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**FIRST- AND SECOND-
GENERATION MIGRANTS IN
GERMANY – WHAT DO WE KNOW
AND WHAT DO PEOPLE THINK?**

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ABSTRACT

First- and Second-Generation Migrants in Germany – What Do We Know and What Do People Think?*

This Paper provides a snapshot of the stock of immigrants in Germany using the 1995 wave of the Mikrozensus, with a particular emphasis on distinguishing first- and second-generation migrants. On the basis of this portrait, we draw attention to the empirically most relevant groups of immigrants and review the received literature on economic migration research in the three principal avenues of migration research. The aspect that we concentrate on in our empirical application, the welfare dependence of immigrants, is a matter of intense debate among economists and policy-makers. We contrast the very moderate actual public transfer payment dependence of migrants to Germany with the perception of migrants' dependence on public assistance from Germans of various population strata.

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NON-TECHNICAL SUMMARY

Ten years after German reunification, and more than fifty years after World War II, German society has transformed its composition to an extent that the founding fathers of post-war Germany could not have anticipated. Certainly, much of this change is a reflection of the international developments; most notably European economic and political integration, the demise of socialism in Eastern Europe, the consequences of post-war baby booms and baby busts, and the ensuing population ageing. Yet, German society in particular has been shaped by the intense and multi-faceted immigration experience, leading to the variegated society we observe today.

The early German post-war migration experience has been dominated by migration streams from Europe's South, with a clear focus on labour migration. The ethnic composition of immigration to Germany, however, has changed over time. Europe as a whole, and Germany as its largest immigration country, has become a net receiving region, and the geographic and cultural distances to the immigrants' countries of origin have increased significantly. As a consequence of this continuous influx, German society today not only contains a large immigrant population, but most importantly, second-generation migrants are a sizeable fraction of the German population. It is reasonable to fear that, if their integration is hampered, this will set off a process of transition from immigrant communities to ethnic minorities and such a climate might make it difficult to prevent second-generation immigrants from persistently becoming second-class citizens.

Yet, despite its paramount relevance for all European countries, almost no research has targeted the question of second-generation migrants' integration into society, neither in comparison to the integration of their parents' generation nor to natives of the same age, nor are the potential consequences of different policies regarding the participation of second-generation migrants in the political process fully understood. To help reduce this gap, this Paper contributes to the received literature on immigration to Germany – which tends to concentrate on the labour market performance of first-generation migrants – by providing an overview of the existing research, with an explicit focus on distinguishing results for first- and second-generation immigrants.

The Paper starts off by providing a snapshot portrait of the immigrant population currently residing in Germany, with a special emphasis on the distinction of first- and second-generation migrants. To this end we offer a detailed characterization of both immigrant generations by demographic and socioeconomic characteristics. The Paper also provides an in-depth review of the received economic literature, conceptualizing these analyses along the three principal avenues of migration research. Most importantly, it becomes transparent that there are considerable differences between both immigrants and natives as well as among the different immigrant generations themselves.

Nevertheless, this review also demonstrates that at the current juncture a substantial number of relevant research questions remain unresolved.

The Paper proceeds to offer its own substantive contribution to this research, by addressing one of the most contentious issues in the current debate, the welfare dependence of migrants. Often it is the case that a clear presentation of the stylized facts or of a convincing body of evidence is not able to prevent the public debate from going astray. The age old fear that immigrants take jobs away from native workers is a case in point. Despite overwhelming evidence that the negative partial equilibrium effects on the most affected groups of native workers are – at worst – minor and that they are probably overcompensated by the positive indirect effects, the argument of 'native jobs first' is raised again and again by anti-immigrationists in all countries. Unfortunately, since this argument appeals to the strong underlying fear for one's own economic existence, and since it is easy to mask xenophobic attitudes behind such a seemingly well justified concern, anti-immigrationists are often able to collect support for their – unjustified – claims.

Here, in the case of immigrant welfare dependence, defining an appropriate position is even more difficult, since there is an additional subtlety to consider. On average, it is true that immigrants to Germany are substantially more likely to be on welfare. Yet, as the preceding discussion has clearly demonstrated, this is a matter of key socioeconomic characteristics, rather than a consequence of underlying unobservable traits. To the contrary, holding observables constant, immigrants are less likely to be on welfare. Thus, existing patterns are largely a result of past immigration policy, and future problems could be prevented by following a deliberate and more skill-oriented immigration policy.

We contrast the findings on the determining factors of the moderate risk of migrants depending on public assistance payments with the perception of immigrants by native Germans using two complementary data sets. Furthermore, we derive some evidence on important correlates of the deviations between facts and perceptions and discuss which explanatory factors might be responsible for this phenomenon. The empirical evidence on the divergence of the perception of immigrants by natives from what we really know suggests that comprehensive education programmes and initiatives to ascertain that this evidence is becoming more transparent to the general public may provide the basis for a more realistic perception of what is a large, albeit heterogeneous population group in Germany. But the success of such activities is far from guaranteed. To analyse whether and to what extent education is really able to resolve misperceptions and to reduce xenophobic attitudes will be one of the key challenges of this line of research.

1. Introduction

Ten years after German re-unification, and more than fifty years after World War II, German society has transformed its composition to an extent that the founding fathers of post-war Germany could not have anticipated. Certainly, much of this change is a reflection of the international developments, most notably European economic and political integration, the demise of socialism in Eastern Europe, the consequences of post-war baby booms and baby busts, and the ensuing population ageing. Yet, German society in particular has been shaped by the intense and multi-faceted immigration experience, leading to the variegated society we observe today.

The early German post-war migration experience has been dominated by migration streams from Europe's South, with a clear focus on labor migration. However, the ethnic composition of immigration to Germany has changed over time. Europe as a whole, and Germany as its largest immigration country, has become a net receiving region, and the geographic and cultural distances to the immigrants' countries of origin have increased significantly. As a consequence of this continuous influx, German society today not only contains a large immigrant population. Most importantly, second-generation migrants are a sizeable fraction of the German population. It is reasonable to fear that, if their integration is hampered, this will set off a process of transition from immigrant communities to ethnic minorities and such a climate might make it difficult to prevent second-generation immigrants from persistently becoming second-class citizens.

Yet, despite its paramount relevance for all European countries, almost no research has targeted the question of second-generation migrants' integration into society, neither in comparison to the integration of their parents' generation nor to natives of the same age, nor are the potential consequences of different policies regarding the participation of second-generation migrants in the political process fully understood. To help reducing this gap, this paper will contribute to the received literature on immigration to Germany – which tends to concentrate on the labor market performance of first-generation migrants – by providing an overview on the existing research, with an explicit focus on distinguishing results for first- and second-generation immigrants. Moreover, this paper offers empirical evidence regarding a matter of intense current debate among economists and policy makers, the dependence on social assistance programs by different immigrant generations. To address the issue of integration most cogently, we contrast the empirical facts with the perception of native Germans regarding this social assistance dependence.

As a basis for this discussion we draw up a balance sheet of sorts regarding the stock of non-citizens in Germany, distinguishing between foreign-born and German-born non-citizens (first- and second-generation immigrants) using the German "Mikrozensus" 1995 (*section 2.2*). Specifically, we provide a description of both generations regarding demographic structure, year of immigration, gender and family status, education profile, income and other socio-economic characteristics. This portrait, in combination with the historical background given in *section 2.1* enables us to identify the immigrant groups relevant enough to warrant a separate empirical analysis. Following a brief overview on the three principal topics in the area of migration research (*section 3.1*), we use *section 3.2* to as comprehensively as possible answer the question: *What do we know* about the relevant groups of non-citizens in Germany and clarify which research questions remain open at the time being. In *section 4.1* we provide detailed empirical evidence on the *actual* public transfer payment dependence of migrants, and contrast these findings with the *perception* of migrants' dependence on public assistance by German natives (*sections 4.2 and 4.3*). The final section offers some conclusions and outlines further directions of research.

2. The Immigrant Population in Germany

This section provides a comprehensive statistical portrait of the population of first- and second-generation immigrants in Germany in 1995. As a first step in this endeavor, we will briefly outline the historical experience of immigration to Germany in more detail. The second sub-section condenses the wealth of individual-level information on both immigrant generations into a set of central demographic and socio-economic characteristics and compares them with that of German natives. Moreover, given this characterization and the historical background of immigration to Germany, we identify the most important – in terms of quantitative importance – immigrant groups currently living in Germany. The following section then surveys the existing evidence in the received literature on Germany, regarding the three principal areas of economic migration research, with emphasis on the distinction of migrants from the first and the second generation.

2.1 Historical Background

The history of immigration to Germany after World War II can sensibly be divided into four periods (see SCHMIDT AND ZIMMERMANN (1992)). The years from the end of World War II to the early 1960's were characterized by the post-war migration flows which were triggered by the massive disruption caused by Europe's two world wars. During the first post-war years,

until about 1950, these flows consisted mainly of displaced people of German ethnicity originating in Eastern Europe. Thereafter, West Germany was affected by migration of ethnic Germans from Eastern Europe leaving the Soviet occupation zone in the East having arrived there from Eastern Europe, and of Germans originating directly from this eastern part of Germany (see SCHMIDT (1996)). The second period from 1955 to 1973 was characterized by labor migration within Europe from the Mediterranean to the northern countries and – to a lesser extent – the immigration of labor from overseas. During this time, Germany actively recruited "guest workers" from several selected European countries (Italy, Spain, Greece, Turkey, Portugal and Yugoslavia), as well as from Morocco and Tunisia. The principal idea behind this recruitment effort was to retain the remarkably strong manufacturing-led growth performance of the German economy despite shortages of manual labor. Excess demand for labor emerged during the 1960s and was not compensated by a sufficient increase in female labor force participation which one could observe elsewhere (see e.g. CARLIN (1996)). Thus, in these years immigration to Germany was clearly dominated by demand-oriented migration incentives due to labor shortages, a characteristic necessarily impinging upon the potential of any supply-side oriented model trying to explain extent or composition of immigration flows. This aspect is the more remarkable, as contemporaneous migration research – with its focus on the US experience – almost exclusively rests on supply-side reasoning when explaining in terms of an economic model how immigrant skill composition, observed as well as unobserved, changes over time (see e.g. BORJAS (1991)).

In fact, the conceptually very powerful Roy model has been the workhorse model of research on migrant performance ever since BORJAS' (1987) article, and has been behind most of the discussion on declining relative immigrant "quality" and "cohort effects" (see also section 3.1 below). A brief look at German immigration history demonstrates how inappropriate a direct translation of this debate would be to the German context: the "guest workers" of the 1960s were deliberately selected to be manual workers, so one should not attribute the low fraction of brain surgeons among them to any sophisticated mechanism of immigrant self-selection.

The middle of the 70's, especially the year 1973, constitutes a fundamental regime switch, a development which was triggered by the first oil crisis and the ensuing economic problems, not only in Germany, but throughout the developed world. For instance, a large literature documents and analyzes the abrupt slowdown in US productivity after 1973 (see e.g. BAUMOL ET AL. (1989)), a phenomenon that was apparently left its trace until the middle of the 1990s. In Germany, one of the major actions to the first oil price shock and the beginning of a

recession was that the recruitment of guest workers was stopped and immigration was restrained. Similarly, all across Europe immigration policy was tightened by setting up a broad range of institutional barriers to immigration from outside Europe. Only two major channels of legal immigration to Germany remained: family reunification and applying for asylum. Apparently as a reaction to the suppression of other channels, one could observe a surge in asylum seekers and refugees. On the other hand and in contrast to such outside-barriers the EU and its predecessors fostered internal migration in Europe, e.g. by EU-wide acknowledgment of university diplomas and formal training. The fourth, most current period of immigration to Europe started at the end of the 1980's with the dissolution of socialism and has led to an increased inflow of people from Eastern Europe. In addition, the civil war in Yugoslavia has triggered a new surge of refugees and asylum seekers migrating to Europe.

2.2 The Population of Non-Citizens in Germany 1995

The following portrait of immigrants residing in Germany in 1995 is based on the information collected in the 1995 wave of the German *Mikrozensus*. The aim of this sub-section is to describe both immigrant generations by the most interesting socio-economic characteristics and to compare them to native Germans. It becomes transparent through this descriptive evidence that not only natives and immigrants are very different, but there is considerable heterogeneity among the immigrants themselves. We distinguish individual-level characteristics falling into three groups of indicators: (i) demographic indicators, (ii) labor force indicators, and (iii) information on income and income sources.

Demographic Indicators

Figure 1 displays the age distribution of first- and second-generation immigrants as well as that of native Germans. Clearly, this current age distribution has been shaped by immigration history – variations in the magnitude of immigrant influx and typical age at immigration – and by demographic behavior. Specifically, whether and at what age first-generation immigrants might return to their country of origin has been a matter of intense research (see e.g. DUSTMANN (1996), SCHMIDT (1994), and SCHMIDT (2000)). The migrants' choice regarding their fertility – with frequency and timing as its principal components – has been researched less intensely. In particular, it is difficult to assess whether migrants' demographic behavior tends to adopt quickly to that of the indigenous population. On average, the second generation of immigrants is considerably younger than the first generation which is in turn younger than the native population. Moreover, the majority of first generation immigrants was in its prime

age, i.e. in the age group between 15 and 35 years, at the time of entry to Germany (cf. **Figure 2**).

If all immigrants remained in the destination country for their whole lifetimes, the distribution of years of entry in the current migrant population would predominantly reflect fluctuations in aggregate immigration intensity (and, of course, old-age mortality). Yet, due to the large emigration flows which accompanied large-scale immigration throughout the last decades (Schmidt (2000)), recent immigrants tend to dominate the migrant population numerically. **Figure 3** displays the year of immigration of the 1995 population of immigrants in Germany. Around 50% of this stock immigrated after 1978 whereas only 40% who were still residing in Germany in 1995 entered the country prior to the recruitment stop in 1973. For this reason it seems appropriate to reject the idea of the migrant population in Germany consisting mainly of workers who arrived as guest workers and decided to stay. Rather, this population is a mixture of former guest workers, their families, and – to a large extent – of more recent immigrants with other motives for immigration and from other origin countries.

The upper panel of **Table 1** reports the geographical distribution of first- and second-generation immigrants at the level of the federal states (*Bundesländer*). The lower panel reports the distribution of immigrants by citizenship. The majority of first- as well as second-generation immigrants concentrates in the two southern states Baden-Württemberg and Bayern as well as the largest state Nordrhein-Westfalen. Both southern states are highly industrialized states and have had lower unemployment rates than the national average. In contrast, the industry structure of Nordrhein-Westfalen has been dominated by the mining and steel industries which were actively recruiting manual labor in the 1960's and the beginning of the 1970's.

By far the largest first-generation immigrant groups are Turks, followed by Yugoslavians and immigrants from the other European guest worker countries (Italy, Greece, Portugal and Spain). For the second-generation, this ranking changes somewhat. Turks are also the largest group, but the other guest worker countries are providing the second largest group. This is apparently due to the increase in refugees from Yugoslavia following the civil wars in the beginning of the 1990's, which may have increased the number of first-generation immigrants from Ex-Yugoslavia considerably.

Labor Force Indicators

Table 2 reports the highest schooling degrees and formal training levels of immigrants and natives. At first glance, one would perhaps expect that the relatively low educational

endowments of the first generation of immigrants – after all, many of these migrants were recruited as manual workers (SCHMIDT (1997)) – would be mitigated substantially in the second generation. Yet, somewhat surprisingly, the share of second-generation immigrants reporting a higher schooling degree is substantially lower than that of native Germans and that of first-generation migrants. This apparent contradiction of the "natural" convergence hypothesis is interpreted as an indicator of "dissimilation" – to express the opposite of assimilation – between natives and foreigners born in Germany by RIPHAHN (2000). If this were the correct interpretation, the policy implications would be enormous. Integration measures aimed directly and exclusively at the second generation should be implemented with priority over all alternative integration programs or initiatives paid from the public budget.

However, in interpreting this information one should bear in mind that almost all second-generation migrants received their schooling degrees in Germany, whereas typically a substantial part of the first-generation migrants did not. The direct comparability of schooling degrees across countries and the transferability of the implied human capital from one country to another are heavily debated topics in the received literature. Thus, the comparison of reported schooling degrees between natives and first-generation immigrants has to be handled with caution. It seems reasonable to presume that – in terms comparable to the associated German degrees – among first-generation immigrants the highest formal training level is overstated as reported in the lower panel of **Table 2**. These measurement problems notwithstanding, a further noticeable feature arguing against the "dissimilation" hypothesis is the remarkably low share of second-generation migrants without any formal training and the relatively high share with a formal vocational training degree – a concentration on years of education seems somewhat misplaced for judging this issue. The treatment or even correction of the measurement problems described above awaits further research – it will be difficult at the conceptual level, though, to separately identify genuine human capital investment abroad and inter-generational tendencies to invest in education.

In line with these observations is the distribution of immigrant groups and natives across selected industry sectors (cf. **Table 3**). Here as well we would have expected convergence across natives and the children of migrants. The sectoral distribution as well as the unemployment rate of the second generation indeed resemble much more those of the native Germans than could be observed for those of the first generation. The first generation which was to a large part actively recruited to perform manual work in the German manufacturing industry is predominantly still employed in this sector as well as in the food and beverages sector. Together with the construction sector these two sectors comprise more than one half of

the employed first-generation immigrants. For natives as well as second-generation immigrants, however, these three sectors only account for slightly more than one third of the employed, respectively.

Income and Income Sources

The level of household income and its sources are important indicators of the economic well-being and performance of different population strata (see e.g. BIEWEN (2000)). **Figure 4** displays the distribution of household income for natives and immigrants. Unfortunately, the *Mikrozensus* contains only categorized income information. However, this income distribution is more right skewed for natives than for second-generation migrants which in turn is more right skewed than that of the first generation.

Table 4 reports the primary sources of income for immigrants and natives. A remarkable pattern is the high share of natives for which pensions are the primary income source. A considerable share of first- as well as second-generation immigrants, however, report social assistance payments as main income source. Such a result would seem to vindicate translating to Germany the serious concern with rising immigrant welfare dependence which is raised in the US literature on immigration. Yet, German post-war immigration history was very heterogeneous, and it would be important to know who exactly is disproportionally dependent on social assistance. For instance, if one found that the low-skilled workers recruited for manual labor in the 1960s – or their descendents – are typically in lower social rungs, the relevant comparison would be with native unskilled. Similarly, if welfare dependence was mainly a phenomenon of asylum seekers, this would be a question of legislative design, rather than a reflection of self-selection mechanisms. These issues are taking center stage in the empirical part of this paper. Moreover, a substantially higher share of the immigrant population reports work income. That is, notwithstanding our reservations at taking mean outcomes at face value, the first step of analysis should be the formation of a balanced view displaying more clearly welfare dependence and active labor market contribution by immigrant group.

Relevant Immigrant Groups in Germany

Given this overview of the stylized facts and the historical background provided above, the following immigrant groups in/to Germany should be distinguished for purposes of any deeper empirical analysis: (i) ethnic Germans who immigrated directly after WW II, (ii) recruited guest workers, (iii) immigrated family members of the guest workers, (iv)

permanently and temporarily accepted asylum seekers and refugees, (v) ethnic Germans who immigrated after 1990, (vi) migrants from within the EU utilizing the free movement agreement, (vii) legal temporary workers (e.g. seasonal workers) mainly from Eastern Europe, (viii) illegal migrants, and (ix) children of these immigrant groups being born in Germany (the second generation).

Legal temporary workers (vii) are of quantitative negligible magnitude. Their access is tightly restricted to only some thousand people per year which can be recruited for specific industry sectors on the basis of temporary formal work contracts. A repeated admission of these contract workers is usually not possible (see regulations in § 10 *Ausländergesetz*, and several statutory orders concerning work permissions and exceptions from the recruitment stop). For illegal migrants (viii) there are no reliable figures available. The only data source for this group are the apprehensions of German border police. On average these were around 34,000 people per annum between 1995 and 1999. The actual share of illegal immigrants living in Germany might be higher, but an assessment of this number is of highly speculative nature. The other immigrant groups can be identified in available micro data, and can be analyzed separately in empirical studies.

3. Economic Migration Research – The State of the Discussion

3.1 Migration Research – Three Principal Topics

Economic research concerning migration issues can be conceptualized into three broad fields, each of them interrelated with each other. All these research areas carry important implications for immigration policy, again reflecting an intimate relationship between them. These fields may be described most sensibly by the following set of research questions:

1. Which factors determine the *decision* to migrate, i.e. which are the motives or driving forces behind observed immigration flows ? Naturally, since the decision to migrate is in all likelihood the outcome of a systematic process, the characteristics of those who decide to relocate from their original home to a new destination are hardly a random sample of the indigenous population of either country. Understanding the composition of migration flows seems therefore to be an important prerequisite for the analysis both of migrant performance and the impact of immigration.

2. Which factors determine the economic *performance* of immigrants in the destination country, i.e. for instance do wages or employment prospects of immigrants converge or diverge as the duration of residence unfolds if compared

to that of natives and what are the reasons for these developments? A related aspect is the degree of *discrimination* against immigrants as well as the degree and the consequences of geographical and/or occupational *segregation*, i.e. the clustering of immigrants or specific immigrant groups in certain geographical areas or occupational groups.

3. Which factors determine the economic *impact* of immigration on the population indigenous to the destination country, i.e. does immigration reduce the wages or employment prospects of e.g. low-skilled natives or resident migrants of preceding entry cohorts, and if so, what are the mechanisms at work? A related aspect are the determinants of the *perception* of as well as the *attitudes* towards immigrants by the natives in the destination country.

3.2 Evidence for Immigration to Germany

The Decision to Migrate

Evidence for the determinants of immigration to Germany is quite scarce, and if available, only at the aggregate level. VOGLER AND ROTTE (2000) follow the traditional literature on explaining aggregate migration flows (see, e.g. HARRIS AND TODARO (1970) for a seminal study) by differential developments of economic activity (per capita), unemployment rates and other socio-demographic factors, such as geographic distance. Pinning down any stable relationship between the economic factors and immigration activities has been notoriously difficult throughout this literature. This has made the creation of a satisfactory connection between the in parts overwhelmingly sophisticated economic theory of the migration decision (see e.g. STARK (1991) or BERNINGHAUS AND SEIFERT-VOGT (1991)) and the – at best – scarce evidence for the validity of its predictions a very frustrating endeavor. VOGLER AND ROTTE (2000) escape from this dilemma – which also plagues their study – by altering their focus in an innovative way: Their analysis explicitly addresses the issue whether political oppression in the country of origin fosters the decision of potential emigrants, with particular emphasis on the role that the current state of economic development plays for this process.

With the aim of predicting future immigration activity in case of the enlargement of the EU to the East, FERTIG (1999) uses an empirical specification derived from a stripped-down theoretical model of the migration decision. He concludes that economic differences exhibit only a moderate influence on actual migration activity. Finally FERTIG AND SCHMIDT (2000) take a completely different approach at modeling aggregate immigration activity, also with the principal aim of forecasting net immigration into the future. In this study, the crucial role

of demographics for migration activity is placed in the focus of the discussion. It has been demonstrated in numerous empirical analyses of migration activity – historical as well as recent – that migrants tend to move from origin to destination at young prime age. **Figure 2** exemplifies this phenomenon for the German case. Thus, the relative prevalence of this age group in the population at the origin is necessarily a major determinant of the actual migration potential and, in consequence, activity from this source. On the basis of these considerations, FERTIG AND SCHMIDT (2000) conclude that even if EU enlargement were to lift all legal obstacles for East-West migration, the ensuing migration flows would likely be only of moderate magnitude.

At the present time, there is no study of international migration to Germany at the individual level. The primary reason for this gap is the missing data base, as any serious empirical study would require micro data at both origin and destination.

Performance and Discrimination

Skills play a dominant role for immigrant performance, whether acquired in formal curriculae as secondary or post-secondary schooling and vocational training, or informally as experience in the labor market, or as manifestation of intrinsic personal traits such as cognitive ability or motivation. The modern literature on immigrant performance dates back to CHISWICK (1978) who regressed labor earnings, the natural measure of labor market performance – at least in the US context – on years of formal education, immigrant status, and a polynomial on duration of residence in a cross-sectional census extract comprising native and migrant workers.

His results demonstrate clearly that for the US, ceteris paribus, a comparison of native with immigrant workers reveals earnings differences that vary systematically with duration of residence in the country. While the most recent immigrant workers typically experience a substantial wage disadvantage, this gap is smaller for earlier immigrant cohorts. CHISWICK (1978) even found immigrants with a long duration of residence in the US to display an earnings advantage. While this latter result is less robust, an earnings gap that decreases in the duration of residence has been a stable empirical phenomenon in all subsequent cross-sectional studies for the US. The really challenging issue, though, is the interpretation of this pattern. Building on human capital theory, CHISWICK (1978) provided a very convincing structural interpretation: in the absence of any noticeable form of discrimination – an absence that seems to be a natural presumption in the context of the American "melting pot" (but see below) – wages directly reflect individual productivities.

Immigrants acquire productive capacity in their origin country, but only part of this human capital can be transferred to the labor market at the destination. Consequently, the young adults arriving at their new home possess a lower earnings capacity, and – since their labor supply is typically inelastic – relatively low wage earnings. Over their time of residence, they tend to acquire the lacking human capital, such as the language spoken at the destination – their low initial earnings capacity implies that the opportunity cost of their investment are relatively low, making substantial human capital acquisition likely. In addition, CHISWICK (1978) attributed the observed overtaking of experienced migrants' over natives' wages to a positive selection in terms of unobserved covariates.

In stark contrast to this positive assessment of immigrant performance, BORJAS (1985 and 1987) emphasizes the necessity to account for cohort effects when trying to measure the dynamics of immigrant wage earnings. Specifically, his empirically work demonstrates that earlier cohorts of immigrants to the US display a better economic performance – compared to contemporaneous native workers – throughout their residence than more recent cohorts. In fact, BORJAS (1985) attributes most of the cross-sectional earnings profile in duration of residence to such cohort effects (for a different view see LALONDE AND TOPEL (1992)).

Specifically, most recent cohorts apparently perform very poorly when compared to earlier cohorts at their time of immigration. In his 1987 paper, BORJAS motivates this development on the basis of the prototypical Roy model of selection applied to the migration context. Most of the decline in immigrant quality is attributed to the changing country-of-origin mix which has shifted more and more to Latin America and Asia, and away from the traditional countries of origin in Europe. While the importance of the origin composition of immigration flows seems to be undisputed, the literature remains controversial as to the precise interpretation of the negative changes in unobserved residual terms as declining immigrant "quality", or, for instance, as a reflection of a changing distribution of wages – with declining real wages for unskilled workers in the US providing an important background phenomenon (for a more recent contribution see YUENGERT (1994)).

Both the rather different history of immigration to Germany and the certainly distinct nature of US and German labor markets suggest that a simple translation of US results to the German context is impossible. Several empirical analyses address the issue of wage performance of the guest workers of the 1960s and 1970s in the German labor market of the 1980s and early 1990s, all using, in principle, the same source of micro data, the *German Socio-Economic Panel* (GSOEP) (see, in particular, DUSTMANN (1993) and SCHMIDT(1997)). On balance, these papers demonstrate that in the German labor market formal skills play a

decisive role for immigrant wage earnings – for instance, SCHMIDT (1997) concludes that those immigrants who received their schooling and post-secondary education in Germany achieve earnings parity with native workers, while the typical first-generation migrant from the "guest worker" countries lags some 20 percent behind the average native worker in terms of wages.

Moreover, any evidence regarding the assimilation hypothesis derived from the US literature – migrants starting out with a considerable disadvantage but catching up quickly – is extremely fragile. DUSTMANN (1993) demonstrates that the distinction of permanent and temporary migrants might be important for the question of earnings dynamics, while SCHMIDT (1997) pursues a non-parametric specification of duration-of-residence effects that reveals no systematic pattern.

Using the *ALLBUS* (see below) as an alternative data source SCHMIDT (1997) compares migrants from the "guest worker" countries with ethnic German immigrants – concluding that the latter group of immigrants is typically better educated and economically well integrated. Finally, DUSTMANN AND SCHMIDT (2000) is the only paper to address the wage performance of female immigrants. To date, almost the complete migration literature and certainly all studies of the German case have concentrated on the analysis of the economic performance of first-generation male immigrants. In their paper DUSTMANN AND SCHMIDT (2000) place considerable emphasis on the treatment of labor supply issues that plague all analyses of female wage earnings. They conclude that for the relative wages of female immigrants not only their own formal education, but also their family circumstances – most notably the return plans of their family – play an important role.

All these analyses, for Germany as well as in the international context, rest their interpretation on a crucial, and typically completely undiscussed, identification assumption. Wage differences can only be used as a perfect measure of disparities in economic productivity, if the labor market functions without any trace of discrimination and any legal barriers to wage parity, of course. While raising this idea in the context of the US labor market might not stand any chance, and any advance to put only the slightest dent into the American melting pot myth will probably face fiercest opposition, challenging the fundamental identification assumption of no immigrant discrimination seems less daring in the European context.

On the other hand, interpreting any unexplained wage differential as a reflection of discrimination would require an equally strong and hardly more plausible implicit identification assumption – the absence of migrant-native differences in productive capacity

once formal characteristics are controlled for. Yet, the two identification assumptions discussed here allow the interpretation of reduced-form wage dynamics in terms of structural ideas, assimilation or discrimination, although all the evidence merely pertains to unexplained migrant-native wage differentials. Borjas cohort argument is an additional variant of the same problem: what is the valid identification assumption ? That is, these assumptions must remain untestable, and their validity has to be judged on the basis of economic reasoning. While this issue threatens to remain unsettled, it seems safe to argue that an analysis of relative immigrant earnings which exclusively concentrates on discrimination proceeds on very thin ice. Nevertheless, the consideration of rising discrimination might be an interesting addition to the Chiswick-Borjas debate on cohort effects and declining immigrant "quality".

The Economic Impact of Immigration

While relative individual economic performance is a matter of direct comparison of an appropriate outcome measure between the individuals of interest – migrants – and a comparison group – natives, the economic impact of immigration unfolds in an indirect fashion via market reactions, and is therefore much more complex as an object of investigation. Conceptually, additional immigration shifts the relevant labor supply curve outward – with the first problem for any empirical strategy arising as the question what exactly is "relevant", the local labor market, the skill group etc. ? The consequences, in terms of employment and wages for this relevant group, as well as for all other groups of labor – with unskilled native workers being the most prominent case in the public debate – are first of all a matter of the relative own elasticities of demand and supply and of the set of elasticities of complementarity with all other production factors.

Yet, the additional labor supply is only part of the story, since product demand, and thus labor demand (on all other sub-markets) tend to be affected positively. On balance, it might not be the case at all that immigration harms any group of native workers via the crowding out that the constant output reasoning typically applied seems to suggest. In fact, the matter is entirely empirical. Nevertheless, even at the theoretical level many facets relevant for the real world might complicate the analysis, for instance the necessity to account for an increasing variety of products via immigration, or the consequences of institutionalized wage rigidities (see SCHMIDT ET AL. (1994)).

The empirical challenge is to isolate immigration induced shifts in labor supply which can be treated as if they were set in an ideal experiment, in other words as exogenous. Several strategies can be found in the literature regarding the definition of the appropriate sub-market,

ranging from time series on aggregate labor markets, over cross-sections of regional labor markets to longitudinal analysis across region and time. The latter "area approach" is certainly the most prominent strategy. Studies also vary in their strategy at pinning down the numerical impact of additional immigration. Reduced-form studies regress outcomes directly on relative shares of immigrant labor, while structural-form approaches first estimate the relevant elasticities of complementarity before assessing the impact of additional immigration in an out-of-sample prediction.

All these analyses face the common problem of non-experimental research: the extent of additional immigration does not vary randomly across time and space, as in a laboratory experiment, but is rather the outcome of systematic forces. Specifically, more attractive destinations will typically generate a larger influx of immigrants. Comparing the relevant economic outcome measures, native employment rates say, across regions will typically confuse the impact of immigration with the underlying reason making the area particularly attractive. Moreover, the indigenous population may be quite mobile, too. Thus, a lacking impact of immigration could be due to compensatory moves of indigenous workers (FILER (1992)).

The literature has proceeded in different directions to address this endogeneity problem. ALTONJI AND CARD (1991) and LALONDE AND TOPEL (1991 and 1997), for instance, pursue the idea of instrumental variable estimation. Using previous immigrant density as their instrumental variable, these estimates invoke the identification assumption that this variable affects immigration but not its impact on regional labor markets. A related idea has been developed by CARD (1990) for the so-called Mariel boatlift, an idea also applied by HUNT (1992) to the Algeria-France migration of the early 1960s. These studies exploit historically unique events in order to create a "natural experiment". Typically, these studies tend to conclude that the crowding out effects of additional immigration on most native workers are of minor importance. If at all, it is the direct competitors – in terms of formal and informal skills – which are affected most.

For Germany, several empirical studies exist which proceed along similar lines. PISCHKE AND VELLING (1997) follow closely the approach by ALTONJI AND CARD (1991) using regional data for Germany, with particular emphasis on demonstrating the fragility of instrumental variable estimates to the underlying identification assumptions. HAISKEN-DENEW (1996) and DENEW AND ZIMMERMANN (1994) use individual-level data from the *GSOEP*, replacing the emphasis on regional labor markets by an analysis of separate industries. Since this approach is necessarily threatened by severe problems of endogeneity,

the idea of instrumental variables is applied as well. In the light of the data material finding a convincing instrument remains a complex task, though. On balance, these studies tend to display quantitatively minor effects of additional immigration on the economic outcomes of the indigenous population, but considerable controversy remains as to their precise magnitude. BAUER (1998), estimates the relevant elasticities of complementarity in a production-function approach using individual-level data, basically confirming those studies who deny a relevant impact of immigration.

Recently, attitudes towards minorities have become an issue of concern in the economic literature (see e.g. DUSTMANN AND PRESTON (2000)). A brief overview on empirical studies concerning the perception of and the attitudes towards immigrants for the German case is provided in section 4.2.

4. The Welfare Dependence of Immigrants – Facts and Perceptions

4.1 The Dependence of Immigrants on Public Transfer Payments – What Do We Know

One of the most contentious issues in the context of immigration and immigration policy regards the welfare state. Indeed, BORJAS (1999) places the debate on immigration welfare dependence on equal footing with the "classical" topics of immigrants' labor market performance and their labor market impact. The concern over this problem in principle reflects legitimate reservations about the fiscal and political viability of a welfare state potentially acting as a magnet to migrants, yet being underwritten by a native electorate. Even though the US welfare system can hardly be compared in terms of its generosity to the German social safety net, the well documented fact regarding the US (see e.g. BLAU (1984), BORJAS AND TREJO (1991) and (1993), BORJAS AND HILTON (1996)) that immigrant households have become important clients of the existing welfare programs led to provisions in the most recent 1996 welfare reform which were directed at curbing immigrants' access to the system.

Neither the empirical results regarding the trends in immigrant welfare nor the institutional arrangements shaping the environment for immigrants' welfare use are easily translated from the US, Canada (see e.g. BAKER AND BENJAMIN (1995)) or the UK (see e.g. BLUNDELL ET AL. (1988)) to the German context. Most of all, the historical developments governing size and composition of immigrant influx to Germany were quite distinct. Consequently, the issue is entirely empirical.

Unfortunately, the empirical literature for Germany is rather scarce, with RIPHAHN (1998) being one exception. The author, using data from the *GSOEP*, reports distinct patterns of

welfare dependence for foreigners and natives. The estimated differences in the dependence on social assistance payments between foreigners and natives suggest a statistically significant and substantially *lower* risk of foreigners to depend on these benefits. However, the differences between the foreigner groups were not statistically significant. Moreover, due to the limited number of observations on second-generation migrants in the *GSOEP*, RIPHAHN (1998) could not distinguish between the first and the second generation. The *Mikrozensus* provides us with the possibility to provide such a separate analysis.

The German *Mikrozensus* is an annually 1% random sample survey of the population residing in Germany conducted by the Federal Statistical Office (*Statistisches Bundesamt*). The information collected includes standard demographic and labor market variables as well as information on household and individual income and income sources. The public use file of the *Mikrozensus* is a 70% random sample of the original dataset containing more than 500,000 observations. Compared to other micro datasets like the *GSOEP* the *Mikrozensus* thus has the advantage of a large number of highly reliable observations which allow e.g. the identification of a substantial number of second-generation immigrants. On the other hand, the *Mikrozensus* is only a cross-section with income *categories* and no information on "weaker" characteristics, like language ability or attitudes.

Similar to the case of the US it is certainly important to distinguish between the welfare dependence of immigrants to Germany in comparison with those of a typical native household and in comparison with a hypothetical native household with the characteristics of a typical immigrant household. Since the most important socio-economic characteristics are available in our data, we will estimate a model aiming at the explanation of the determining factors of social assistance dependence. The focus of this analysis is on the risk of being dependent on such public transfer payments for non-citizens. Before we proceed with the estimated model, we briefly summarize the German social assistance system and discuss some of the methodological issues in modeling the dependence on welfare payments.

Social assistance is an integral part of the German income support system which is, in principle, based on residency in Germany and not on citizenship. However, since 1994 there have been some exceptions for asylum seekers. The intention of social assistance is to guarantee eligible individuals a minimum income sufficient for living purposes. Social assistance is strictly means-tested and serves as a substitute for other benefit schemes, like unemployment benefits, if the eligibility for those has expired. Financial benefits under the heading of social assistance comprise lump-sum payments for which under regular

circumstances no repayment requirement is entailed when the financial situation of the supported individual improves again.

In the received international literature on modeling the dependence on welfare payments, the problem of possible non-take up behavior of eligible individuals is heavily discussed. In our case this problem may be important since the residency regulation reform in 1991 provided authorities with the possibility to expel foreigners without a permanent residence permission, if they claim social assistance (cf. RIPHAHN (1998)). This sample selection problem may lead to a bias in the estimated coefficients. However, since there is no information available on the legal status of foreigners in the *Mikrozensus* we are forced to continue under the proviso that this selection problem is negligible.

In our own analysis we assume that the probability to observe an economically active individual (aged 15 to 65 years) in the state of receiving social assistance payments is determined by the following groups of factors: (i) the *household structure*, such as living in a single household, the number of children etc.; (ii) *individual characteristics*, like age, sex, education etc.; (iii) the *level of information* on eligibility criteria, the amount and duration of benefits etc., for which (following RIPHAHN (1998)) we introduce two indicator variables: living in a small city and living in a big city; (iv) *foreigner specific characteristics*, like being a first- or second-generation migrant, the duration of residence in Germany etc. Moreover, one would presume that the *duration* of past dependence on social assistance payments may also have an effect on the probability to observe someone in this state since an individual may be caught in what is sometimes called the "welfare trap". Unfortunately, the *Mikrozensus* provides no information on the duration an individual has been receiving social assistance.

We estimate a discrete choice model, specifically a binomial probit model, to explain the probability of observing an individual in a certain state by the set of socio-economic variables described above. The dependent variable takes the value of one if an individual reported social assistance as its primary source of income in the 1995 wave of the *Mikrozensus*, and zero otherwise. All explanatory variables are defined in **Table A.1** in the appendix. The focus of our analysis lies on the foreigner-specific variables which comprise dummy variables for different first- and second-generation foreigner groups, information on the duration of residence in Germany for the first generation and interaction variables comprising individual characteristics like age and education for the first and the second generation, respectively. The share of individuals depending on social assistance in our sample is 8.1% for foreigners whereas only 1.4% of German citizens reported social assistance as primary source of income.

Table 5 reports some descriptive statistics for the variables in the sample. With our analysis we address the counterfactual question if the risk of non-citizens to depend on public transfer payments is higher than that of comparable natives conditionally on observable characteristics, such as education or age. Since the composition of the migrant population with respect to these attributes is largely a result of German immigration recruitment policy of the 1960's and early 1970's and its aftermath, a comparison that did not condition on these factors would lack respect for the role of history in shaping current circumstances. By contrast, our approach is designed to reveal whether migrants are different from native Germans in terms of intrinsic, unobservable characteristics, as much of the public debate seems to suggest. Specifically, in our analysis we invoke the identification assumptions that the functional relationship between the risk of dependence and the determining factors is represented by a normal distribution function and that a valid comparison group for foreigners are natives with the same set of socio-economic characteristics.

Estimation Results

Table 6 reports the estimated marginal effects of each explanatory variable and its associated t-values for our preferred specification. The marginal effects are the changes of the probability of an individual to be observed in state 1, i.e. receiving social assistance, associated with a unit change in the respective regressors, holding all other regressors constant. These marginal effects are the effect of a unit-change in each variable, one at a time, evaluated at the sample means of all variables. To derive a marginal effect for categorical variables, we consider instead of a change at the sample mean a discrete change from 0 to 1. The preferred specification is the result of a sequence of tests involving linear restrictions on the parameters of the categorical variables, most notably regarding the distinction of variables' effects for first- and second-generation migrants. The null hypotheses that these parameters are equal is rejected at a 1% significance level for all variables, except for the distinction of "first-generation high education" and "second-generation high education" which are combined into the variable "foreigner high education". The same result holds for the variables "first-generation not employed" and "second-generation not employed" which are comprised in the variable "foreigner not employed". Homogeneity restrictions for natives, first-generation and second-generation foreigners are rejected at a 1% significance level (see "Diagnostics" in **Table 6**).

Most of the estimated marginal effects are statistically significant at a 1% significance level (the critical value is 2.576). Household and individual characteristics paint a clear and

credible picture about the correlates of welfare dependence. While married individuals are substantially less likely than single adults to be on welfare, single adults with children are somewhat more likely to be on the welfare roles. The likelihood also rises unambiguously with the number of children, irrespective of marital status – the cost of raising children has rightfully been a contentious issue in the population economics literature and the public debate throughout the last decades. Interestingly, East Germans are slightly less likely than West Germans to be on welfare, which is presumably to be a reflection of the different mix of income support programs (early retirement schemes) available in this part of the country.

Regarding personal traits, an inversely u-shaped age profile indicates that welfare dependence is somewhat less prevalent in older age groups. For instance, a one-year increase in age at the sample mean of approximately 42 years implies a decline in the dependence risk of 0.01%. By contrast, for a 30 year old the corresponding marginal effect is a positive 0.06%. The coefficient for the female dummy demonstrates the slightly higher likelihood to receive welfare for women. Education is apparently an important correlate of welfare dependence, as particularly low educated individuals, and those without formal training are found on the welfare roles.

Finally, inhabitants of big cities are more likely to receive welfare, a phenomenon that we attribute in our table to the availability of information on income support schemes and the lower opportunity cost of receiving welfare in big cities. Yet, the full spectrum of underlying reasons for this pattern necessarily remains unexplored.

Our specification also comprises a series of interactions of the substantive variables such as age or education with indicators of first- and second-generation foreigners status, respectively (apart from the two entries "high education" and "not employed", see above). That is, all these marginal effects arise in addition to the effect already displayed in the main section of the table. Thus, for instance, while high education and being not employed both display significant effects on the likelihood to receive welfare, their differential effects for immigrants are negligible – in these respects migrants' and native Germans' reactions are identical.

Regarding the migrants of the first-generation, in a remarkably stable pattern the results demonstrate a slightly lower welfare dependence than for native Germans. Remarkable are also the distinct age patterns, indicating that welfare dependence is particularly unlikely for young adults among the first-generation immigrants. Compared to a 30 year old native, the marginal effect of growing older on the dependence risk more than doubles for first-generation migrants of the same age. The associated marginal effect is 0.14%. The

employment situation apparently also exerts a differential impact on immigrants of the first-generation, as the long-term jobless are disproportionally more likely to be on welfare than long-term jobless natives.

For the US a rising duration of residence is apparently a strong correlate of welfare dependence. Quite in contrast, welfare dependence declines significantly as immigrants' duration of residence in Germany proceeds, albeit with declining annual effects. This pattern is certainly to a considerable degree the reflection of institutional regulations, since receiving a work permit at the time of the survey has typically been a matter of years for refugees and asylum seekers.

For second-generation immigrants residing in Germany, we generally observe a pattern of welfare dependence which is very close to that observed among native Germans. The marginal effects of the citizenship indicators demonstrate that, on average, they are relatively unlikely to be on welfare, although the differences to natives are small if significant at all. The age profile of second-generation migrants resembles that of natives, albeit with a somewhat more pronounced curvature. Among second-generation migrants residing in Germany, it is particularly problematic to command only low human capital endowments, while long-term joblessness has apparently not such a detrimental effect.

On balance, first- and second-generation immigrants display distinct patterns of dependence compared to natives but also compared to each other. The estimated marginal effects of the group indicators for the first generation suggest small but statistically significant *lower* probabilities to be observed as receiving social assistance. For example, being a first-generation Turkish immigrant reduces this probability by 0.82 percentage points all other factors equal. The comparable effects for the second generation are even smaller but for foreigners with Turkish, other guest worker country and other EU country citizenship they are statistically significantly *negative*.

To conclude, given the substantially lower education of foreigners as the major reason for their higher average (unconditional) rate of receiving welfare, their risk of being dependent on social assistance payments is conditional on observables by no means higher than that of comparable natives. If this pattern which our estimates reveal for existing migrants to Germany hold true for all future immigration, the message for immigration policy is clear and unmistakable: pursuing a deliberate and systematic immigration policy which balances human rights and the country's human capital requirements is the best option to assure that future immigrants will not become clients of the welfare system in any disproportionate fashion.

4.2 The Dependence of Immigrants on Public Transfer Payments –
What Do People Think

Often it is the case that a clear presentation of the stylized facts or of a convincing body of evidence is not able to prevent the public debate from going astray. The age-old fear that immigrants take jobs away from native workers is a case in point. Despite overwhelming evidence that the negative partial equilibrium effects on the most-affected groups of native workers are – at worst – minor and that they are probably overcompensated by the positive indirect effects, the argument of "native jobs first" is raised again and again by anti-immigrationists in all countries. Unfortunately, since this argument appeals to the strong underlying fear for one's own economic existence, and since it is easy to mask xenophobic attitudes behind such a seemingly well-justified concern, anti-immigrationists are often able to collect support for their – unjustified – claims.

Here, in the case of immigrant welfare dependence, defining an appropriate position is even more difficult, since there is an additional subtlety to consider. On average, it is true that immigrants to Germany are substantially more likely to be on welfare roles. Yet, as the preceding discussion has clearly demonstrated, this is a matter of key socio-economic characteristics, rather than a consequence of underlying unobservable traits. To the contrary, holding observables constant, immigrants are less likely to be on welfare. Thus, existing patterns are largely a result of past immigration policy, and future problems could be prevented by following a deliberate, and more skill-oriented immigration policy.

It seems safe to argue that the typical member of the indigenous German population is far removed from being aware of these subtleties. Thus, it would be extremely important to ascertain what exactly are the perceptions of native Germans regarding this important aspect of immigration and of immigration policy. Thus, after gauging possible gaps between facts and perceptions, and the correlates of such gaps, one could engage into considerations how to systematically remove such disparities. The assessment of perceptions is the topic of this sub-section.

The empirical literature on the perception of immigrants and foreigners as well as the natives' attitudes towards them is quite scarce for Germany. Exceptions are GANG AND RIVERA-BATIZ (1994) using the *Eurobarameter* survey and BAUER ET AL. (2000) performing a cross-country comparison with the 1995 wave of the *ISSP* survey, which for the case of Germany, was conducted as an appendix to the *ALLBUS* (*Allgemeine Bevölkerungsumfrage der Sozialwissenschaften*). The latter paper focuses on the link between immigration policy and the perception of migrants. This paper, by contrast, contributes to the received literature

by using the detailed information available in the *ALLBUS* to quantify the explanatory power of different *individual* variables for the perception of foreigners in Germany.

The *ALLBUS* is an publicly available opinion survey based on a representative sample of residents in Germany which is conducted biannually with varying focuses on different topics. The sample is drawn out of out of all individuals living in private households who, for the 1996 wave, have been born prior to January, 1st 1978. This wave, conducted between March and June 1996, contains questions on the perception of and attitudes towards immigrants and foreigners as well as standard socio-economic characteristics of the respondents. The majority of the respondents are German natives but there is also a representative share of foreigners in the sample.

Attitudes of native respondents

Overall, the respondents perceive immigrants – foreigners as well as ethnic Germans – and non-citizens living in Germany with a considerable degree of skepticism. Unfortunately, the questions on what is called "foreigner" in the *ALLBUS* are not distinguishing between foreign born and German born non-citizens, preventing us from extending the analysis to differences in the perception of first- and second-generation immigrants. However, some of the questions differentiate among immigrant groups, like Turks, Italians, ethnic Germans, and asylum seekers. The upper panel of **Table 7** reports the distribution of agreement of native respondents in East and West Germany with three claims related to the impact of foreigners on the German housing and labor market, as well as on the propensity to convict crimes. Originally, there were seven categories of possible agreement/disagreement with these claims on an ordered scale reaching form (1) "I do not agree at all" to (7) "I agree completely". These seven possibilities were condensed into three categories: (1) and (2) into "no agreement", (6) and (7) into "agreement" and the other three original categories into "medium".

Table 7 reveals that approximately 32% (28%), 20% (43%), and 26% (38%) in West (East) Germany agreed with the respective claim, whereas around 23% (28%), 34% (18%), and 32% (20%) did not. Natives in the western part of the country seem to be more concerned with the housing market impact of immigration than East Germans are, whereas the latter are more concerned with the labor market impact. Presumably as a consequence of this perception, the majority of respondents claimed that immigration should be limited and a substantial fraction even opted for a complete immigration stop. **Table 8** reports the respective shares of answers. Somewhat surprising is the high share of respondents in Eastern

Germany opting for an immigration stop of workers from EU-countries which is considerably larger than that concerning asylum seekers. One might speculate that this is due to the formulation "workers" in the question. Unfortunately, there is no control question with a more "innocuous" formulation.

The distribution of agreement with the claim "Foreigners should be sent back if unemployment is high" (**Table 7**) suggests that labor market worries might play a substantial role in explaining this distribution which are again more pronounced in East Germany. Moreover, the facts that around 30% of respondents in both parts of the country agreed with the claim that foreigners should be prohibited from political activity in Germany, that a substantial share would not agree with a full legal equivalency of different immigrant groups with native Germans, and that more than 43% of the native respondents claimed it would be important that German citizenship is connected to being of German descent (not reported in the tables), suggest that a substantial fraction of the German population is perceiving immigrants mainly as guests which are presumed to live in Germany only for a temporary period. On balance, immigrants from Italy which have on average a longer duration of residency in Germany and ethnic German migrants are perceived much more positively than Turks and especially asylum seekers. This pattern is reflected in the distribution of answers on the questions in the last two panels in **Table 7**.

From the perspective of our analysis in the preceding sub-section the distribution of agreement to the claim "Foreigners are a burden for the social security system in Germany" is of special interest. The distribution of agreement in the original seven categories, reported in **Table 9** is quite uniform with a considerable share of respondents agreeing with this claim. For an analysis of the determining factors of the propensity to opt for different degrees of agreement we dropped the observations on respondents who refused to answer and condensed the remaining information into the three categories as explained above. This procedure provides us with an ordinal variable containing three categories of agreement which we use as the dependent variable in an ordered probit model in the next sub-section.

4.3 Possible Explanations For the Divergence Between Facts and Perceptions

The ordered probit model is a widely used model in a discrete choice framework with ordinal dependent variables. In such models it is assumed that respondents display a certain intensity of opinion which is an unobservable latent variable for the analyst, but can be explained by a set of measurable factors and an unobservable error term. Moreover, it is assumed that this unobservable intensity of opinion is reflected by the observable answers of the respondents,

i.e. respondents choose the category which represents most closely their true opinion on the question. In the example at hand we have three categories and assume that the error term is normally distributed. The resulting ordered probit model can be estimated by Maximum Likelihood. The estimated coefficients for the explanatory variables are quite difficult to interpret directly since they are not equal to the marginal effects of the respective variable. However, these marginal effects, i.e. the change in the probability to choose a certain answer in response to a unit change in the regressors can be calculated from the coefficients and interpreted quite straightforwardly for the *two extreme* categories, albeit not for the middle category (cf. e.g. GREENE (1997)).

Table A.2 in the Appendix explains the set of explanatory variables which contains socio-economic individual characteristics (like age, sex, education etc.), three self-classified attitude variables not related to foreigners, information on the respondents' partner and a measure of possible contacts to foreigners. Concerning the latter variable, more than half of the respondents in the 1996 wave of the *ALLBUS* report contact(s) to foreigners in either family, neighborhood, among friends or at work, but the intensity of these contacts remains unclear. Therefore, we decided to use a measure of exposure to foreigners, i.e. the actual share of foreigners living in the region (*Landkreis*) of the respondent to have an indicator for possible contacts to foreigners and, therefore, on the possible information of the respondent concerning foreigners. **Table 10** reports some descriptive statistics of the variables in the sample.

Estimation Results

The estimated coefficients, associated t-values and marginal effects of our preferred specification are reported in **Table 11**. This specification is the result of several tests on equality restrictions on the parameters of the different categorized explanatory variables. The majority of the estimated coefficients is statistically significant at a 5% significance level.

The observable tendency of agreement displays a u-shaped profile in age, due to the disproportionate share of young respondents displaying agreement. German citizens tend to agree much more emphatically with the proposed statement, as do women (a marginal increase of some 20 and 5 percentage points, respectively). Education is apparently a very important determinant of respondents' attitude to the issue, as it is particularly the low educated who agree with the proposed – and as we have seen completely unreflected – statement.

The estimated marginal effects suggest that residing in Eastern Germany increases the probability to agree to the claim by nearly 10 percentage points. Somewhat surprisingly, after

controlling for other covariates, the labor market variables "currently unemployed" and "fears loss of employment" have no statistically significant effect on the probability to opt for a certain opinion category. This result also holds if both variables are examined separately for East and West Germany. It has been argued above that voicing fears of job loss might be a vehicle for many to mask underlying, rather xenophobic motives for an anti-imigrationist position. Our results seem to corroborate this argument. Moreover, classifying oneself as having a right-wing attitude increases this probability by approximately 5 percentage points, whereas the opposite attitude reduces it by around 10 percentage points.

It is to be expected that the contact with immigrants reduces xenophobic misperceptions. Having a partner with a foreign citizenship at birth reduces the probability of agreement by around 10 percentage points. Living in a region with a low foreigner share increases the probability of agreement by more than 5 percentage points, whereas living in a region with a high foreigner share has no statistical significant impact on the chosen answer category. Sensitivity tests concerning the division of regions with a low foreigner share do not display any substantial impact on the estimation results. However, the latter variable has to be interpreted with caution, since it may be endogenous if foreigners decide to live in regions where natives have a more positive perception of them. Usually, the residential choice of individuals is determined by a complex set of factors, including family relations, friends, labor market opportunities and local amenities. It is possible that for foreigners the perception by natives may contribute to the local amenities of candidate locations of residence, but it seems to be only one element out of a set of several factors. Therefore, we would expect that the endogeneity of this variable is not severe.

5. Conclusions

This paper provided a snapshot portrait of the immigrant population currently residing in Germany, with a special emphasis on the distinction of first- and second-generation migrants. To this end we provided a detailed characterization of both immigrant generations by demographic and socio-economic characteristics. The paper also an in-depth review of the received economic literature, conceptualizing these analyses along the three principal avenues of migration research. The manuscript thus contributes to our understanding of the current state of knowledge regarding the immigrant population of Germany. Most importantly, it has become transparent that there are considerable differences between both immigrants and natives as well as among the different immigrant generations themselves. Nevertheless, this

review also demonstrated that at the current juncture a substantial number of relevant research questions remains unresolved.

The paper proceeds to offer its own substantive contribution to this research, by addressing one of the most contentious issues in the current debate, the welfare dependence of migrants. We contrasted the findings on the determining factors of the moderate risk of migrants to depend on public assistance payments with the perception of immigrants by native Germans using two complementary datasets. Furthermore, we derived some evidence on important correlates of the deviations between facts and perceptions and discussed which explanatory factors might be responsible for this phenomenon.

The implications of our analyses are twofold. First, our results suggest that for the case of Germany we are still in need of generating more empirical evidence on some of the most important questions of migration research. Researchers will hardly be able to complete this task without access to additional, individual-based data material. In light of this topic's importance for the future of our society, it is hoped that any initiative to collect such data will be funded generously, and that policy makers and administrators alike will support such endeavor.

Furthermore, the empirical evidence on the divergence of the perception of immigrants by natives from what we really know suggests that comprehensive education programs and initiatives to ascertain that this evidence is becoming more transparent to the general public may provide the basis for a more realistic perception of what is a large, albeit heterogeneous population group in Germany. But the success of such activities is far from being guaranteed. To analyze whether and to what extent education is really able to resolve misperceptions and to reduce xenophobic attitudes will be one of the key challenges of this line of research. A comprehensive scientific evaluation of this question as well as the effectiveness of other integration programs is one of the signposts guiding our future directions of research.

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Table 1: The Distribution of Immigrants and Natives by Federal State and Citizenship

Distribution of Immigrants and Natives in Mikrozensus 1995	First Generation	Second Generation	Natives
By Federal State (*Bundesland*):			
West Germany			
Baden-Württemberg	22.40%	23.51%	11.99%
NRW	21.29%	22.89%	20.69%
Bayern	18.24%	14.39%	15.14%
Hessen	10.51%	9.83%	7.11%
Niedersachsen	7.09%	9.02%	9.22%
Berlin	6.59%	6.19%	4.17%
Rheinland-Pfalz	5.01%	4.33%	5.06%
Hamburg	3.29%	4.66%	2.08%
Bremen	1.25%	1.99%	0.81%
Schleswig-Holstein	1.95%	1.07%	3.56%
Saarland	1.15%	1.53%	1.36%
East Germany			
Sachsen	0.53%	0.20%	6.09%
Thüringen	0.18%	0.20%	3.38%
Brandenburg	0.22%	0.07%	3.38%
Sachsen-Anhalt	0.22%	0.03%	3.62%
Mecklenburg-Vorpommern	0.10%	0.10%	2.37%
By Citizenship of:			
Turkey	28.56%	31.20%	-
Former Yugoslavia	19.25%	15.21%	-
Other Guest Worker Countries	19.16%	21.49%	-
EU without All Guest Worker Countries	10.39%	14.33%	-
CIS and CEEC	7.62%	4.85%	-
India, Pakistan and Middle East	3.77%	3.03%	-
East Asia	3.60%	2.44%	-
African Countries	2.67%	1.76%	-
USA and Rest of America	2.58%	2.18%	-
Rest of Western Europe	1.11%	1.82%	-
Others/No Citizenship	1.28%	1.69%	-

Notes: Data source is the German *Mikrozensus* of 1995. CEEC stands for Central and Eastern European States, CIS for Community of Independent States.

Table 2: The Education of Immigrants and Natives

Education Levels	First Generation	Second Generation	Native Germans
Highest Schooling Degree:			
Other	21.22%	22.10%	5.73%
Elementary Schooling	49.00%	47.04%	49.80%
Advanced Schooling	12.71%	16.87%	27.20%
Higher Schooling	17.06%	13.99%	17.27%
Formal Training level:			
Other	8.26%	16.95%	5.54%
None	45.68%	35.31%	19.22%
(Technical) University Degree	8.42%	5.76%	10.87%
Vocational Training	34.65%	39.30%	55.48%
Advanced Vocational Training	2.99%	2.68%	8.88%

Notes: Data source is the German *Mikrozensus* of 1995. The highest schooling degree is reported for all individuals older than 15 years. The highest formal training level is reported for all individuals older than 18 years.

Table 3: Sectoral Distribution of Immigrants and Natives

	First Generation	Second Generation	Natives
Unemployment Rate	11.09%	7.65%	6.09%
Size of Labor Force	19,566	4,613	329,112
Share of Population in Germany	4.38%	1.89%	93.73%
Share of Labor Force in Selected Sectors:			
Manufacturing	30.18%	21.24%	23.37%
Construction Sector	8.17%	5.79%	8.38%
Food and Beverages	7.16%	4.96%	2.22%
Banking and Insurance	0.91%	1.34%	3.18%
Total:	**46.42%**	**33.34%**	**37.15%**
Share of All Employed in Selected Sectors:			
Manufacturing	33.94%	23.00%	24.89%
Construction Sector	9.19%	6.27%	8.92%
Food and Beverages	8.05%	5.38%	2.36%
Banking and Insurance	1.03%	1.46%	3.38%
Total:	**52.21%**	**36.10%**	**39.56%**

Notes: Data source is the German *Mikrozensus* of 1995. The labor force comprises all individuals aged 15 to 65 years.

Table 4: Primary Sources of Income for Living

Primary Income Source	First Generation	Second Generation	Native Germans
Work Income	64.84%	62.42%	55.89%
Unemployment Benefit and Assistance Payments	7.05%	5.31%	4.11%
Pensions	7.41%	7.13%	28.56%
Support by Parents or Spouse	7.31%	9.93%	6.84%
Other (Non-Work) Income	0.38%	0.42%	0.43%
Social Assistance Program	11.36%	12.8%	1.76%
Other Benefits (Student Grants etc.)	1.66%	1.99%	2.40%

Notes: Data source is the German *Mikrozensus* of 1995. Reported figures apply to *all* age groups.

Table 5: Summary Statistics – Mikrozensus 1995

	Mean	Standarderror
Dependence on Social Assistance	0.018	0.134
Household Characteristics:		
Married	0.680	0.466
Single with Child(ren)	0.068	0.253
Number of Children	0.496	0.850
Residing in East Germany	0.182	0.386
Individual Characteristics:		
Age	42.531	12.741
Female	0.503	0.500
High Education	0.172	0.377
Low Education	0.538	0.499
(Technical) University Degree	0.115	0.320
No Formal Training	0.229	0.420
Part-Time Work	0.107	0.310
Temporary Work Contract	0.049	0.216
Employed in Public Sector	0.199	0.400
Minor Employment	0.028	0.165
Not Employed	0.072	0.259
Not Employed For More Than Six Months	0.060	0.237
Information Level Indicators:		
Inhabitant of a Small City (less than 20,000)	0.421	0.494
Inhabitant of a Big City (more than 100,000)	0.298	0.458
First-Generation Characteristics:		
Turkish Nationality	0.019	0.135
Yugoslavian Nationality	0.011	0.103
Other Guest Worker Country Nationality	0.011	0.102
Other EU-Country Nationality	0.005	0.070
CIS or CEEC Nationality	0.005	0.068
Other Nationality	0.009	0.093
Age	2.245	9.476
High Education	0.009	0.094
Low Education	0.042	0.202
Not Employed	0.007	0.083
Not Employed For More Than Six Months	0.005	0.073
High Education in Origin Country	*0.005*	0.070
Low Education in Origin Country	*0.036*	0.186
Duration of Residence in Germany	0.892	4.360

Table 5 continued: Summary Statistics – Mikrozensus 1995

	Mean	**Standarderror**
Second-Generation Characteristics:		
Turkish Nationality	0.003	0.056
Yugoslavian Nationality	0.001	0.038
Other Guest Worker Country Nationality	0.002	0.047
Other EU-Country Nationality	0.001	0.037
CIS or CEEC Nationality	0.001	0.022
Other Nationality	0.001	0.037
Age	0.331	3.525
High Education	0.001	0.035
Low Education	0.007	0.085
Not Employed	0.001	0.033
Not Employed For More Than Six Months	0.001	0.026

Notes: Means and standard errors are for the complete sample. Number of observations: 305,962. See Table A.1 and the text for a description of the variables.

Table 6: Estimation Results of Probit Model – Mikrozensus 1995

	Marginal Effect	t-Value
Household Characteristics:		
Married	-0.1081	-36.37
Single with Child(ren)	0.0102	25.25
Number of Children	0.0026	27.65
Residing in East Germany	-0.0033	-14.21
Individual Characteristics:		
Age and Age Squared	-0.0001	-10.45
Female	0.0008	4.72
High Education	-0.0018	-4.73
Low Education	0.0026	10.72
(Technical) University Degree	0.0012	2.23
No Formal Training	0.0114	38.18
Part-Time Work	-0.0038	-13.50
Temporary Work Contract	-0.0041	-13.79
Employed in Public Sector	-0.0026	-11.14
Minor Employment	0.0049	6.03
Not Employed	0.0161	24.34
Not Employed For More Than Six Months	0.0060	11.91
Information Level Indicators:		
Inhabitant of a Small City (less than 20,000)	-0.0013	-6.40
Inhabitant of a Big City (more than 100,000)	0.0018	8.04
Foreigner Characteristics:		
High Education	0.0003	0.32
Not Employed	-0.0005	-0.81
First-Generation Characteristics:		
Turkish Nationality	-0.0082	-19.04
Yugoslavian Nationality	-0.0060	-18.18
Other Guest Worker Country Nationality	-0.0062	-19.55
Other EU-Country Nationality	-0.0049	-19.43
CIS or CEEC Nationality	-0.0048	-18.29
Other Nationality	-0.0056	-18.34
Age and Age Squared	-0.0004	-3.28
Low Education	0.0005	0.42
Not Employed For More Than Six Months	0.0019	2.13
Low Education in Origin Country	*-0.0023*	-3.23
Duration of Residence in Germany and Duration of Residence in Germany Squared	-0.0016	-17.77

Table 6 continued: Estimation Results of Probit Model – Mikrozensus 1995

	Marginal Effect	t-Value
Second-Generation Characteristics:		
Turkish Nationality	-0.0040	-2.75
Yugoslavian Nationality	-0.0018	-0.49
Other Guest Worker Country Nationality	-0.0040	-3.62
Other EU-Country Nationality	-0.0040	-3.51
CIS or CEEC Nationality	-0.0019	-0.49
Other Nationality	0.0024	0.40
Age and Age Squared	0.0005	1.91
Low Education	0.0152	4.33
Not Employed For More Than Six Months	-0.0034	-4.26
Diagnostics:		
Homogeneity of First-Generation Foreigner Groups	256.98 (15.09)	
Homogeneity of Sec.-Generation Foreigner Groups	234.57 (15.09)	
Homogeneity of First- and Second-Generation	298.98 (16.81)	
Homogeneity of Natives and First-Generation	678.49 (16.81)	
Homogeneity of Natives and Second-Generation	241.61 (16.81)	

Notes: Number of observations 305,962. Numbers in parentheses are the critical values of the $\chi^2(5)$ and $\chi^2(6)$ at the 1% confidence level.

Table 7: Attitudes Towards Foreigners – ALLBUS 1996

Claim or Question	No Agreement		Medium		Agreement	
	West	East	West	East	West	East
Foreigners are a burden for the housing market.	23.04%	27.97%	44.84%	43.78%	32.12%	28.25%
Foreigners take jobs away.	34.34%	18.28%	45.67%	38.55%	19.99%	43.17%
Foreigners commit more crimes.	31.70%	19.71%	42.32%	42.60%	25.89%	37.69%
Foreigners should be sent back if unemployment is high.	42.04%	26.18%	40.52%	42.75%	17.43%	31.07%
Foreigners should be prohibited from political activity in Germany.	35.61%	33.30%	36.48%	37.11%	27.90%	29.58%
Full Legal Equivalency to Native Germans For:						
Italians	16.14%	17.83%	44.03%	48.33%	39.83%	33.85%
Ethnic Germans	14.43%	16.21%	41.40%	47.19%	44.17%	36.59%
Asylum Seekers	52.40%	42.66%	36.85%	42.93%	10.75%	14.40%
Turks	31.10%	29.56%	46.01%	46.24%	22.89%	24.21%
Would You Appreciate Living in the Neighborhood of ... ?	Not Appreciate		Medium		Appreciate	
Italians	2.38%	7.15%	61.44%	74.75%	36.18%	18.10%
Ethnic Germans	7.12%	9.33%	68.44%	74.37%	24.44%	16.30%
Asylum Seekers	31.69%	31.16%	58.93%	63.68%	9.37%	5.16%
Turks	17.15%	27.26%	68.00%	65.67%	14.86%	7.07%
Would You Appreciate it if a ... Marries a Member of Your Family ?	Not Appreciate		Medium		Appreciate	
Italian	7.89%	17.98%	67.37%	71.21%	24.74%	10.81%
Ethnic German	12.72%	18.26%	69.79%	73.02%	17.49%	8.72%
Asylum Seeker	45.59%	42.91%	47.70%	53.45%	6.71%	3.64%
Turks	37.56%	42.09%	53.31%	54.09%	9.14%	3.82%

Notes: All figures are the respective shares of total *valid* answers of German citizens, i.e. without respondents who did not answer. The share of valid answers varies between 95.1% and 99.9%.

Table 8: Attitudes Towards Immigrants – ALLBUS 1996

Immigration of Different Groups	Unlimited Access		Limited Access		No Access	
	West	East	West	East	West	East
Ethnic German Migrants	14.69%	13.33%	73.73%	68.93%	11.58%	17.74%
Asylum Seekers	12.68%	11.55%	65.74%	67.47%	21.58%	20.98%
Workers From EU Countries	32.98%	11.11%	54.95%	50.98%	12.07%	37.91%
Workers From Non-EU Countries	8.34%	4.27%	59.26%	46.25%	32.40%	49.48%

Notes: All figures are the respective shares of total valid answers. The share of valid answers varies between 95% and 99.9%.

Table 9: Distribution of Agreement – ALLBUS 1996

Foreigners are a Burden for the Social Security System	All Respondents	Native Respondents Only
No agreement at all	13.43%	12.14%
Disagreement	11.75%	11.41%
Mild disagreement	12.35%	12.17%
Indifference	20.78%	20.65%
Mild agreement	14.23%	14.90%
Agreement	11.55%	12.10%
Full agreement	15.92%	16.64%

Notes: All figures are unweighted shares of total valid answers. The share of valid answers is 99.5%.

Table 10: Summary Statistics – ALLBUS 1996

Variable	Mean	Standarderror
Dependent Variable (coded: 0;1;2)	1.023	0.725
Individual Characteristics:		
Age	46.070	16.765
German Citizen	0.940	0.238
Residing in East Germany	0.317	0.465
Female	0.506	0.500
Living in a Single Household	0.160	0.367
High Degree of Schooling	0.217	0.413
Middle Degree of Schooling	0.296	0.456
Currently Unemployed	0.029	0.169
Employed in Public Sector	0.123	0.328
Currently in School	0.007	0.083
Self-Classified Variables:		
Right Wing	0.093	0.291
Left Wing	0.171	0.377
Fears Loss of Employment	0.113	0.317
Partner-Specific Variables:		
Partner is German Citizen	0.597	0.491
Partner has been Non-Citizen at Birth	0.019	0.136
Proximity Measure:		
Low Share of Foreigners	0.617	0.486
High Share of Foreigners	0.043	0.203

Notes: Number of Observations is 3499. All figures are unweighted sample means and standarderrors, respectively.

Table 11: Estimation Results of Ordered Probit Model – ALLBUS 1996

Statement: "Foreigners are a burden for the social security system."	Coefficient	t-Value	Marginal Effects	
			Pr(Y=1) No agreement	Pr(Y=3) agreement
Individual Characteristics:				
Age × 100	-0.078	-2.14	0.020	-0.030
Age Squared × 100	0.007	4.49	-	-
German Citizen	0.645	7.29	-0.198	0.208
Residing in East Germany	0.303	5.91	-0.093	0.098
Female	0.160	4.11	-0.049	0.052
Living in a Single Household	0.034	0.50	-0.010	0.011
High Degree of Schooling	-0.439	-8.03	0.135	-0.142
Middle Degree of Schooling	-0.187	-3.94	0.057	-0.060
Currently Unemployed	-0.024	-0.22	0.007	-0.008
Employed in Public Sector	-0.200	-3.26	0.061	-0.065
Currently in School	-0.323	-0.90	0.100	-0.104
Self-Classified Variables:				
Right Wing	0.153	2.36	-0.047	0.049
Left Wing	-0.304	-5.99	0.093	-0.098
Fears Loss of Employment	0.097	1.55	-0.030	0.031
Partner-Specific Variables:				
Partner is German Citizen	0.013	0.25	-0.004	0.004
Partner has been Non-Citizen at Birth	-0.320	-2.10	0.100	-0.103
Proximity Measure:				
Low Share of Foreigners	0.159	3.25	-0.049	0.051
High Share of Foreigners	-0.058	-0.54	0.018	0.019

Notes: Number of observations is 3499. The estimation equation included a constant. Marginal effects for the middle category *Pr(Y=2)* are not reported. For definition of the variables see Table A.2.

Table A.1: Variable Description – Mikrozensus 1995

Variablename	Description
Dependent Variable	1 if individual reports social assistance payments as main source of income for living; 0 otherwise
Household Characteristics:	
Married	1 if individual is married; 0 otherwise
Single with Child(ren)	1 if household head is single with one or more children; 0 otherwise
Number of Children	Absolute number of children in household
Residing in East Germany	1 if household resides in East Germany; 0 otherwise
Individual Characteristics:	
Age	Age of the individual in years (15 – 65 years)
Female	1 if the individual is female; 0 otherwise
High Education	1 if the individual has a high schooling degree (Hochschul- or Fachhochschulreife); 0 otherwise
Low Education	1 if the individual has no or a low (Hauptschule) schooling degree; 0 otherwise
(Technical) University Degree	1 if the individual has a (technical) university degree; 0 otherwise
No Formal Training	1 if the individual has no formal training; 0 otherwise
Part-Time Work	Equals 1 if the individual works part-time; 0 otherwise
Temporary Work Contract	1 if the individual has a temporary work contract; 0 otherwise
Employed in Public Sector	1 if the individual is employed in the public sector; 0 otherwise
Minor Employment	Equals 1 if the individual is employed with not more than 630 German Marks monthly earnings; 0 otherwise
Not Employed	Equals 1 if the individual is not employed; 0 otherwise
Not Employed For More Than Six Months	1 if the individual has been not employed for more than six months; 0 otherwise
Information Level Indicators:	
Inhabitant of a Small City	1 if the individual lives in a city with less than 20,000 inhabitants; 0 otherwise
Inhabitant of a Big City	1 if the individual lives in a city with more than 100,000; 0 otherwise

Table A.1 continued: Variable Description – Mikrozensus 1995

Variablename	Description
First-Generation and Second-Generation Characteristics:	*All migrant characteristics are divided into first- and second-generation groups if not mentioned otherwise.*
Turkish Nationality	1 if the individual owns the citizenship of Turkey; 0 otherwise
Yugoslavian Nationality	1 if the individual owns the citizenship of former Yugoslavia; 0 otherwise
Other (European) Guest Worker Country Nationality	1 if the individual owns the citizenship of Greece, Italy, Portugal or Spain; 0 otherwise
Other EU Country Nationality	1 if the individual owns the citizenship of any other EU country; 0 otherwise
CIS or CEEC Nationality	1 if the individual owns the citizenship of a GUS or CEEC country; 0 otherwise
Other Nationality	1 if the individual owns the citizenship of any other country; 0 otherwise
Age	Interaction term between foreign nationality and age
High Education	Interaction term between foreign nationality and high education
Low Education	Interaction term between foreign nationality and low education
Not Employed	Interaction term between foreign nationality and not employed
Not Employed For More Than Six Months	Interaction term between foreign nationality and not employed for more than six months
High Education in Origin Country	*1 if a first-generation migrant was older than 25 years at immigration and has a high schooling degree*
Low Education in Origin Country	*1 if a first-generation migrant was older than 14 years at immigration and has a low schooling degree*
Duration of Stay in Germany	*Duration of Stay in Germany in years for first-generation migrants*

Notes: Data source is the 1995 wave of the Mikrozensus. See also text for a description of the variables.

Table A.2: Variable Description – ALLBUS 1996

Variablename	Description
Dependent Variable	Degree of agreement on the claim „Foreigners are a burden for the social security system". Coded 0: no agreement, 1: medium, 2: agreement
Individual Characteristics:	
Age	Age of the respondent in years
German Citizen	1 if the respondent has a German citizenship; 0 otherwise
Residing in East Germany	1 if the respondents lives in Eastern Germany; 0 otherwise
Female	1 if the respondent is female; 0 otherwise
Living in a Single Household	1 if the respondents lives in a single household; 0 otherwise
High Degree of Schooling	1 if the respondents holds a high schooling degree (*Hochschul-* or *Fachhochschulreife*); 0 otherwise
Medium Degree of Schooling	1 if the respondents holds a medium schooling degree (Mittlere *Reife*); 0 otherwise
Currently Unemployed	1 if the respondents was unemployed at the time of the interview; 0 otherwise
Employed in Public Sector	1 if the respondents was employed in the public sector at the time of the interview; 0 otherwise
Currently in School	1 if the respondents was in school at the time of the interview; 0 otherwise
Self-Classified Variables:	
Right Wing	1 if the respondent classified himself or herself as having a right wing attitude; 0 otherwise
Left Wing	1 if the respondent classified himself or herself as having a left wing attitude; 0 otherwise
Fears Loss of Employment	1 if the respondent reported to be afraid of loosing his job; 0 otherwise
Partner-Specific Variables:	
Partner is German Citizen	1 if the partner of the respondent holds the German citizenship; 0 otherwise
Partner has been Non-Citizen at Birth	1 if the partner of the respondent has had another citizenship at birth; 0 otherwise
Proximity Measure:	
Low Share of Foreigners	1 if the actual share of foreigners residing in the region (*Landkreis*) of the respondent was lower than 8%; 0 otherwise.
High Share of Foreigners	1 if the actual share of foreigners residing in the region (*Landkreis*) of the respondent was equal or higher than 16%; 0 otherwise.

Notes: Originally, there were seven possible categories for the self-classified variables "Right Wing" and "Left Wing". These two variables combine the two extreme categories at each end of the scale.

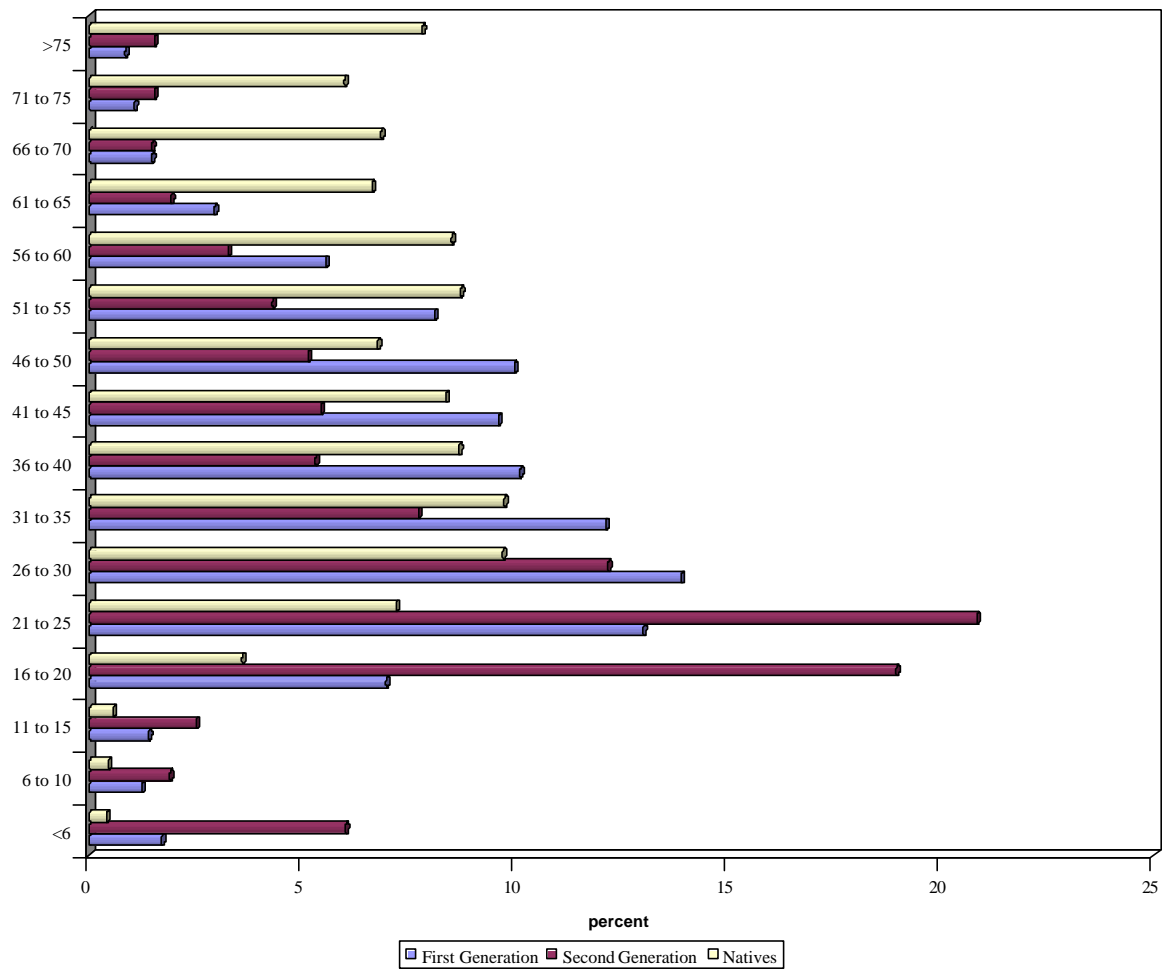**Figure 1: The Age Distribution of Immigrants and Natives - Mikrozensus 1995**

First Generation   Second Generation   Natives

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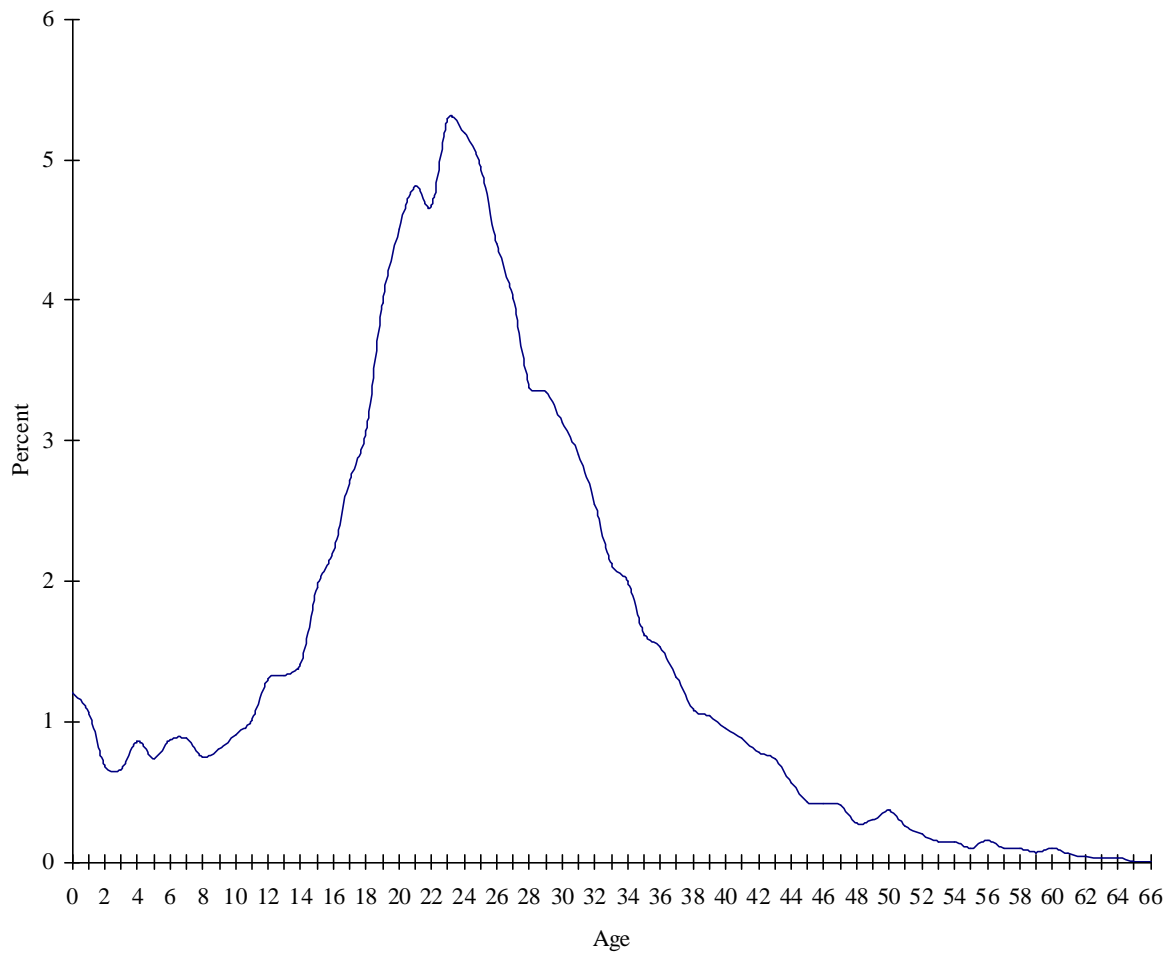**Figure 2: Age at Immigration to Germany - Mikrozensus 1995**

Figure 3: Year of Immigration of 1995 Stock of First-Generation Immigrants - Mikrozensus 1995
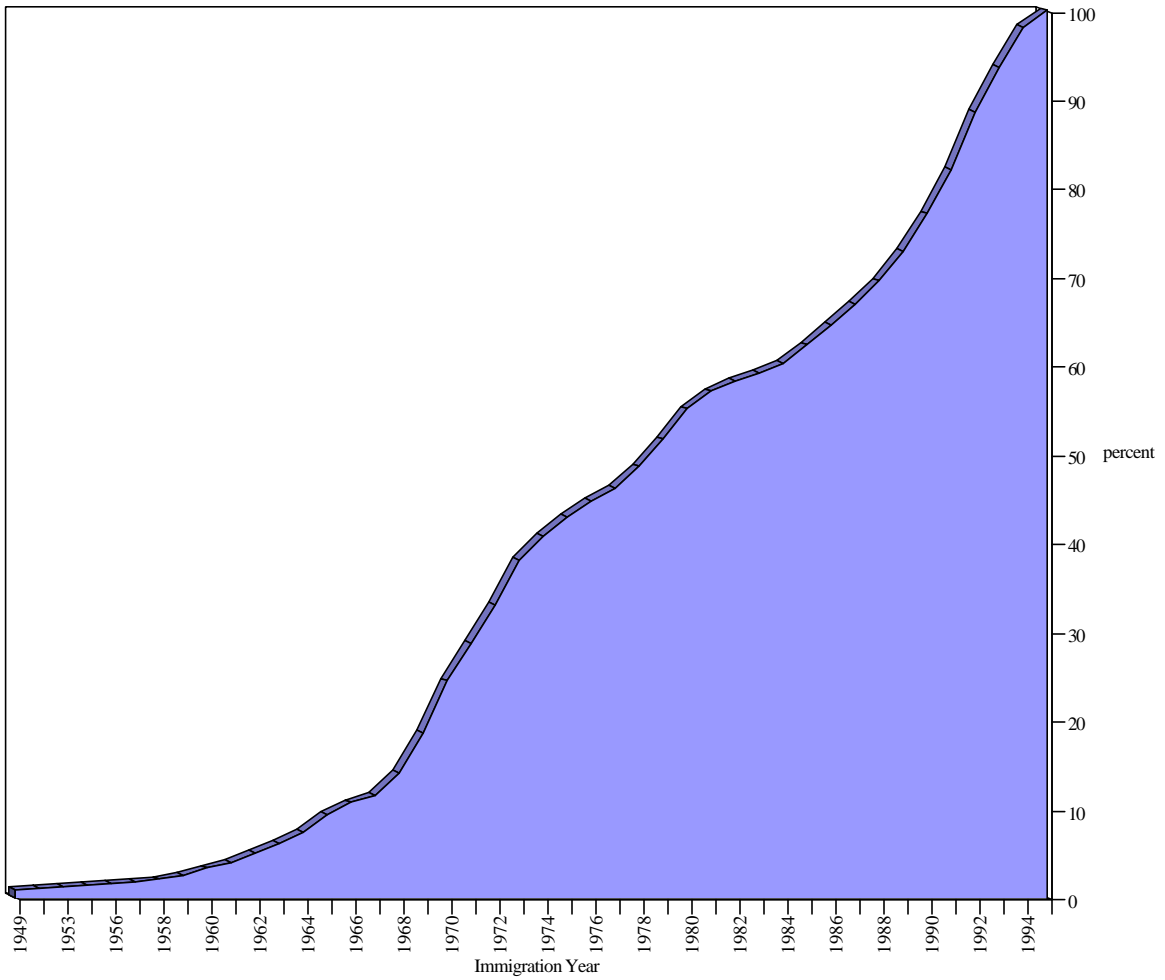
Figure 4: Household Income - Immigrants vs. Natives (Mikrozensus 1995)

first generation family head   second generation family head   native family head