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## Short term living conditions and long term prospects of immigrant children in Germany

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**Short Term Living Conditions and Long Term  
Prospects of Immigrant Children in Germany**

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# **Short Term Living Conditions and Long Term Prospects of Immigrant Children in Germany**

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## **Abstract**

In Germany the foreign born population is made up of foreigners and so called "ethnic Germans" who migrated from eastern European countries to Germany. While the first group is confronted with problems arising from the typical German concept of ethnicity and citizenship, the latter are entitled to a German passport immediately after crossing the border. About one half of the immigrants who entered Germany since 1984 are ethnic Germans. Thus, any analysis of the living conditions of immigrant children in comparison to native born German children must take into account the heterogeneity of immigrants in Germany as well as the respective institutional settings.

Throughout the last decade the financial situation of children in Germany has been marked by increasing problems: in 1997 the population share of children living in households receiving welfare payments was about twice as high as the respective share for the entire population. Poverty head count rates (based on a poverty threshold of 50 percent of median equivalent income) clearly increased over this period from about 10 percent to more than 15 percent in 1996. The central aim of this paper is to analyze differences between native and foreign children within this process.

Our comparative analyses are based on the different sub-samples of the German Socio-Economic Panel Study (GSOEP). With respect to non-monetary as well as monetary indicators there are - although the German transfer system is strong - remarkable differences in living conditions between native born German children and those born to immigrants and foreigners. On average we find that children in Germany to have lost out in terms of their relative income position over the period 1985/86 to 1995/96, thus pushing the need for targeted social policy. This should cover targeted financial transfers as well as an improvement of day care for children. Although there are some signs of improvement concerning the integration process of foreigners' children over this period, the majority of this group still lives in rather poor conditions.

There is no formal "discrimination" of immigrant children by the German school system. But due to the strong intergenerational correlation of educational attainment it is a problem that the educational level of immigrant parents as well as of foreign parents living in Germany is still clearly below the population average, although there are some signs of improvement. As a result of the low educational level of their parents we find children born to immigrants and foreigners in Germany to be on less favorable educational tracks more often than native born German children. The long-term problem arising from this will be a persistently high share of rather poorly qualified persons in the future work force, who will face severe labor market problems and as such will be a problem for the German economy as a whole. In other words: the German educational system -- including pre-school, school and vocational training -- needs to provide equal opportunities to all children regardless of their social background. If necessary, there should be additional incentives for children born to immigrants and foreigners to overcome language disadvantages.

## 1 Introduction

In 1995, the share of foreign born persons in Germany was about 9% of the entire population<sup>1</sup>; in West Germany, where most of the immigrants live, the share of foreign born is about 12%. As a result of this, the number of children born to immigrants is of a significant magnitude as well, especially since for immigrant women – on average – a higher fertility rate can be observed than for native German women (cf. Deutscher Bundestag 1998a: 55ff). But despite an ongoing influx of immigrants into Germany, German society does not consider itself an "immigrant society"!

Due to the specific German regulations on granting citizenship, children born to foreign immigrants to Germany are considered "immigrant children" regardless of their respective place of birth (abroad or within Germany after their parents immigrated). In contrast to countries like the US, where citizenship is granted to persons born within the US (*ius solis*), children born in Germany do not automatically receive German citizenship. They receive the nationality of their parents (*ius sanguinis*). This in turn leads to so-called "second" and even "third generation immigrants", the latter being children born to second generation immigrants, who – very often – still hold their original citizenship<sup>2</sup>.

The most relevant immigrant groups in Germany are made up of migrant workers from Mediterranean countries who entered the country in the 1960s and early 1970s (so-called *guestworkers*) and by immigrants from Eastern Europe after the fall of the Berlin wall in October 1989 (especially "Ethnic Germans" [*Aussiedler*]). As a result of the specific German concept of ethnicity and citizenship it is worthwhile to make certain distinctions when speaking of immigrant children: while children of the first group are often referred to as second or even third generation guestworkers, the latter group of "ethnic Germans" consists of persons (including their children) who usually get German citizenship immediately when they cross the German border.

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<sup>1</sup> Immigrants who entered the country after 1949, the year the Federal Republic of Germany was founded.

<sup>2</sup> The new federal government most recently introduced some changes in the legislation concerning citizenship and naturalization. For the following empirical analyses these changes are not relevant, since they are based on data up until 1996.

Figure 1 shows our concept of "immigration status" based on the combination of citizenship and country of birth of children and their parents.

Figure 1 Immigration Status in Germany

Citizenship (child or parents)	Place of Birth (child or parents)	
	in Germany	Abroad
German	(A) Native Born German	(B) German Immigrant (mainly <i>Aussiedler</i> )
Non-German	(C1) Native Born Foreigner "Second and Third Generation"	(C2) Foreign Born Foreigner (classic case of immigrant)

The major aim of this paper is to describe and analyze short and long run prospects of children in Germany. The "*Kinder- und Jugendbericht*" (child and youth report) published in 1998 (cf. Deutscher Bundestag 1998b) shows clear signs of a worsening economic situation of children in Germany<sup>3</sup>; unfortunately this official report fails to provide sufficient information on immigrant children. The share of children living in households receiving welfare was up to about 7% in 1997, which is about twice the share for the entire population. Taking into account a variety of different analyses, the report concludes that the risk of falling into poverty for children is about 1.5 to 2 times higher than for adults (Deutscher Bundestag 1998b: 90). The report also states a positive correlation of child poverty with (future) malnutrition, drug abuse, crime intensity, etc. and as such asks for improvement and targeting of social policy. It is expected that these additional costs are going to "pay off" in the long run, due to a reduction in the higher costs of fighting the above mentioned negative developments (Deutscher Bundestag 1998b: 95).<sup>4</sup>

<sup>3</sup> This "*Kinder- und Jugendbericht*" report is produced by an independent commission on behalf the Federal Government. This report was heavily criticized by the CDU/FDP coalition, which was in power at the time.

<sup>4</sup> The necessity for an improvement in the financial situation of families with dependent children was enforced by a decision of the German Constitutional Court on November 10, 1998. The court required the government to increase tax deductions for children (*Steuer-Freibetrag*) or to raise direct child related transfers (*Kindergeld*). See Kirner et al. (1999) for a discussion of social policy options in reaction to the court decision.

For our own analysis we pay special attention to differences in the situation of immigrant and foreign children as compared to those born to native born German parents. Mostly, we will differentiate three groups of children depending on their family roots:

- A: the mainstream of Native Born Germans
- B: German Immigrants (mainly *Aussiedler*)
- C1 + C2: Foreigners (Foreign Born and Native Born).

For the short run we analyze income position, poverty risk, and some selected living conditions like the individual housing situation. Our indicator for long run prospects is on current educational enrollment of teenagers, which is closely linked to future development. At the same time it is also most likely correlated to current and past income and poverty (cf. Buechel et al. 1999).<sup>5</sup>

The paper is organized as follows: Chapter 2 gives a brief review of regulations and the structure of immigration to West Germany throughout the past 50 years. Chapter 3 discusses methodological aspects; Chapter 4 shows the results of our empirical research, which is based on data from the German Socio-economic Panel (GSOEP). The population under consideration is made up of all children up to 16 years of age living in private households in Germany. Chapter 5 concludes and gives a brief outlook for further research as well as some policy options.

## **2 General Features of Immigration to West Germany**

In 1950, residents with a non-German nationality represented only about 1 percent of the West German population. As such, the share of foreigners and immigrants was quite small compared to most other European countries<sup>6</sup>. The role of foreigners changed dramatically

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<sup>5</sup> "Aus den Ergebnissen der Berliner Jugendstudie geht hervor, daß bei einer massiven Verschlechterung der finanziellen Lage vor allem Eltern mit geringem Bildungsstatus auf einen baldigen Schulabschluß drängen, damit sie von elterlichen Zuwendungen unabhängig werden (Walper 1998). Da Bildung eine wichtige Ressource ist, um Notlagen zu überwinden und ihre Folgen abzufedern, kann dieses Verhalten zur Fortsetzung der Notlagen über Generationen hinweg beitragen" (Deutscher Bundestag 1998b: 93)

<sup>6</sup> However, after World War II a lot of refugees came from former German "settlements" in order to live in (West and East) Germany. But they were not treated as a "foreign born" population; more importantly they

over succeeding decades. With only a few exceptions, the foreign population grew substantially in all European countries. This was especially true for West Germany, where the share of foreigners in 1995 was more than twelve times as high as 1950. The following paragraphs illustrate the most essential features of this process<sup>7</sup>.

In the late 1950s, the West German government established a so-called "guest-worker" system to ease its labor market shortages. Treaties with Italy, Turkey, Yugoslavia, and other Mediterranean countries led to huge inflows of foreign laborers. In 1970 almost 2.9 million foreigners, almost 5 percent of the total population, lived in the West Germany (Fassmann and Muenz 1994).

Between 1988 and 1994 more than 1.5 million *Aussiedler* immigrated to Germany, representing about 2 percent of the current population of the western states of Germany. Their integration into German society has been supported by German language courses, financial aid, and full integration into the retirement system (without any prior contribution).

The majority of asylum seekers in Europe between 1988 and 1993 entered Germany. The demands that this large number of asylum seekers put on resources has led to a change in German asylum law. Since 1993, individuals entering Germany via safe countries<sup>8</sup> were no longer allowed to apply for asylum.

By 1993, foreign residents made up 8.6 percent of the population of reunified Germany, despite the fact that Germany's official policy to encourage foreign workers to immigrate from non-EG member states was terminated in November 1973. Since World War II, West Germany has accepted a larger number of foreign nationals than any other country in Western Europe. Even this enormous growth in foreign residents understates the number of new residents who have immigrated to the western states of Germany over the last decade. All

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mostly spoke German, which is not the case for all "ethnic Germans" who have entered the country since the late 1980s.

<sup>7</sup> We concentrate on West Germany, since the share of foreign born residents in East Germany (former GDR) are negligible. In 1989 there were less than 200,000 foreigners (1,1% of the total population) living in the GDR, 80% if those stemming from only five countries (Vietnam, Poland, Mosambique, Soviet Union and Hungary) (see Herrmann 1999). After German reunification a lot of these persons re-migrated to their home countries.



ethnic Germans who moved from Eastern Europe to the western states of Germany (*Aussiedler*) were immediately granted full citizenship. This group is not included in the above mentioned 8.6 percentage share of foreigners. When these ethnic Germans are included, the overall share of residents who were not born in Germany is about 10 percent (12 percent in West Germany), half of whom have arrived since 1984 (Schulz 1994). Due to the age composition of immigrants and foreigners and their higher fertility rates (up to now), the structure among children is heavily influenced by immigration (see Table 1). In reunified Germany one out of five children up to 16 years of age is born outside of Germany or is a foreigner; in West Germany this is the case for one out of four children.

The German concept of citizenship is closely related to history: "Political fragmentation led Germans to think of their nation not as a political or geographical unit, but as a cultural, linguistic and ethnic one" (Hailbronner 1992). The policy implication of this concept of citizenship is that German citizenship is possible for those who can trace their ancestry to German roots, while non-ethnically German persons, even if they are born in Germany, do not automatically receive German citizenship. The *ius sanguinis* (right of blood) allows people of German origin who live outside the borders of Germany to claim German citizenship. In practice however, this right of blood applies almost exclusively to ethnic Germans in Eastern Europe and German people who lived under Communist rule in the former East Germany.

A very interesting result of this German concept of ethnicity and the regulations for citizenship is that more than one out of four foreigners living in Germany in 1995 is native born, and at the same time about 45 percent of all immigrants are German citizens, mainly *Aussiedler*.

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<sup>8</sup> "Safe countries" are defined as signers of the Geneva Convention, which among others include all EU member states. As such Germany is surrounded by "safe countries".

### 3 Data and methods

#### 3.1 Data

The micro data used for the following analyses<sup>9</sup> comes from the German Socio-economic Panel Study (GSOEP), which in many features is comparable to the US Panel Study of Income Dynamics (PSID). The survey study has been started in 1984 in West Germany and was extended to the territory of the German Democratic Republic (East Germany) in June 1990, shortly before unification (cf. Wagner et al 1993).

The 1984 West-German GSOEP explicitly oversampled foreigners to a great extent, since a higher drop-out rate was to be expected (mostly due to remigration behavior) and to ensure a sufficient number of observations for detailed analyses. Nevertheless, due to massive immigration since 1983, when the original sample was drawn, the representation of immigrants to Germany within the GSOEP data constantly worsened. This was the case, because an ongoing panel study does not cover new immigrants, as long as these are not joining existing survey households. This might happen fairly often in case of family re-unification, which in fact can be observed very frequently in GSOEP *guestworker*-families. But given the structure of immigration especially since the late 1980s (see chapter 2 above), there were a lot of new immigrants like the ethnic Germans (contributing about 50% of net immigration in the period 1984 to 1994) and asylum seekers, refugees, etc. who mostly settled down in newly created households<sup>10</sup>. To overcome this unsatisfactory situation a new sub-sample was introduced to GSOEP in the years 1994/95, the so-called "immigrant sample" (cf. Burkhauser et al 1997). Due to federal privacy laws in Germany, ethnic Germans cannot be identified as immigrants in the big cross-sectional surveys of the Federal Statistical Office, whereas this is possible with the new GSOEP sub-sample.

For this paper we are exploiting data for the years 1985/86 for West Germany and the years 1995/96 for the new unified Germany (East and West Germany, including the most recent

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<sup>9</sup> Table 1, which has already been mentioned above, is based on the same data.

<sup>10</sup> As long as these persons live in institutions (e.g., refugee camps) they are not part of the GSOEP target population of private (non-institutionalized) households.

immigrant population in 1994)<sup>11</sup>. Due to a very small influx between 1984 and 1985, we consider the GSOEP being representative for the years 1985/86. This has the advantage that, by that time, we already had more information on our respondents than was the case in the very first wave in 1984. The years 1995/96 again are representative for the population in Germany, whereas the years in between are likely to be biased due to non-covered immigration. Some of our following analyses for 1995/96 focus on the child population in unified Germany, some concentrate on West-Germany to allow for a better comparison with the situation a decade ago in 1985/86.<sup>12</sup>

Although in the GSOEP all adult members of a given household are interviewed personally (whereas in the PSID only one person per household is interviewed) the interviewing mode for children is the same in both surveys. Information about children up to 16 years of age is gathered by some questions asked from the main respondent (mostly the head of household). Thus, we have rather restricted data on the youth population. It covers age, gender, and some more detailed information concerning enrollment in pre-school, school, or other educational settings. Nevertheless, due to the fact that the GSOEP is a household related survey interviewing all adult household members, we do have a lot of data on the household (a given child lives in) as a whole as well as its adult members.

Citizenship of a person is known from the "register file" containing basic demographic information on each household member (i.e. for adults as well as for children). Eventual immigration related data (country of origin, year of immigration, etc.) is not known for children, but for interviewed persons only, since this data is collected in a special biography questionnaire. Due to the above mentioned differentiation of our sample, we need to know immigration related information for the parents, but not necessarily for the child itself.<sup>13</sup>

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<sup>11</sup> In order to get more stable results we pool information over two years. In our regression analyses we control for this by a time-dummy variable. The pooling procedure might lead to an underestimation of standard errors. Further versions of these estimations will use robust standard errors (according to White).

<sup>12</sup> The number of observations for these analyses are 6,566 in 1985/86, and 5,648 in West Germany and 2,122 in East Germany for 1995/96.

<sup>13</sup> Based on some assumptions one also can define immigrant information for children: e.g. if a child is born after its mother immigrated to Germany, we assume the child to be native born. If the birth took place before the mother migrated, the child would be dealt with as an immigrant. Nevertheless, depending on the

## 3.2 Methodological Aspects

Our empirical analyses start with descriptive, mostly bivariate, information for the subpopulations of interest at both periods in time. In a second step we estimate multiple regression models for income, poverty status, and school attendance controlling for a variety of influential factors in order to find out if there are any significant immigration or foreigner related differences in the short term living conditions and long term prospects of children in Germany.

In line with the description of immigration structures given in chapter 2, in our empirical analysis we will make use of different variables to identify the subgroups of interest.

- First, we apply a simple dummy variable indicating if a child lives in an household with immigrants or if the child stems from immigrants as compared to the mainstream population of Native Born Germans.
- A second variable differentiates between Native Born Germans, German Immigrants and Foreigners ("third generation immigrants" are not treated explicitly, since they form a very small group in the available data ).
- A third variable differentiates immigrants and foreigners according to years since migration of the parents. Here we look at those who have lived in Germany for up to 5 years, 6 to 10 years, 11 to 20 years, more than 20 years, and finally those who were born in Germany, but still do belong to the immigrant population according to our definition (see figure 1 above). This differentiation is not only relevant to measure the time spent in Germany, which is a proxy for chances to be better integrated into the host country's society. It is also worthwhile to check the position in the business cycle at the point of time when a person immigrated: we assume that there are long term benefits of entering the country during a boom period, since this enhances the chances on the labor market from the very beginning. On the other hand, a person immigrating during a through period might experience long term unemployment.
- Finally, a variable differentiates our population of interest according to the country of origin. Here we look at those coming from EU-countries, European Non-EU-countries, Eastern Europe (including former Soviet Union), Western industrialized countries

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mother in this example being an immigrant and/or foreigner herself, the child would be sorted into the

(including USA, CND, NZL, AUS) and a rest category, which includes asylum seekers and refugees from other parts of the world.

Without any doubt, individual well-being depends on monetary as well as non-monetary factors. Nevertheless, for the short term perspective we are dealing mainly with disposable household income and poverty status as the major indicators for economic well-being of individuals, because a lot of non-monetary conditions are closely connected to income. Additionally, we will focus on some non-monetary indicators like those concerning the children's housing situation.

The income situation of a household is depicted by annual income measures, referring to the year prior to the interview. We are using two income concepts: pre-government income and post-government income which is our measure of disposable income. We also look at the receipt of public transfers.<sup>14</sup>

- Pre-government income is a measure of market income, which includes income by employment of any kind, private transfers, net returns on assets (income from interests, dividends or rent), and imputed rental value of owner occupied housing.
- Post-government income is pre-government income minus taxes and social security contributions, plus public transfers and pensions of all sources.
- Public transfers are the sum of all -- mostly means tested -- transfers received by all household members throughout the previous year. This measure is an insufficient indication for addressing the question: "How costly are immigrants for the society?"

Using the official consumer price index (CPI) all incomes are measured in DM of 1991. Because there are some differences in the price level in East and West Germany we apply a purchasing power parity index to adjust East German incomes (which are in real terms higher than in nominal terms, cf. Krause 1995).

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corresponding category "German immigrant" or "Foreigner".

<sup>14</sup> These annual income measures are part of the PSID-GSOEP Equivalent Data File produced by Cornell University in Ithaca, NY and the DIW in Berlin. For more information on this project see Burkhauser, Butrica and Daly 1999.

In order to adjust income for differences in family or household size, we apply a straightforward equivalence scale, following Atkinson, Rainwater, and Smeeding (1995). We calculate an adjusted "equivalent income" as follows:

$$(1) \quad Y_{eq} = Y_{disp} / S^\epsilon$$

where  $Y_{eq}$  = Equivalent Income  
 $Y_{disp}$  = Disposable Household Income  
 $S$  = Household or Family Size  
 $\epsilon$  = Equivalence Elasticity

For the following calculations we use  $\epsilon = 0.5$ , which gives the square root of household size.

A very interesting indicator of well being is the poverty status of households and persons. We apply two poverty measures: the well known headcount ratio (percentage share of population with income below a certain poverty line) as well as an index that also takes into account the intensity and inequality of poverty.

- In order to show the sensitivity of our results to the chosen poverty line, we calculate poverty head count ratios, defined as the share of population with income below 50% as well as 60 % of median income of the entire population<sup>15</sup>.
- Inequality of poverty is taken into account by the poverty-index  $P_\alpha$  with  $\alpha = 2$  as suggested by Foster, Greer, and Thorbecke (1984). Again we allow the underlying poverty threshold to be 50% and 60% of median income of the entire population. Based on the poverty aversion parameter  $\alpha$  this index gives additional weight to the poorest poor; in contrast to the very illustrative head count ratio this index includes information on the inequality of poverty.<sup>16</sup>

$$(2) \quad \text{Head Count Ratio:} \quad H = 1/n [\sum_{i=1 \rightarrow q} ((z - y_i) / z)^0] = q/n$$

$$(3) \quad \text{Poverty Index:} \quad P_{\alpha=2} = 1/n [\sum_{i=1 \rightarrow q} ((z - y_i) / z)^2]$$

where:  $q$  = Number of Poor  
 $n$  = Population

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<sup>15</sup> The term "entire population" describes all persons living in Germany. This includes those age 17 and over.

<sup>16</sup> For the head count ratio, it does not matter if a poor person's income is only one monetary unit below the poverty line or 100 units, whereas the poverty index would be rather small in the first case, but would clearly increase if the latter was true.

z        Poverty Line  
y<sub>i</sub>     Individual Income

When differentiating our three subgroups of children in the following analyses we make use of other socio-economic information as independent variables. We will look at parental age and educational status, household type, community size, housing situation, and unemployment experience of all employable household members. Without any doubt unemployment is a very important determinant of income and other living conditions. In this context GSOEP data allows us to check for recent occurrence of unemployment in a child's household (for each adult household member we have this information based on the month of the interview) as well as in the course of previous year. In order to give more than a snapshot of the current employment situation, we construct an "unemployment index" at the household level. Based on monthly employment status information for the previous calendar year, this index calculates "months with unemployment" as a share of "potential months with employment" for all employable, adult members of a given household. The index is zero if a household is not affected by unemployment at all. It is 100 if all adult members were unemployed during the full time under consideration. The index is not defined, if all adult members are retirees (e.g., not of employable age) or if they could not take up employment due to educational activities, pregnancy, etc.

With respect to education the parental population of our sample is very heterogeneous. Educational levels achieved from foreign countries are hard to compare to those in the German system. Thus, parental educational status in our analysis is based on the International Standard Classification of Education (ISCED) and gives the highest educational status achieved by a child's parents. Due to problems of comparing educational degrees received within Germany with those from abroad (see e.g. Reitz et al. 1999), we decided to roughly differentiate only three levels of education: "without secondary education", "secondary education", and "some post-secondary education".

For our analyses of long term prospects we use information on actual school enrollment in Germany, since all children observed in our survey are currently being educated within this system. We distinguish between the basic level of *Hauptschule* which ends after nine years of schooling, *Realschule* which goes up to tenth grade, and *Gymnasium* which prepares for university.

## 4 Empirical Results

### 4.1 Short-term prospects

#### 4.1.1 Non-Monetary Living Conditions of Children in Germany by Immigrant Status

Table 1 depicts the composition of the resident population (up to 16 years of age) in Germany in 1985/86 and 1995/96 with respect to immigration. In 1985/86 the group of Non-Natives was clearly dominated by foreigners (mostly children of *guestworkers*); the share was almost 87%. On the other hand German immigrants contributed only 13% to this population of foreign or foreign born children. Due to the massive influx of "Ethnic Germans" (*Aussiedler*) from the former Soviet Union, Poland, and Romania, this drastically changed over the next 10 years. Although the population shares of both groups of Non-Natives grew substantially until 1995/96, the German immigrants meanwhile doubled their share to 26%. The share of mainstream native born Germans among all children in the mid of the 1990s is down to 77% in West Germany. Due to the very low occurrence of foreigners and immigrants in East Germany this figure is somewhat different for united Germany: Here the share of mainstream children is still above 80%.

Table 2 displays some key descriptive statistics for the years 1985/86 and 1995/96. Again, these indicators are broken down for native born German kids, immigrant children with German citizenship, and children born to foreigners.

Immigrants, and especially foreigners in the 1990s, can be found much more often in (larger) cities. This most likely is the result of network-oriented migration behavior according to which a lot of new migrants tend to move into areas and neighborhoods where fellow aliens live. Additionally, immigrants who stick to their traditional way of life (this is indeed the case for example for a large part of the big Turkish community in Berlin), face a better supply of different things for their daily life. This in turn, also lowers the pressure of integration into German society. This also leads to a tendency to build more "immigrant communities".

The regional distribution of children in West-Germany did not change very much in the ten-year period under consideration. Additionally, there are no big differences between the native



German born population and the other groups. Only about one fifth of all immigrants and foreigners are living in the north, about 40 percent are living in the mid-western part of West-Germany, and about 35 percent in southern regions. But within the immigrant groups we can find some changes in the patterns. Most of the recent German immigrants have settled down in the northern part of Germany, which is not as attractive for foreign immigrants. Foreign immigrants still prefer the southern part of Germany, which is closer to the Mediterranean countries, where most of the immigrants come from. Another argument is that the typical jobs for *guestworkers* are predominantly in these areas (especially in the automobile industry).

Corresponding to the higher share of native German children living in small towns (less than 20,000 inhabitants) this group also shows the highest share of owner-occupied housing. In 1985/86 already more than 50% of these children lived in homes owned by their families. Most interesting is the fact that foreigners doubled their respective share over this period from 14% to about 30%. East German children show only a slightly higher share of owner occupiers in the mid 1990s, while German immigrants could barely maintain this standard. Since - on average - self-occupied housing is more spacious than rented homes, it is not very surprising to see that foreigners also improved their situation concerning flat size and number of rooms per capita. But there also seems to be an adoption of German standards, when it comes to evaluating flat space<sup>17</sup>. Although foreigners clearly improved their housing conditions by means of objective indicators, the percentage share who complained about flat size being "too small" increased from a third to about 50%.

In line with the traditionally high relevance of family networks as well as high fertility rates among foreigners, we find lone parents to be less likely among children of foreigners compared to both other groups. On the other hand, children of foreign immigrants have a much bigger chance to live in a household with three and more kids in 1985/86. Due to the massive influx of *Aussiedler* over the period observed, the share of multi-children families for German immigrants clearly increased until 1995/96. The situation in East Germany is somewhat different to that of West German natives: The overwhelming majority of children lives in families with 1 or 2 children, larger families are rather rare.

Especially for the long-run prospects of children parental education is very important. Not surprisingly the educational background of children of foreign immigrants is by far worse than the background of German children. Even the impressive improvement between 1985/86 and 1995/96 does not eliminate this clear difference. More than a third of foreigner's children still live with low educated parents (less than secondary education). Nevertheless, this process seems to be partly the result of an increasing share of "second generation immigrants" among these foreign parents, which meanwhile led to a share of 29% with some post-secondary education. Another interesting aspect is the worsening of the educational background of German immigrants due to the newly immigrated *Aussiedler*. The parents of children in the group of German immigrants have an educational level comparable to that of foreign immigrants. The share of parents with some post-secondary education is smallest in this group. Again, East German children do not differ that much from West German Natives.

Unemployment is much more common in households of both immigrant groups than in households of native born German children in West Germany. This is true for the snapshot of current unemployment in the month of the interview as well as for the unemployment index based on previous year. A dramatic unemployment problem can be seen in East Germany, where almost 30% of the children are affected by unemployment in the month of the interview. Concentrating on West Germany, the impact of unemployment experience (as measured by the index) shows, first of all, that those who are not at all affected by unemployment (Index=0%) is smallest for both immigration groups, the only exception we can observe is in 1985/86 for children of German immigrants. Households of foreigners are affected most by unemployment, especially in the most recent period. There, the share of children living in a household without unemployment is only two thirds and almost every tenth child in this group lives in a household severely struck by unemployment.

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<sup>17</sup> This information comes from the head of household, thus, does not necessarily match the impression of the children.

#### 4.1.2 Income, Wealth and Poverty of Children in Germany by Immigrant Status: Descriptive Analyses

After going through a list of non-monetary indicators, we now concentrate on income and poverty indicators, again broken down by immigrant status (Table 3). The overall picture in terms of all measures employed is that immigrant and foreigner children tend to be in a significantly worse position than native born children in West Germany. Nevertheless, for the period 1995/96 we have to state that children in East Germany are very much like non-Native children in West Germany. The following discussion of some selected measures tries to shed some more light on this issue by also looking at distribution aspects.

##### *Income Levels and Relative Income Positions*

The upper panel of table 3 shows average pre- and post-government incomes (in 1991 DM) for each of the relevant subgroups in West Germany in both periods as well as for East German children in 1995/96. Although East German incomes are adjusted for purchasing power differences, they are lower than those of the West German mainstream population and they barely match the income of children born to German immigrants and foreigners in West Germany. Looking at the equivalent weighted amount of public transfers received we find not only the highest absolute value for East German kids, but this group also exhibits the highest dependency rate measured by public transfers as a percent of post-government income. On the other side, children of foreigners tend to live in households which clearly receive less public transfers in absolute terms.

Relative income positions based on post government income are for all children below population average (because households without children on average terms are better off than households with children). While the position of native born German kids and foreigner children has been fairly stable over the ten year period, there has been a remarkable drop for German immigrant children from almost 80% down to less than 70%, which perfectly fits the result of their higher dependency on public transfers.

The following results on poverty and income distribution are based on equivalent post government income.

### *Poverty*

The poverty rate (based at a poverty threshold of 50% of median income) of native born children nearly doubled from 1985/86 to 1995/96 from 8.5% to 15.2%, whereas the corresponding rate for German immigrant children increased from 10% to 14% "only". Again, children born to foreigners experienced a higher increase from 16% to 24%. Additional information on poverty comes from the poverty index ( $P_{\alpha=2}$ ), which also gives information on the degree of poverty. For native born children this index, when based on a poverty line at 50% of median income, confirms the head count ratio results when it doubles from .0151 to .0328. On the other hand, for children of foreigners the index skyrocketed from .0122 to .0674, while it remained stable for German immigrants.

### *Income distribution*

Quintile shares as well as decile ratios show that the income distribution for households with children widened considerably in the period under consideration. In fact, the income distribution based on the entire population in (West-) Germany became less equal as well, but this increase in inequality was much more pronounced for households with children than for other households. While the 90:10 decile ratio for those up to 16 years of age increased by almost 50% (from 3.07 to 4.58), this change was 26% for the entire population (from 3.32 in 1985 to 4.18 in 1995; not shown in Table 3). The most impressive change appearing in this context is the drastic increase in inequality among children born to foreigners: This is not only evident by looking at the development of the 90:10 decile ratio (from 2.88 in 1985/86 to 6.12 in 1995/96) but also the top quintile share increased significantly from 8.8% to 21.4% over this period. Clearly, there seems to be a subpopulation within this group which literally made it to the top. On the other hand, there is still almost a third of this population living in the lowest quintile. Very interesting as well is the increasing inequality among native born children in the lower tail of the income distribution, which is expressed by the 50:10 decile ratio: While this ratio was only 1.75 in the mid 1980s, it grew to 2.49 in the mid 1990s.

The share of East German children in the highest quintile is only less than 10% in 1995/96. Given that they also have a rather low average equivalent post government income, it seems surprising that their poverty rates do not differ from those of native born children in West Germany. This is a result of the much flatter income distribution: East German children in 1995/96 show decile ratios comparable to those in West Germany about a decade ago.

One important conclusion that can be drawn from these selected descriptive analyses is that in 1995/96 children of immigrants are clearly worse off than native born children in West Germany, although the differences to East German children are much smaller.

### *Stock of Assets*

As an additional piece of information, the lowest part of table 3 shows the portfolio of assets owned by households with children in Germany. In particular, this qualitative information on the stock of wealth very well documents the integration process of children born to foreigners: In the mid 1980s only less than a third lived in households which had life insurance and only some 6 % owned financial assets. Only ten years later these shares increased to almost 50% and 12%, respectively. Although native born children – again – live in much better endowed households, this clearly shows that a relevant part of foreigner's households meanwhile make their living fairly well. On the other hand, the influx of ethnic Germans during the last few years on average clearly worsened the situation of children in households of German immigrants. While only less than a fifth of this group held no assets at all in 1985/86, this population share increased to more than 26% in 1995/96.

Obviously, no matter if measured by means of monetary or non-monetary indicators, children born to immigrants and foreigners in West-Germany -- on average -- live under conditions which are less favorable than those for native born children. But from a theoretical as well as from a political point of view it is important to know if the weak position of immigrant children is due to the immigration status per se (for example via discrimination) or due to their social structure, like a poorer qualification level of immigrant parents<sup>18</sup>. For this purpose, we use multiple regression models which simultaneously control for a set of independent variables. Dependent variables are equivalent post-government income and poverty status. Both types of regression are estimated for 1985/86 and 1995/96.

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<sup>18</sup> Based on GSOEP data, Büchel, Frick and Voges (1997) showed that in a bivariate comparison immigrants to Germany have a higher probability of social assistance take-up when comparing them to natives. Nevertheless, when controlling for a variety of socio economic structure variables, this difference is clearly reduced.

#### 4.1.3 Income and Poverty of Children in Germany by Immigrant Status: Results from Regression Models

##### *Income*

Table 5a displays the results of regression models on (the natural logarithm of) equivalent post government income for 1985/86; Table 4b repeats these analyses for West Germany 1995/96. We control for parental age, highest educational level of parents, regional information, community size and household or family type. In addition we introduce different indicators on immigration status and we also run a model including unemployment experience by all adult household members<sup>19</sup>.

A control dummy for the second calendar year of each two-year-period under consideration is introduced as well. This time effect does not prove to be significant in any of the regression models on income. Thus, from a substantive point of view the pooling procedure does not cause a problem, but our levels of significance are likely to be overestimated, since most of the observations show up twice in the regression. Nevertheless, because most effects are highly significant this is not a severe problem again.<sup>20</sup>

Before checking for immigration specific effects, we go through the list of additional control variables. Unless differently indicated, the following findings are true for both periods under consideration (1985/86 and 1995/96, respectively):

- All other things equal and when compared to the reference group of children living in the Southern part of Germany, children living in the Midwest experience an income loss of about 7% in the mid 1980s. In the second period this effect increases to about 11% and we also find a negative impact for those living in the North (about 14%).
- There is no significant income difference according to community size.
- The younger the parents, the lower the income position of the family. If a child's parents are not older than 25 years, the child on average has an income loss of about a third in the mid

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<sup>19</sup> Due to potential endogeneity problems we do not include unemployment experience in all of our models. On the other hand, given the higher probability of immigrants to be struck by unemployment, we wanted to check how the coefficients for immigrants change once we introduce unemployment experience as well.

<sup>20</sup> An update of these estimations will be use robust standard errors.

1980s as compared to those with parents aged 46 and over. This effect increases to about 80% in the second period.

- Children of lone parents live on incomes about 70% lower than those in the reference group of children who live with both parents and no other siblings.
- As expected, there is a positive and significant correlation between parental education and equivalent income. As compared to the reference group of children, whose parents did not complete secondary education, those with highly educated parents who completed some post-secondary education as well, have an income which on average is about 40% higher. Again, this effect clearly increases over the ten-year period under investigation to about 60%.

Controlling for immigration of any kind (Model I) we find a negative and significant coefficient which supports the hypothesis of some discrimination of immigrants, but it can be a result of non-observed effects of "ability", too. In 1985/86 they received about 7 percent less income than other households (after controlling for the household structure by an equivalent scale and by dummy variables for household types!). This negative effect almost doubled to 13 percent in 1995/96.

Differentiating immigration status according to "pure" and "mixed" immigrant and foreigner households, respectively (Model II, with one parent being a "native born German" in the mixed case), shows that "pure" households of foreigners experience significant income losses of about 8% in 1985/86 and even 36% in 1995/96. This most likely is an outcome of much higher recent unemployment rates among foreigners. On the other hand, there is a clear positive effect of "mixed" parental couples for children in the mid 1990s: This is true for both, children of German immigrants and those born to foreigners, although only the latter is statistically significant.

Breaking down immigrants by area of origin shows that immigrants from Western countries to be very different from all the other immigrants (Model III). Although this group is fairly small, they had about the same income position as native born Germans in 1985/86 and an even better one in 1995/96. These immigrants are a positive selection. For the first period, the coefficients for all other groups of immigrants are, as expected, negative; statistically significant are the income deviations for those stemming from European countries, which are not part of the EU

(about 10%) and those from Eastern Europe (about 14%). Within ten years this structure has been confirmed with all depicted results being even more pronounced. Additionally, the coefficient for children coming from "other" countries, is also significantly negative due to the inclusion of asylum seekers and refugees.

If a society is successfully integrating immigrants, their status of economic well-being should improve with duration of stay in the host country. We control for this by brackets of years since parents' migration (Model IV). As expected, especially children born to newly arrived immigrants (those who live in Germany no longer than five years) live on a significantly lower income. In 1985/86 this income differential was about a fifth as compared to native born German children; within ten years this gap widened to more than a third. One aspect might be the beginning of a long term integration success story. While in 1985/86 in principle all children born to immigrants and foreigners – no matter when their parents came to Germany – had to face lower incomes than native born German kids, in 1995/96 there are no more significant income differentials for those whose parents live in Germany for more than 20 years or even were born in the country.

In order to analyze one important "channel" which might worsen the living conditions of immigrants, we add information on unemployment experience (see Model V). In terms of the adjusted  $R^2$ , there is a clear improvement in the explanatory power of this model (in 1995/96 from about 30% to almost 40%). As expected, there is a negative and statistically highly significant effect of increasing unemployment on disposable income. The magnitude of this effect is higher in the specification of our model for 1995/96. More interesting, this additional piece of explanation does not really interfere with the results as they were interpreted above. Except for variables that are correlated with unemployment experience, there is no principal change in our results. Just the magnitude of the coefficients for "parental education" and children whose parents most recently entered Germany is somewhat reduced without losing statistical significance.



### *Poverty Risk*

Tables 6a and 6b display the results of logistic regressions on poverty status in both periods under consideration. For each model we show odds-ratios<sup>21</sup> instead of coefficient estimates; statistical significance is given by Wald-Statistics<sup>22</sup>. Basically, the results are in line with those of the regressions on income; nevertheless, since by definition the analysis of relative poverty concentrates on the lower tail of the income distribution, there are a few notable exceptions.

Again, before looking at immigration specific effects, we check the list of additional control variables. Unless otherwise indicated, the following findings are true for both periods under consideration (1985/86 and 1995/96, respectively):

- All other things equal, children living in the Midwest or North of Germany have a higher risk of falling into poverty than those in the South.
- There does not seem to be any significant difference between children living in the countryside as compared to those in big cities.
- The younger the parents, the higher the poverty risk for the children.
- Children of lone parents in the first period under consideration are about 13 times as likely to be poor than those living with both parents and no other siblings (reference group). Ten years later this ratio is reduced to approximately 7 times. But in this second period an increasing number of siblings also yields an increasing poverty risk.
- Parental education is a very important and highly significant predictor of child poverty. As compared to the reference group of those children whose parents did not complete secondary education, those with highly educated parents (with some post-secondary education) have a poverty risk which is about 80% lower.

Comparing the results of Model I (where we just employ a single dummy for all non-native born or foreign children) for both periods, it looks like children of immigrants and foreigners are exposed to a reduced risk of poverty as compared to the reference group of native born German children: while in the mid 1980s they exhibited a 50% higher risk, this went down to only 16% ten years later. Model II clarifies this somewhat surprising result by differentiating

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<sup>21</sup> These odds-ratios are much easier to interpret than the estimated coefficients. An odds-ratio value of 1.10 for a dummy-variable  $x$  indicates that a person with  $x=1$  has a risk of being poor approximately 10% higher as the reference group, all other things being equal. Correspondingly, an odds-ratio value of 0.90 is to be interpreted as an approximately 10% lower poverty risk as compared to the risk in the reference group.

the group of immigrants and foreigners into those with "pure" and "mixed" parental couples. Model II for the period 1995/96 identifies children with "pure" foreign parents as being mostly exposed to poverty, while c.p. "pure" German immigrants as well as "mixed" foreigners seem to have a risk of falling into poverty even lower than native born German children.

The results of Model III are in line with those of the OLS regressions on income: highest chances of being poor can be found among children stemming from European Non-EU countries (mostly Turkey and the former Yugoslavia) as well as from the category "other" which includes asylum seekers and refugees. On the other hand, children in households coming from EU-countries and other Western industrialized countries again prove to be in a positive selection, having a poverty risk lower than that of native born German children.

Model IV differentiates children according to the number of years their parents already spent in Germany: not surprising, those who immigrated most recently (during the last five years) are in the worst position. Compared to the reference group and with all other things being equal, children in this group exhibit a poverty risk about four times as high in 1985/86 and almost three times as high in the mid 1990s. For the 1985/86 estimation, this effect somewhat erodes with extended duration of stay in Germany and is no longer significant for those whose parents entered Germany more than 20 years ago (the *guestworker* of the 1960s). The picture for the second period 1995/96 is somewhat different in this context: a significant poverty boosting effect can only be seen for those children whose parents immigrated just recently. Children whose parents arrived in Germany 11 to 20 years ago show a significantly lower poverty risk than native born children (odds-ratio .6549).

Finally, Model V controls for the impact of unemployment<sup>23</sup>. For both periods one can see the anticipated drastic increase in poverty risk for children with increasing unemployment experience in the respective household context. Again, as was the case for the OLS regressions on equivalent income, it is important to note that the additional consideration of

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<sup>22</sup> The square root of this statistic approximates the T-value.

<sup>23</sup> The change in the model specific -2 log likelihood, and as such the model improvement, show that the Pseudo-R<sup>2</sup> in both periods increases from about 20% without unemployment variables to about 30% after these controls.

this unemployment effect does not change the structure of all the other covariates, it just slightly reduces their impact.

## 4.2 Long-term prospects

### 4.2.1 Descriptive Analysis of School Enrollment

On the one hand, here is no discrimination of foreign born or children with a foreign nationality in the educational system of Germany, but, on the other hand, more or less no special measures of anti-discrimination or special training for *children* who are non-German native speakers exist. Nevertheless, it is an interesting question to see how immigrant children are doing in the educational system. Table 6 gives some insight in the educational enrollment of the subgroup of 13 to 16 year old children, which are most likely on their final school track. In other words, the school where they are educated at this age is most likely the type of school from which they will receive their final degree. The German school system differentiates three major levels: "*Hauptschule*" is the lowest level with graduation after 9 years of school, "*Realschule*" ends after 10 years, and successfully finishing a "*Gymnasium*" qualifies for university access (cf. Wagner et al. 1998). Pupils who successfully finish "*Hauptschule*" or "*Realschule*" are usually look for an apprenticeship to go on with vocational training. Without any doubt, on a tight apprenticeship-market the odds are against those with a "*Hauptschule*"-degree. Thus, it is most interesting to see which type of school a child is attending since this piece of information is a very good indicator for further development and future economic success.

Looking at the population share attending school at a "*Gymnasium*" level, it shows that the situation of foreigners improved over the 10 year period by increasing the share of pupils at "*Gymnasium*" from 14% to 19%. Nevertheless, this is still a lower share in comparison to both other groups, with a third of Natives and a quarter of German immigrants attending this type of school. Most impressive is the clear reduction in the share of foreigners attending the lowest school level ("*Hauptschule*"). This share dropped from 57% to 39%.<sup>24</sup>

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<sup>24</sup> This finding is consistent with those of Jeschek (1999), who found an ongoing, though in recent years somewhat slowed down improvement of the educational engagement of foreigners in Germany. This analysis is based on official data which does not provide explicit information on children of German immigrants.

#### 4.2.2 Regression Analysis of School Enrollment

For a multiple analysis of the determinants of school enrollment of 13 to 16 year old persons we control for the same covariates as in the regressions on income position and poverty status<sup>25</sup>. Tables 7a and 7b show the results of logistic regressions on the probability of "Attending *Gymnasium*" for both periods. Not surprisingly, we find a clearly lower probability of attending this type of school among children with younger parents. On the other hand, children in metropolitan areas show a slightly higher tendency to be enrolled at the *Gymnasium* level. We also confirm the well-known positive inter-generational correlation of education (cf. Wagner et al 1998): as compared to the reference group of children whose parents did not complete secondary education, we find an extremely increased probability to attend *Gymnasium* among those kids whose parents' highest educational level is post-secondary education (e.g., a university degree). For the first period of the mid 1980s (table 7a) we find a small and positive time effect, which is absolutely plausible given the increasing relevance of *Gymnasium* over the last thirty years in West Germany.

More important to our research question is the impact measured by immigration specific variables on school enrollment. At first glance it might be surprising that Model I for both periods does not show a significant effect for the simple immigration dummy. In other words, it does not seem to be immigration status *per se* that accounts for the descriptive differences in educational enrollment, but rather other socio-economic effects. Nevertheless, Model II in both periods show a significantly higher probability to attend *Gymnasium* for children of "mixed" parental couples of foreigners and Germans. On the other side, in the mid 1980s there was a significant lower *Gymnasium* attendance of children with "purely" foreign parents. Ten years later, this effect still exists, though clearly reduced and no longer significant. Accounting for the country of origin in Model III, children stemming from Non-EU countries (Turkey and

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Jeschek (1999) also argues that young male foreigners seem to experience increasing problems with vocational training and apprenticeships. We can not identify this process, since we are concentrating on children up to 16 years of age who are not yet engaged in the labor market. Another most recent study by the Bundesinstitut fuer Bildungsforschung (BIBB) and EMNID reveals that, in fact, the differences in successfully reaching a vocational degree are increasing again: while the share of Germans without such a degree is 8%, it is about a third among young foreigners (Frankfurter Rundschau 6.8.1999).

former Yugoslavia) had a reduced probability to attend *Gymnasium* in the 1980s, while during 1995/96 we again confirm children coming from western industrialized countries to be in a most advantageous position.

In contrast to the regression results on poverty risk (table 5a and 5b), we do not find a significant effect for children of most recent immigrants, though the direction of this impact is as expected negative. If integration is an ongoing process, one would expect that this situation would improve with extended duration of stay within the host country. In fact, in 1995/96 children whose parents live in Germany for 10 to twenty years have an even higher probability of attending gymnasium than the reference group of native born German children.<sup>26</sup>

## 5 Conclusion and Outlook

Based on our empirical findings we can draw the following conclusions: with respect to non-monetary as well as monetary indicators there is still a remarkable difference in terms of living conditions between native born German children and those born to immigrants and foreigners. While the integration process of foreigners' children over the period 1985/86 to 1995/96 shows some signs of improvement, the children of ethnic Germans are a new problem group which is not sufficiently addressed by German politics. When evaluating these differences within West Germany, one also needs to take into account the position of children in East Germany: at least monetary indicators show quite some similarities to the situation of non-native children in West Germany.

Given the general prosperity in the German economy and society, poverty rates among children are surprisingly high. This is true for all children, no matter if they are native or foreign born. From 1985/86 to 1996/96 the poverty head count rates for West Germany (poverty line at 50 percent of median equivalent income) on average went up from about 10 percent to almost 17

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<sup>25</sup> Due to the reduced number of observations and the age restriction imposed for children we combined the dummy variables for parental age up to 35 years into one single category. Also the categories "Years since parents immigrated: >20 years" and "Native born foreigner" are added into one common dummy variable.

<sup>26</sup> Adding unemployment experience in Model V somewhat improves the overall explanatory power of the estimation, though it does not seem to have an impact on its own and it does not change the depicted structures.

percent; the 1995/96 average for children in East Germany is about 15 percent. Foreign born immigrant children have a clearly higher poverty risk of about 24 percent, though among this group there seems to be an increasing concentration at the upper end of the income distribution as well. Although children of foreigners and immigrants in West Germany as well as East German children are heavily subsidized by public transfers, which make about a fifth of their post government income, their relative income position is only between 70 and 75 percent of the entire population. The group exposed most to poverty is made up by children of single parents. Obviously, the German welfare state fails - or at least has major difficulties - to give equal chances to all children. This high poverty risk of single parents and their children is mostly due to low labor force participation rates of single mothers. This very often is caused by insufficient child day care facilities, preventing lone parents from finding adequate jobs or even forcing them to stay out of the labor market (cf. Spiess 1997).

There is no formal "discrimination" of immigrant children by the German school system. But due to the strong intergenerational correlation of educational attainment it is a problem that the educational level of immigrant parents as well as of foreign parents living in Germany is still clearly below the population average, although there are some signs of improvement. As a result of the low educational level of their parents, we find children born to immigrants and foreigners in Germany to be on less favorable educational tracks more often than native born German children. The long-term problem arising from this will be a persistently high share of rather poorly qualified persons in the future work force who will face severe labor market problems and as such will be a problem for the German economy as a whole. In other words: the German educational system -- including pre-school, school and vocational training -- needs to provide equal opportunities to all children regardless of their social background. If necessary, there should be additional incentives for children born to immigrants and foreigners to overcome language disadvantages.

An outlook concerning further research on immigrants should try to integrate two aspects: research methodology and policy analysis. Firstly, substantive research questions on how to measure the ongoing integration process of immigrants into German society by means of monetary and non-monetary indicators are important. Secondly, one has to think about future developments in the scope and structure of immigration to Germany, which is not an easy task as can be seen by developments over the last decade. In any case, immigration scenarios need

to take into account the relevant institutional settings. Until recently, the German government did not view Germany as an immigration country and as such did not argue in favor of an immigration policy. Besides this, there is an ongoing discussion (not only in academia) on the necessity of an *active* immigration policy that not only tries to cope with new immigration in terms of humanity (like German law on asylum), but rather tries to influence future immigration according to economic needs (see Zimmermann 1994, Herrmann 1999). This also includes the discussion on the German regulations concerning citizenship. In this context the new Federal Government recently started to facilitate the naturalization (*Einbürgerung*) of long-term aliens and allowed (temporary) dual citizenship for native born children of foreigners. This can be seen as a first and very important step towards easing the way to integrate immigrants into German society, though this process also requires some integration willingness on behalf of the immigrants themselves. One example in this context is an improved knowledge of the German language.

Concerning one of our major research questions, this means that one major task when improving the integration process of immigrants has to concentrate on education of children. Although our results based on 13 to 16 year old children show an improvement of educational training in the German school system up until 1995, Jeschek's (1999) findings on increasing problems for young foreigners in terms of vocational training are an alarming sign. Without sound vocational training the chances on the German labor market are very poor. Additionally, the native German population needs to be better informed about the chances of future immigration to Germany, which is all the way necessary in order to cope with the shrinking numbers of the native born due to low fertility.

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*Table 1*      Composition of Resident Children Population in West-Germany  
(up to 16 years of age)

<b>Immigrant Status</b>	1985/86	1995/96	1995/96
	West Germany	West Germany	Germany
Native Born German	84.3	76.8	80.5
German Immigrant	2.1	6.1	5.6
Foreigner	13.6	17.1	13.9
Total	100.0	100.0	100.0

*Source:* GSOEP, authors' calculations.

*Table 2* Basic Indicators describing Living Conditions of Children in Germany by Immigrant Status

	1985/86				1995/96				
	West Germany				West Germany				East Germany Total
	Native Born German	German Immigrant	Foreigner	Total	Native Born German	German Immigrant	Foreigner	Total	
<b>Community Size</b>									
<20.000 inhabitants	46.4	34.5	30.3	43.9	46.5	43.0	30.7	43.6	53.2
20-100.000 inhabitants	28.3	24.5	26.2	27.9	28.3	24.8	34.9	29.2	18.5
100-500.000 inhabitants	14.5	12.0	19.1	15.1	13.9	22.4	14.5	14.5	17.0
>500.000 inhabitants	10.8	29.1	24.3	13.0	11.3	9.8	20.0	12.7	11.3
<b>Regional Distribution</b>									
North	21.0	16.4	19.7	20.7	23.5	26.5	16.6	22.5	0
Mid-West	42.5	52.1	38.5	42.1	42.1	56.0	41.6	42.8	0
South	36.5	31.5	41.9	37.1	34.5	17.4	41.8	34.7	0
East	0	0	0	0	0	0	0	0	100.0
<b>Housing Situation</b>									
Owner occupier (in %)	53.1	29.6	14.2	47.2	55.7	27.4	29.6	49.5	33.5
# of Rooms									
• Rooms per capita	1.12	0.97	0.83	1.07	1.15	0.95	0.91	1.09	1.00
• less than 1 room per capita (in %)	27.8	45.1	66.5	33.5	26.0	52.1	51.1	32.0	36.6
Housing Space									
• m <sup>2</sup> per capita	27.6	23.0	18.6	26.2	29.2	23.0	22.4	27.6	23.0
• "too small" (in %) <sup>1)</sup>	21.5	20.5	33.8	23.2	28.4	28.3	48.4	31.8	37.6
<b>Household Structure</b>									
Lone Parent	6.5	(12.3)	(2.7)	6.1	9.3	9.5	4.4	8.5	8.5
Multi-Adult 1 child	33.9	34.3	22.9	32.4	27.6	21.6	22.7	26.4	34.3
Multi-Adult 2 children	41.4	35.4	41.9	41.3	40.4	37.3	41.9	40.5	43.9
Multi-Adult 3+ children	18.2	17.9	32.3	20.1	22.7	31.6	30.9	24.6	13.3
<b>Unemployment Experience in previous year</b> <sup>2)</sup>									
• No employable person	2.9	(8.4)	1.9	2.9	1.6	(0.4)	2.8	1.8	0
• Index = 0% (no unemployment last year)	83.5	76.5	79.1	82.7	79.0	77.4	65.5	76.6	58.5
• Index = 1-50%	9.3	(8.7)	12.4	9.7	16.8	13.9	22.3	17.6	32.0
• Index = 50-100%	4.3	(6.4)	6.6	4.7	2.5	8.2	9.4	4.0	9.5
<b>Current Unemployment</b> <sup>3)</sup>									
• Fraction of households with unemployment (in %)	7.6	18.4	15.4	8.9	5.7	14.4	16.8	8.1	29.3
<b>Parental Education</b> <sup>4)</sup>									
Without Sec. Education	9.8	(4.8)	55.6	15.9	9.9	27.1	37.4	15.6	(1.7)
Completed Sec. Education	49.9	65.7	29.7	47.5	48.7	50.8	33.6	46.2	53.3
Some Post-Sec. Education	40.3	29.5	14.7	36.6	41.5	22.1	29.0	38.1	45.0

( ) Values in parentheses: n < 30. - <sup>1)</sup> Evaluation by head of household. - <sup>2)</sup> Months in unemployment as a share of months with potential employment of all employable household members during the previous year. - <sup>3)</sup> At least one household member is officially registered as unemployed in the month of the interview 1986 and 1996, respectively. - <sup>4)</sup> Highest educational level achieved by parents.

Source: GSOEP, authors' calculations.

Table 3 Income and Poverty Measures for Children in Germany by Immigrant Status

	1985/86				1995/96				
	West Germany				West Germany				East Germany
	Native Born German	German Immigrant	Foreigner	Total	Native Born German	German Immigrant	Foreigner	Total	Total
• Mean Equivalent Pre-Government Income <sup>1)</sup>	32,650	25,800	24,699	31,425	35,715	25,081	27,986	33,741	26,979
• Mean Equivalent Post-Government Income <sup>1)</sup>	26,538	21,973	20,239	25,586	28,825	21,747	23,500	27,480	23,862
• Mean Equivalent Public-Transfers <sup>1)</sup>	1,808	1,898	2,051	1,843	1,973	3,213	2,443	2,129	3,648
• Public Transfers as a percent of Post-Government Income	11.1	13.2	14.1	11.5	12.4	20.4	20.4	14.3	21.1
• Relative Equivalent Pre-Government Income Position (Total Populat.=100)	108.7	90.1	82.3	104.7	104.3	75.2	87.6	99.8	78.6
• Relative Equivalent Post-Government Income Position (Total Populat.=100)	94.7	78.4	72.2	91.3	92.4	69.7	75.3	88.1	76.5
<b>Measures based on Equivalent Post-Government Income Quintiles</b>									
• Lowest	17.8	28.9	32.5	20.0	18.0	20.7	30.2	20.2	19.0
• Second lowest	19.0	21.5	25.3	20.0	15.6	37.7	25.6	18.7	25.9
• Middle	20.3	16.9	19.3	20.0	19.6	22.2	12.5	18.5	26.2
• Second highest	21.0	19.1	14.2	20.0	23.0	12.0	10.3	20.2	19.3
• Highest	22.0	13.6	8.8	20.0	23.8	7.4	21.4	22.4	9.7
<b>Decile Ratios</b>									
• 90:10	3.04	2.89	2.88	3.07	4.71	2.58	6.12	4.58	3.02
• 90:50	1.74	1.78	1.70	1.76	1.89	1.66	2.17	1.91	1.59
• 50:10	1.75	1.63	1.70	1.75	2.49	1.55	2.82	2.40	1.90
<b>Poverty Head Count Ratio using a poverty line at ...</b>									
• 50% of Median	8.5	10.2	15.7	9.5	15.2	13.7	23.9	16.6	15.4
• 60% of Median	16.2	24.5	30.0	18.3	21.4	28.6	36.2	24.4	23.9
<b>Poverty Index (<math>P_{\alpha=2}</math>) using a poverty line at ...</b>									
• 50% of Median	.0151	.0270	.0122	.0149	.0328	.0248	.0674	.0382	.0216
• 60% of Median	.0207	.0334	.0234	.0214	.0438	.0347	.0832	.0500	.0320
<b>Assets<sup>2)</sup></b>									
• Saving Account	79.6	80.1	60.7	77.0	78.6	50.8	55.0	72.9	81.7
• Savings with Building Societies	54.1	53.3	30.7	50.8	57.6	44.8	38.5	53.5	51.4
• Life Insurance	70.3	61.0	31.6	64.7	77.1	52.7	48.6	70.7	71.9
• Financial Assets	19.0	11.4	6.6	17.1	28.2	6.1	12.2	24.1	17.2
• Operating Assets	10.6	6.8	2.5	9.4	9.2	0.7	2.2	7.5	7.9
• None	10.0	19.9	27.6	12.7	8.9	26.1	23.9	12.5	8.0

<sup>1)</sup> In 1991 DM. - <sup>2)</sup> Fraction of households holding specific assets in the previous year (in %).

Source: GSOEP, authors' calculations.

*Table 4a* OLS Regression Results on Equivalent Income of Children in West Germany 1985/86 (t-values in parenthesis; n = 6566)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	-.074219 (-5.279)	-.073856 (-5.249)	-.072177 (-5.131)	-.074862 (-5.316)	-.058195 (-4.221)
R_NORTH	Region: North	-.027896 (-1.583)	-.027334 (-1.552)	-.024914 (-1.413)	-.031723 (-1.796)	-.004407 (-.255)
METRO	Metropolitan Area	-.004384 (-.226)	.001990 (.102)	-.001508 (-.078)	.001150 (.059)	-.017982 (-.944)
AGE1625	Parental Age 16-25	-.369360 (-8.857)	-.374642 (-8.984)	-.368936 (-8.848)	-.369063 (-8.832)	-.327656 (-8.010)
AGE2635	Parental Age 26-35	-.185342 (-10.512)	-.188700 (-10.672)	-.190380 (-10.769)	-.183501 (-10.353)	-.181710 (-10.463)
AGE3645	Parental Age 36-45	-.017526 (-1.051)	-.018365 (-1.102)	-.019033 (-1.142)	-.015329 (-.915)	-.019170 (-1.171)
HHTYP10	Lone Parent	-.759137 (-27.297)	-.752094 (-26.962)	-.760002 (-27.278)	-.755686 (-27.132)	-.635418 (-22.108)
HHTYP22	Multi-Adult-HH with 2 children	-.080602 (-5.375)	-.078602 (-5.241)	-.079500 (-5.295)	-.080825 (-5.372)	-.091431 (-6.225)
HHTYP23	Multi-Adult-HH with 3+ children	-.171311 (-9.345)	-.168845 (-9.189)	-.167365 (-9.079)	-.176107 (-9.557)	-.177928 (-9.888)
ISCED_2	Parents with Sec. Education	.177111 (9.065)	.174687 (8.490)	.175694 (8.622)	.181759 (9.204)	.151242 (7.799)
ISCED_3	Parents with some Post-Sec. Education	.420220 (20.472)	.416178 (19.142)	.417453 (19.431)	.424097 (20.409)	.362388 (17.550)
T86	Year 1986	.007290 (.587)	.007683 (.619)	.007447 (.600)	.007648 (.615)	.003079 (.254)
ALIND_1	No employable household member	-	-	-	-	-.454820 (-11.501)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	-.086905 (-4.154)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	-.448996 (-15.296)
IMMIHH	HH with Immigrants or Foreigners	-.075767 (-3.934)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	-.248372 (-4.257)	-	-	-
T2_MIX	German Immigrant and Native German	-	.072685 (1.105)	-	-	-
T3_PUR	Both Parents are Foreigners	-	-.086700 (-3.534)	-	-	-
T3_MIX	Foreigner and Native German	-	-.059885 (-1.769)	-	-	-
O_EU	Origin: EU-country	-	-	-.051283 (-1.363)	-	-
O_NONEU	Origin: Non-EU country	-	-	-.106981 (-3.859)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	-.143539 (-3.522)	-	-
O_WEST	Origin: Western industr. countries	-	-	.082855 (1.394)	-	-
O_OTHER	Origin: other	-	-	-.015255 (-.306)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	-.203400 (-3.554)	-.118118 (-2.104)
YRS_2	Years since parents immigrated: 6-10	-	-	-	-.038615 (-.758)	-.041829 (-.842)
YRS_3	Years since parents immigrated: 11-20	-	-	-	-.067421 (-2.783)	-.078533 (-3.321)
YRS_4	Years since parents immigrated: >20	-	-	-	-.083766 (-2.326)	-.080411 (-2.289)
YRS_8	Native born Foreigner	-	-	-	-.203146 (-2.356)	-.226543 (-2.693)
(Constant)		10.001647 (414.452)	10.004389 (403.329)	10.002704 (405.425)	9.998955 (412.112)	10.068081 (415.493)
Adjusted R <sup>2</sup>		23.05	23.22	23.16	23.15	27.01

Source: GSOEP, authors' calculations.

*Table 4b* OLS-Regression Results on Equivalent Income of Children in West Germany 1995/96 (t-values in parenthesis; n = 5648)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	-.121276 (-7.000)	-.107777 (-6.239)	-.100666 (-5.824)	-.115139 (-6.649)	-.113848 (-7.011)
R_NORTH	Region: North	-.143602 (-6.900)	-.140212 (-6.767)	-.118902 (-5.724)	-.131251 (-6.299)	-.132833 (-6.791)
METRO	Metropolitan Area	.019659 (.842)	.040050 (1.730)	.038574 (1.661)	.023047 (.991)	.042140 (1.930)
AGE1625	Parental Age 16-25	-.806788 (-14.557)	-.795419 (-14.535)	-.793451 (-14.448)	-.782843 (-14.138)	-.815526 (-15.555)
AGE2635	Parental Age 26-35	-.323933 (-13.925)	-.324733 (-14.140)	-.318497 (-13.838)	-.292436 (-12.422)	-.329999 (-14.863)
AGE3645	Parental Age 36-45	-.094061 (-4.113)	-.111544 (-4.930)	-.101866 (-4.488)	-.076473 (-3.335)	-.081925 (-3.802)
HHTYP10	Lone Parent	-.679210 (-22.256)	-.691450 (-22.904)	-.683344 (-22.522)	-.680499 (-22.341)	-.526655 (-18.100)
HHTYP22	Multi-Adult-HH with 2 children	-.093146 (-4.814)	-.090415 (-4.732)	-.088588 (-4.620)	-.092143 (-4.780)	-.104450 (-5.764)
HHTYP23	Multi-Adult-HH with 3+ children	-.110340 (-5.018)	-.128507 (-5.897)	-.136142 (-6.203)	-.116684 (-5.329)	-.130532 (-6.325)
ISCED_2	Parents with Sec. Education	.282368 (12.086)	.205944 (8.654)	.250382 (10.508)	.275503 (11.817)	.189047 (8.532)
ISCED_3	Parents with some Post-Sec. Education	.630131 (25.925)	.535095 (21.331)	.579415 (23.147)	.628079 (25.905)	.493649 (21.186)
T96	Year 1986	.023988 (1.585)	.021568 (1.443)	.022534 (1.505)	.020605 (1.367)	.014356 (1.015)
ALIND_1	No employable household member	-	-	-	-	-1.303845 (-23.456)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	-1.40522 (-7.223)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	-.735233 (-19.496)
IMMIHH	HH with Immigrants or Foreigners	-.135445 (-7.089)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	-.100459 (-2.940)	-	-	-
T2_MIX	German Immigrant and Native German	-	.120986 (1.460)	-	-	-
T3_PUR	Both Parents are Foreigners	-	-.359188 (-13.673)	-	-	-
T3_MIX	Foreigner and Native German	-	.134343 (4.141)	-	-	-
O_EU	Origin: EU-country	-	-	-.023184 (-.459)	-	-
O_NONEU	Origin: Non-EU country	-	-	-.280748 (-8.811)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	-.246059 (-8.390)	-	-
O_WEST	Origin: Western industr. countries	-	-	.289086 (6.805)	-	-
O_OTHER	Origin: other	-	-	-.178423 (-3.757)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	-.351623 (-9.285)	-.238084 (-6.650)
YRS_2	Years since parents immigrated: 6-10	-	-	-	-.139556 (-4.291)	-.060035 (-1.947)
YRS_3	Years since parents immigrated: 11-20	-	-	-	-.202071 (-5.157)	-.205734 (-5.591)
YRS_4	Years since parents immigrated: >20	-	-	-	.010298 (.350)	.002367 (.086)
YRS_8	Native born Foreigner	-	-	-	-.060675 (-.762)	-.073481 (-1.984)
(Constant)		10.057135 (303.006)	10.138947 (303.427)	10.083259 (299.992)	10.038838 (301.613)	10.211449 (317.825)
Adjusted R <sup>2</sup>		29.06	30.88	30.64	29.78	39.09

Source: GSOEP, authors' calculations.

*Table 5a* Logistic Regression Results on Poverty Status of Children in West Germany 1985/86  
(Odds-ratios with Wald-Statistic in parenthesis; n = 6566)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	1.9619 (35.916)	1.9793 (36.731)	1.9551 (35.252)	1.9515 (34.990)	1.7316 (20.775)
R_NORTH	Region: North	1.6302 (11.780)	1.6163 (11.331)	1.6357 (11.865)	1.6604 (12.656)	1.2134 (1.636)
METRO	Metropolitan Area	.8758 (.940)	.8861 (.778)	.8708 (1.015)	.8363 (1.662)	1.0449 (.088)
AGE1625	Parental Age 16-25	3.5274 (29.839)	3.6195 (30.743)	3.4523 (28.712)	3.2896 (25.881)	2.8043 (17.252)
AGE2635	Parental Age 26-35	1.7621 (18.741)	1.7358 (17.579)	1.7495 (18.022)	1.6716 (15.014)	1.7710 (15.321)
AGE3645	Parental Age 36-45	.8476 (1.477)	.8452 (1.528)	.8479 (1.465)	.8091 (2.346)	.8398 (1.338)
HHTYP10	Lone Parent	13.2308 (328.596)	13.4831 (327.700)	13.0542 (322.654)	13.1303 (321.946)	9.9742 (210.721)
HHTYP22	Multi-Adult-HH with 2 children	.8166 (2.558)	.8149 (2.599)	.8289 (2.185)	.8450 (1.742)	.9285 (.304)
HHTYP23	Multi-Adult-HH with 3+ children	1.2410 (2.340)	1.2383 (2.277)	1.2513 (2.479)	1.3034 (3.440)	1.2801 (2.607)
ISCED_2	Parents with Sec. Education	.4308 (51.607)	.4394 (44.753)	.4105 (53.173)	.4163 (54.077)	.4608 (36.801)
ISCED_3	Parents with some Post-Sec. Education	.2042 (116.014)	.2067 (106.128)	.1945 (116.305)	.1948 (120.408)	.2904 (61.195)
T86	Year 1986	.8032 (5.331)	.8057 (5.178)	.8017 (5.407)	.7936 (5.869)	.8195 (3.843)
ALIND_1	No employable household member	-	-	-	-	8.9125 (112.890)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	2.2434 (30.264)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	12.2178 (300.723)
IMMIHH	HH with Immigrants or Foreigners	1.5615 (12.594)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	1.1212 (.089)	-	-	-
T2_MIX	German Immigrant and Native German	-	.7269 (.257)	-	-	-
T3_PUR	Both Parents are Foreigners	-	1.5961 (9.892)	-	-	-
T3_MIX	Foreigner and Native German	-	1.9570 (8.339)	-	-	-
O_EU	Origin: EU-country	-	-	1.2728 (1.087)	-	-
O_NONEU	Origin: Non-EU country	-	-	1.4616 (5.055)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	1.9726 (6.942)	-	-
O_WEST	Origin: Western industr. countries	-	-	2.2203 (4.893)	-	-
O_OTHER	Origin: other	-	-	1.4820 (1.131)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	4.2886 (21.191)	2.8328 (9.549)
YRS_2	Years since parents immigrated: 6-10	-	-	-	1.7249 (3.698)	1.9939 (5.540)
YRS_3	Years since parents immigrated: 11-20	-	-	-	1.4371 (5.434)	1.6504 (9.284)
YRS_4	Years since parents immigrated: >20	-	-	-	1.1138 (.170)	1.0489 (.027)
YRS_8	Native born Foreigner	-	-	-	1.3248 (.129)	2.0170 (.811)
Initial -2 log: 4134.90 Model Improvement		857.47	861.16	860.20	870.54	1229.84

Source: GSOEP, authors' calculations.

*Table 5b* Logistic Regression Results on Poverty Status of Children in West Germany 1995/96  
(Odds-ratios with Wald-Statistic in parenthesis; n = 5648)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	1.3242 (9.378)	1.3665 (11.253)	1.3393 (9.843)	1.3299 (9.452)	1.4165 (11.224)
R_NORTH	Region: North	1.6801 (25.620)	1.7839 (30.766)	1.6256 (21.948)	1.6337 (22.383)	1.8163 (27.485)
METRO	Metropolitan Area	.8342 (2.227)	.7694 (4.471)	.7846 (3.880)	.8187 (2.645)	.7537 (4.123)
AGE1625	Parental Age 16-25	9.6535 (98.918)	9.9063 (98.833)	9.5132 (96.512)	9.3686 (94.095)	14.2305 (112.408)
AGE2635	Parental Age 26-35	2.3749 (45.234)	2.4124 (46.250)	2.3365 (43.070)	2.2005 (35.598)	3.8412 (70.606)
AGE3645	Parental Age 36-45	1.1640 (1.265)	1.2545 (2.768)	1.1595 (1.169)	1.0813 (.321)	1.3106 (2.628)
HHTYP10	Lone Parent	7.3818 (238.018)	7.7402 (245.633)	7.3912 (233.607)	7.8235 (246.926)	5.6438 (140.410)
HHTYP22	Multi-Adult-HH with 2 children	1.0188 (.029)	1.0140 (.016)	1.0206 (.034)	1.0311 (.078)	1.0745 (.357)
HHTYP23	Multi-Adult-HH with 3+ children	1.5131 (13.416)	1.5662 (15.494)	1.5853 (16.352)	1.5574 (15.062)	1.8818 (25.187)
ISCED_2	Parents with Sec. Education	.3721 (108.302)	.4333 (72.201)	.3881 (91.988)	.3771 (102.307)	.4435 (55.972)
ISCED_3	Parents with some Post-Sec. Education	.1174 (300.355)	.1407 (235.250)	.1234 (269.849)	.1155 (300.412)	.1787 (160.533)
T96	Year 1986	.7576 (12.985)	.7631 (12.140)	.7579 (12.770)	.7793 (10.300)	.7600 (10.229)
ALIND_1	No employable household member	-	-	-	-	211.7675 (111.650)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	2.2057 (63.999)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	29.7650 (345.815)
IMMIHH	HH with Immigrants or Foreigners	1.1636 (2.688)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	.5825 (9.229)	-	-	-
T2_MIX	German Immigrant and Native German	-	.3651 (2.242)	-	-	-
T3_PUR	Both Parents are Foreigners	-	1.9203 (34.113)	-	-	-
T3_MIX	Foreigner and Native German	-	.4977 (7.359)	-	-	-
O_EU	Origin: EU-country	-	-	.5781 (4.361)	-	-
O_NONEU	Origin: Non-EU country	-	-	1.5176 (9.520)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	1.0799 (.311)	-	-
O_WEST	Origin: Western industr. countries	-	-	.0830 (10.921)	-	-
O_OTHER	Origin: other	-	-	2.8801 (26.870)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	2.9396 (49.364)	1.9582 (15.505)
YRS_2	Years since parents immigrated: 6-10	-	-	-	.9554 (.094)	.6355 (6.014)
YRS_3	Years since parents immigrated: 11-20	-	-	-	.6549 (4.543)	.6005 (5.710)
YRS_4	Years since parents immigrated: >20	-	-	-	.9245 (.246)	.9492 (.087)
YRS_8	Native born Foreigner	-	-	-	.7301 (.518)	.8137 (.223)
Initial -2 log: 5659.34 Model Improvement		1166.23	1229.15	1232.78	1221.01	1906.02

Source: GSOEP, authors' calculations.



Table 6 Educational Enrollment of 13-16 year old Children in Germany by Immigrant Status

	1986				1996				
	West Germany				West Germany				East Germany Total
	Native Born German	German Immigrant	Foreigner	Total	Native Born German	German Immigrant	Foreigner	Total	
<b>Type of School</b>									
<i>Hauptschule</i>	33.8	35.8	56.6	36.5	26.5	28.8	39.2	28.7	7.5
<i>Realschule</i>	24.4	8.4	13.1	22.7	24.8	22.3	25.1	24.6	36.7
<i>Gymnasium</i>	24.2	25.8	13.6	23.0	32.3	25.9	18.9	29.5	36.9
Other <sup>a</sup>	17.6	30.0	16.7	17.8	16.4	23.0	16.8	17.2	19.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> This category includes *Waldorfschule*, *Gesamtschule*, special schools for the disabled, as well as vocational training.

Source: GSOEP, authors' calculations.

*Table 7a* Logistic Regression Results on the Probability of "Attending Gymnasium" of 13 to 16 Years old Children in West Germany 1985/86 (Odds-ratios with Wald-Statistic in parenthesis; n = 1231)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	.9741 (.025)	.9818 (.012)	.9839 (.009)	.9680 (.038)	.9370 (.152)
R_NORTH	Region: North	.9207 (.154)	.9139 (.181)	.9327 (.108)	.9156 (.174)	.9638 (.029)
METRO	Metropolitan Area	1.4114 (2.125)	1.5325 (3.130)	1.5127 (2.972)	1.4252 (2.221)	1.3350 (1.444)
AGE1635	Parental Age 16-35	.4082 (6.177)	.3694 (7.392)	.4032 (6.260)	.4099 (6.090)	.3841 (6.979)
AGE3645	Parental Age 36-45	.9052 (.400)	.9248 (.244)	.9039 (.408)	.9179 (.294)	.9489 (.108)
HHTYP10	Lone Parent	.3084 (6.924)	.3096 (6.877)	.3041 (7.078)	.3067 (6.966)	.3753 (4.571)
HHTYP22	Multi-Adult-HH with 2 children	1.1686 (.908)	1.1954 (1.174)	1.1754 (.962)	1.1610 (.825)	1.1564 (.769)
HHTYP23	Multi-Adult-HH with 3+ children	.7798 (1.051)	.8301 (.573)	.8259 (.603)	.7830 (1.003)	.7728 (1.102)
ISCED_2	Parents with Sec. Education	1.6234 (3.246)	1.3924 (1.447)	1.5241 (2.324)	1.6141 (3.077)	1.4291 (1.677)
ISCED_3	Parents with some Post-Sec. Education	8.6647 (63.960)	7.3373 (52.372)	7.9871 (56.162)	8.6218 (61.841)	7.4003 (52.116)
T86	Year 1986	1.3808 (2.531)	1.4183 (2.924)	1.4264 (2.980)	1.4013 (2.754)	1.4525 (3.304)
ALIND_1	No employable household member	-	-	-	-	.4009 (1.743)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	.3154 (10.319)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	.3870 (2.202)
IMMIHH	HH with Immigrants or Foreigners	.8324 (.489)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	.2046 (1.566)	-	-	-
T2_MIX	German Immigrant and Native German	-	.8923 (.028)	-	-	-
T3_PUR	Both Parents are Foreigners	-	.4728 (3.695)	-	-	-
T3_MIX	Foreigner and Native German	-	2.1824 (3.311)	-	-	-
O_EU	Origin: EU-country	-	-	1.0276 (.002)	-	-
O_NONEU	Origin: Non-EU country	-	-	.3415 (3.911)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	.6109 (.807)	-	-
O_WEST	Origin: Western industr. countries	-	-	1.6298 (.196)	-	-
O_OTHER	Origin: other	-	-	2.2200 (2.951)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	.3261 (.714)	.4565 (.325)
YRS_2	Years since parents immigrated: 6-10	-	-	-	.2021 (1.499)	.2515 (1.076)
YRS_3	Years since parents immigrated: 11-20	-	-	-	.7614 (.552)	.7250 (.756)
YRS_48	Years since parents immigrated: >20	-	-	-	1.0567 (.023)	1.0560 (.022)
Initial -2 log: 1373.05						
Model Improvement		192.70	202.05	201.45	195.90	212.63

Source: GSOEP, authors' calculations.

*Table 7b* Logistic Regression Results on the Probability of "Attending Gymnasium" of 13 to 16 Years old Children in West Germany 1995/96 (Odds-ratios with Wald-Statistic in parenthesis; n = 843)

Variable	Label	Model I	Model II	Model III	Model IV	Model V
R_MIDWES	Region: Midwest	1.2901 (1.679)	1.3777 (2.560)	1.3414 (2.164)	1.3068 (1.804)	1.3294 (2.027)
R_NORTH	Region: North	.7256 (1.803)	.7820 (1.016)	.7563 (1.337)	.7455 (1.455)	.7666 (1.178)
METRO	Metropolitan Area	1.5552 (2.516)	1.6105 (2.806)	1.6343 (2.998)	1.6109 (2.837)	1.6256 (2.919)
AGE1635	Parental Age 16-35	.1930 (17.021)	.1793 (18.245)	.1774 (17.893)	.2116 (15.106)	.2206 (14.135)
AGE3645	Parental Age 36-45	.6103 (7.335)	.6055 (7.512)	.6155 (6.990)	.6408 (5.735)	.6377 (5.841)
HHTYP10	Lone Parent	1.9489 (4.062)	2.1856 (5.364)	1.9805 (4.156)	1.5304 (1.442)	1.4886 (1.239)
HHTYP22	Multi-Adult-HH with 2 children	.9199 (.170)	.9534 (.054)	.9056 (.236)	.9440 (.080)	.9261 (.140)
HHTYP23	Multi-Adult-HH with 3+ children	1.0613 (.053)	1.0326 (.015)	.9772 (.007)	1.0748 (.077)	1.0373 (.019)
ISCED_2	Parents with Sec. Education	4.1206 (16.220)	3.4403 (11.192)	3.5582 (11.804)	3.9758 (14.966)	3.7803 (13.616)
ISCED_3	Parents with some Post-Sec. Education	17.5265 (64.910)	14.6359 (51.409)	15.2109 (53.637)	16.8615 (61.224)	15.2280 (54.350)
T96	Year 1996	.7835 (1.266)	.8174 (.846)	.7739 (1.353)	.7404 (1.814)	.7413 (1.777)
ALIND_1	No employable household member	-	-	-	-	.7580 (.112)
ALIND_3	Unemployment Index 1-50 %	-	-	-	-	.7013 (1.684)
ALIND_4	Unemployment Index 50-100 %	-	-	-	-	.6352 (.594)
IMMIHH	HH with Immigrants or Foreigners	1.0732 (.096)	-	-	-	-
T2_PUR	Both Parents are German Immigrants	-	.6370 (1.435)	-	-	-
T2_MIX	German Immigrant and Native German	-	2.9606 (2.295)	-	-	-
T3_PUR	Both Parents are Foreigners	-	.7568 (.545)	-	-	-
T3_MIX	Foreigner and Native German	-	2.0536 (2.986)	-	-	-
O_EU	Origin: EU-country	-	-	.7399 (.163)	-	-
O_NONEU	Origin: Non-EU country	-	-	.6621 (.730)	-	-
O_EAST	Origin: Eastern Europe, Former SU	-	-	.8377 (.321)	-	-
O_WEST	Origin: Western industr. countries	-	-	3.3512 (3.883)	-	-
O_OTHER	Origin: other	-	-	2.4035 (2.806)	-	-
YRS_1	Years since parents immigrated: 0-5	-	-	-	.3821 (2.565)	.3908 (2.410)
YRS_2	Years since parents immigrated: 6-10	-	-	-	.6158 (.863)	.6301 (.769)
YRS_3	Years since parents immigrated: 11-20	-	-	-	3.6781 (7.211)	3.6401 (6.952)
YRS_48	Years since parents immigrated: >20	-	-	-	1.0494 (.024)	1.0561 (.030)
Initial -2 log: 1006.04						
Model Improvement		177.01	184.40	184.94	188.75	191.02

Source: GSOEP, authors' calculations.

## Appendix

Table A1 Descriptive Statistics of Variables used in Regression Models

Variable	Label	1985/86		1995/96	
		unweighted Mean	weighted Mean	unweighted Mean	weighted Mean
R_MIDWES	Region: Midwest	.44	.42	.43	.43
R_NORTH	Region: North	.18	.21	.19	.22
METRO	Metropolitan Area	.16	.13	.13	.13
AGE1625	Parental Age 16-25	.03	.02	.03	.02
AGE2635	Parental Age 26-35	.30	.31	.39	.38
AGE3645	Parental Age 36-45	.45	.44	.42	.45
HHTYP10	Lone Parent	.05	.06	.06	.08
HHTYP22	Multi-Adult-Household with 2 children	.41	.41	.40	.41
HHTYP23	Multi-Adult-Household with 3+ children	.27	.20	.26	.25
ISCED_2	Parental Education: Secondary Education Completed	.40	.47	.45	.46
ISCED_3	Parental Education: Some Post-Secondary Education Completed	.26	.37	.31	.38
ALIND_1	No employable household member	.02	.03	.01	.02
ALIND_3	Unemployment Index 1-50 %	.11	.10	.22	.18
ALIND_4	Unemployment Index 50-100 %	.05	.05	.04	.04
IMMIHH	Household with Immigrants or Foreigners	.43	.15	.38	.23
T2_PUR	Both Parents (if present) are German Immigrants	.01	.01	.07	.05
T2_MIX	One Parent is German Immigrant, the other is Native German	.01	.01	.01	.01
T3_PUR	Both Parents (if present) are Foreigners	.37	.10	.26	.11
T3_MIX	One Parent is Foreigner, the other is Native German	.05	.04	.06	.06
YRS_1	Years since parents immigrated: 0-5	.01	.01	.05	.04
YRS_2	Years since parents immigrated: 6-10	.03	.02	.07	.06
YRS_3	Years since parents immigrated: 11-20	.30	.09	.08	.04
YRS_4	Years since parents immigrated: >20	.08	.03	.18	.08
YRS_8	Native born Foreigner	.01	.01	.02	.01
O_EU	Origin: EU-country	.16	.03	.08	.02
O_NONEU	Origin: Non-EU country	.23	.07	.18	.07
O_EAST	Origin: Eastern Europe, Former Soviet Union	.02	.02	.08	.07
O_WEST	Origin: Western industrialized countries	.01	.01	.01	.03
O_OTHER	Origin: other	.01	.02	.02	.03

Source: GSOEP, authors' calculations.