0.138)	0.3772** (0.160)	0.3931** (0.161)	0.3926** (0.161)	0.3878** (0.161)
Age	-	0.0012 (0.035)	0.0113 (0.039)	0.0164 (0.039)	0.0160 (0.039)	0.0161 (0.039)

Age ² * 10 ⁻²	-	-0.0252 (0.044)	-0.0226 (0.049)	-0.0309 (0.049)	-0.0303 (0.049)	-0.0303 (0.049)
Age * Men	-	0.0623 (0.043)	0.0392 (0.047)	0.0325 (0.048)	0.0324 (0.048)	0.0328 (0.048)
Age ² * Men * 10 ⁻²	-	-0.0525 (0.053)	-0.0293 (0.059)	-0.0219 (0.059)	-0.0217 (0.059)	-0.0221 (0.059)
Years of Schooling	-	-	0.5267** (0.093)	0.5414** (0.094)	0.5416** (0.094)	0.5435** (0.094)
Years of Post-School Education	-	-	0.3955** (0.043)	0.3999** (0.044)	0.3999** (0.044)	0.3998** (0.044)
Years of Schooling * Men	-	-	0.1894* (0.107)	0.1865* (0.108)	0.1863* (0.108)	0.1855* (0.108)
Years of Post-Sch. Educ. * Men	-	-	-0.1900** (0.062)	-0.1821** (0.062)	-0.1822** (0.063)	-0.1819** (0.062)
Sample 1990	0.2089** (0.057)	0.2092** (0.057)	0.0589 (0.066)	0.0544 (0.067)	0.0546 (0.067)	0.0495 (0.067)
Constant	1.0109** (0.082)	1.3563** (0.656)	-4.9793** (1.168)	-5.1865** (1.177)	-5.1838** (1.177)	-5.2002** (1.179)
Log-Likelihood	-1341.46	-1329.61	-996.02	-982.34	-982.33	-981.76

Probit estimations, sample restricted to workers in dependent employment (2253 obs.), standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Table 8: German Migrants and Natives - Earnings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Origin:							
East German	0.1030** (0.038)	0.0287 (0.033)	-0.0926* (0.056)	-0.0355 (0.080)	-0.0418 (0.082)	-0.0367 (0.055)	-0.1671** (0.061)
East European	-0.0108 (0.037)	-0.0133 (0.032)	-0.1575** (0.063)	-0.1007 (0.085)	-0.1028 (0.085)	-0.0944 (0.062)	-0.1988** (0.068)
East European *	0.0816 (0.063)	0.0334 (0.055)	0.0601 (0.055)	0.0628 (0.055)	0.0621 (0.055)	0.0380 (0.054)	0.1066* (0.063)
Other Territories							
Immigration History:							
Over 16 at Immigration	-	-	-	-0.0507 (0.050)	-0.0531 (0.051)	-	-
War Cohort (1940 - 1950)	-	-	-	-	-0.0207 (0.059)	-	-
Duration of Residence	-	-	0.0044** (0.002)	0.0032 (0.002)	0.0037 (0.003)	0.0030* (0.002)	0.0058** (0.002)
Demographics:							
Men	0.1226** (0.029)	0.1289** (0.025)	0.1308** (0.025)	0.1308** (0.025)	0.1310** (0.025)	0.1519** (0.025)	-
Married	-0.1780** (0.031)	-0.1624** (0.027)	-0.1616** (0.027)	-0.1617** (0.027)	-0.1620** (0.027)	-0.1549** (0.026)	0.1192** (0.021)
Married * Men	0.3613** (0.039)	0.2882** (0.034)	0.2874** (0.034)	0.2872** (0.034)	0.2874** (0.034)	0.2842** (0.034)	-
Experience	0.0244** (0.003)	0.0325** (0.003)	0.0321** (0.003)	0.0319** (0.003)	0.0319** (0.003)	0.0300** (0.003)	0.0341** (0.003)
Experience ² * 10 ²	-0.0522** (0.007)	-0.0564** (0.006)	-0.0563** (0.006)	-0.0553** (0.006)	-0.0554** (0.006)	-0.0527** (0.006)	-0.0615** (0.007)

Years of Schooling	-	0.0837** (0.007)	0.0831* (0.007)	0.0834** (0.007)	0.0835** (0.007)	0.0680** (0.007)	0.0801** (0.007)
Years of Post-Sch. Educ.	-	0.0677** (0.006)	0.0674** (0.006)	0.0675** (0.006)	0.0676** (0.006)	0.0574** (0.006)	0.0635** (0.008)
Job Status:							
Farmer	-	-	-	-	-	0.0603 (0.090)	-
Self-Employed	-	-	-	-	-	0.3174** (0.032)	-
Civil Servant	-	-	-	-	-	0.1428** (0.028)	-
White Collar	-	-	-	-	-	0.1054** (0.019)	-
Part-Time	-0.5126** (0.032)	-0.5269** (0.028)	-0.5254** (0.028)	-0.5254** (0.028)	-0.5248** (0.028)	-0.5159** (0.027)	-
Sample 1990	0.0984** (0.018)	0.0384** (0.016)	0.0391** (0.016)	0.0392** (0.016)	0.0387** (0.016)	0.0390** (0.015)	0.0660** (0.018)
Constant	7.2822** (0.032)	6.1547** (0.069)	6.1663** (0.069)	6.1631** (0.069)	6.1619** (0.070)	6.2605** (0.070)	6.3237** (0.075)
Adj. R ²	0.4476	0.5838	0.5852	0.5852	0.5850	0.6078	0.3928

Least Squares regressions of logged earnings (1985=100); sample restricted to employed workers reporting at least DM 300 and at most DM 9500 average net monthly earnings (1718 obs.) in columns (1) to (6); a further restricted sample of full-time working men (1060 obs.) in column (7). Standard errors in parentheses. A * indicates significance at the 10% level, a ** indicates significance at the 5% level (two-sided test).

Figure 1: The Partition of Germany After World War II

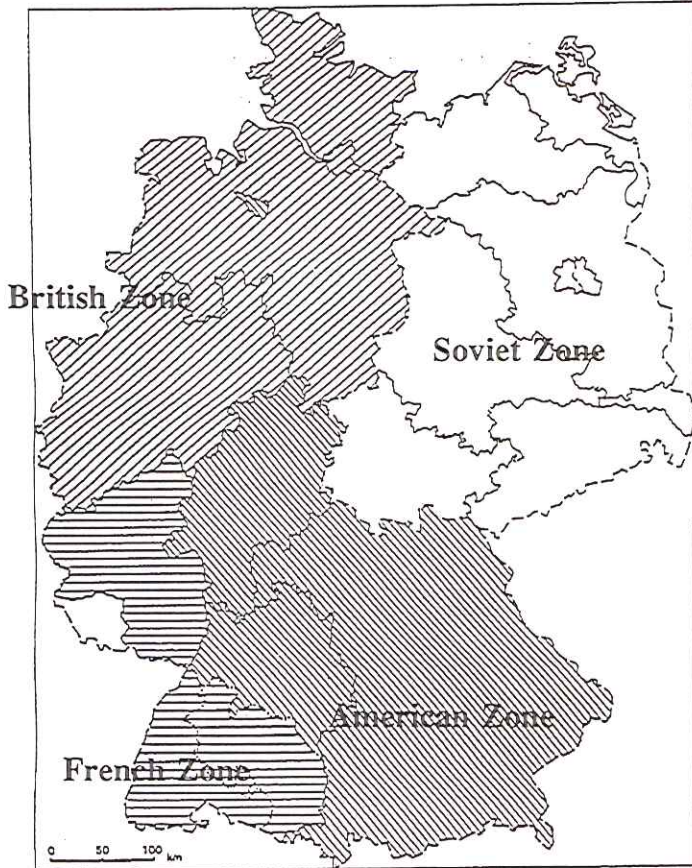


Figure 2: German Immigrants from Eastern Europe 1950-1992

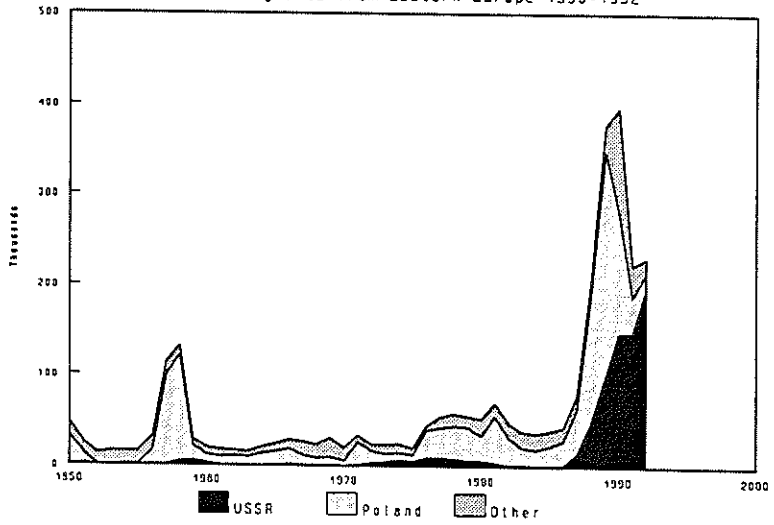


Figure 3: German Immigrants from East Germany 1961-1990

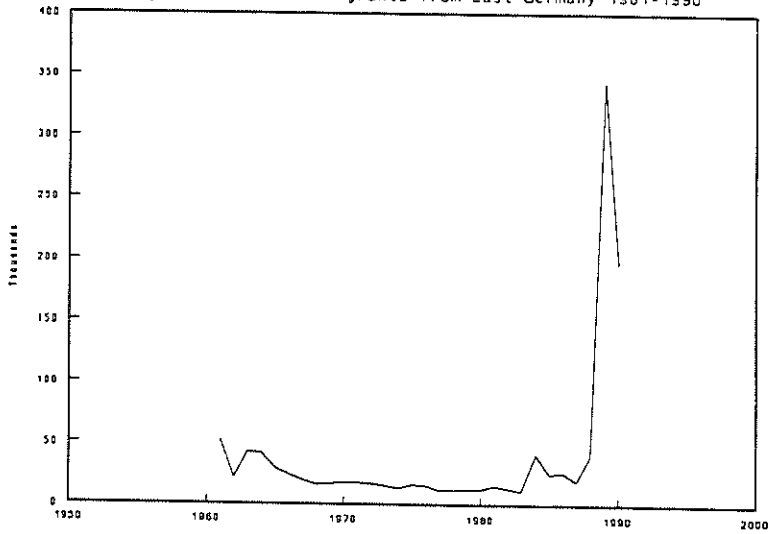


Figure 4: German Immigrants in the ALLBUS

