

UCLA

On-Line Working Paper Series

Title

ASSIMILATION IN A NEW CONTEXT: THE ROLE OF ORIGIN AND NATIONALITY ON SECOND
GENERATION EDUCATIONAL ATTAINMENT IN GERMANY

Permalink

<https://escholarship.org/uc/item/8px0r2w5>

Author

Luthra, Renee Reichl

Publication Date

2008-12-01



California Center for Population Research
University of California - Los Angeles

Assimilation in a New Context: The Role of Origin and Nationality of Second Generation Educational Attainment in Germany

Renee Reichl Luthra

CCPR-2008-050

December 2008
Last Revised: December 2008

California Center for Population Research
On-Line Working Paper Series

**ASSIMILATION IN A NEW CONTEXT:
THE ROLE OF ORIGIN AND NATIONALITY ON SECOND GENERATION
EDUCATIONAL ATTAINMENT IN GERMANY**

**Renee Reichl Luthra
UCLA Sociology
Draft: December 16, 2008**

*This paper has not yet been peer reviewed. Please do not copy or cite without permission.

Direct correspondence to Renee Reichl Luthra, DIW Berlin, Mohrenstr. 58, 10117 Berlin, Germany; E-mail: rreichl@ucla.edu. Support for this research was provided by the Berlin Program for Advanced German and European Studies.

Thanks to Roger Waldinger for comments on this draft, as well as the Forschungsdatenzentrum der Länder im Amt für Statistik Berlin-Brandenburg for providing access to the data.

I. Introduction

Educational attainment is the most critical intervening variable between social origins and destinations (Hout and Diprete 2005; Breen and Lujikx 2004). Although immigrants to Germany generally stem from poor socioeconomic backgrounds, if their descendents obtain educational and vocational qualifications, their life chances are much more likely to converge with those of Germans without a migration background. As the intergenerational assimilation of immigrants depends on the educational attainment of the second and later generations, this outcome is a key indicator for tests of competing models of immigrant incorporation. Given that 30% of the West German population under the age of 25 reports a migration background (Bildungsbericht 2008: Tab. A1-4A), the educational attainment of this group is critical demographically and politically as well.

The high level of scholarly and political interest in the topic is reflected in many recent publications, most of which report poor educational outcomes amongst immigrants and their children (Kalter et al 2007, Gang and Zimmerman 2000; Worbs 2003; Fertig and Schmidt 2001). Explanations for this finding are numerous: on the one hand, many researchers argue that the children of immigrants perform poorly because they are the children of negatively selected, economically disadvantaged parents (Kristen and Granato 2004; Kalter, Kalter et al 2007), finding that after controlling for the social background of immigrant children, very little ethnic inequality remains. On the other hand, other scholars argue that migrant specific disadvantages such as institutional discrimination (Gomolla and Radtke 2002), a lack of citizenship (Nordrhein-Westfalen Bericht 2008), school segregation (Stanat 2006; Kristen 2002), and language ability (Ohlinger 2007), among other variables, also play a large role in creating immigrant/non-immigrant inequality in educational attainment in Germany, even net of class background.

Unfortunately, both empirical and theoretical generalizations drawn from these studies remain tentative. Relying primarily on the German Socio-Economic Panel Study (GSOEP) and the German Mikrozensus, nearly *all* of these studies focus on the former guest workers and their children. Yet while former guest workers are the most visible and perhaps most controversial foreign born group in Germany, as of 2005 they comprise less than half of German residents with a

migration background (Statistisches Bundesamt 2007:316). Former guest workers are also unusually homogeneous in terms of their low human capital, concentration in unskilled blue collar sectors, time of migration, and context of reception. In contrast, the ethnic German *Aussiedler*, asylum seekers, and more recent EU migrants who comprise the remainder of the migrant population display a bifurcated human capital distribution, report variation in German language skills, and arrived through different legal channels that are likely to impact their and their children's integration. Given these differences, it is impossible to extrapolate from the experience of guest worker's children to the situation of immigrant integration in Germany more generally. In addition, assessments focusing *solely* on the children of guest workers lack the variation in independent variables (such as context of reception and legal status) that are central to recent models of immigrant integration. Initial comparisons between the children of guest workers and other migrants is suggestive of considerable variation in educational performance (Weiss and Thränhardt 2005; Fuchs and Sixt 2008a; Educational Report 2008), but has yet to be systematically confirmed with nationally representative data. For these reasons, prior work needs to be expanded to provide basic descriptive information on non-guest worker migrant groups as well as to test for competing hypotheses drawn from the immigrant incorporation literature.

My paper addresses this gap in our understanding of second generation integration by modelling the educational attainment of the children of immigrants using 2005 Mikrozensus data. While earlier Mikrozensus years have been used to study this topic before (Kirsten 2007; Riphahn 2003), only the Mikrozensus 2005¹ allows the identification of naturalized persons with a migration background. This allows me to improve on this prior research in three ways. First, I can include ethnic German *Aussiedler* in my analysis, who currently represent over 9% of the entire population and nearly half of all those with a migration history (Statistisches Bundesamt 2007). As I will discuss below, guest

¹ Mikrozensus 2006, now available, also has the necessary information to include naturalized migrants and *Aussiedler*; unfortunately, the two samples cannot be combined together because the Mikrozensus follows a rotation scheme, in which every year 3/4th of the sample is repeated. The Mikrozensus files made available to guest researchers do not include the necessary identification variables to allow researchers to identify which part of the sample is repeated. At the moment, I am currently negotiating access to the variables that will allow me to include the 1/4th new respondents from the 2006 file.

workers and ethnic German *Aussiedler* represent two opposite poles in terms of the context of reception, and thus comparisons between the children of *Aussiedler* and the children of guest workers provide an excellent test of the impact of the legal and social context of reception on the performance of the second generation. Second, I can also include newer and less studied migrant groups, most importantly naturalized migrants, but also the numerically small and *positively* selected migrant streams from the EU, as well as refugee streams from Africa, Iraq and Iran, and Southeast Asia. The inclusion of *Aussiedler*, naturalized migrants, and these smaller groups introduces greater variation in class background as well as allowing me to test for the impact of citizenship on second generation performance. Third, I follow Kirsten (2007) and test not only for the main effects of different national origins but also for the interaction between origins and class background, further expanding her analysis to include tests for interactions between origins and categorical educational categories as well.

Following this brief introduction, the paper is organized as follows: I first provide a brief review of Germany's migration streams and education system and the current state of the art in second generation education research. Next, I apply competing assimilation models from the United States to formulate hypotheses that would explain variation found in second generation educational attainment in Germany. I then describe the data and my variables and provide results. In line with previous research, I find that second generation *disadvantage* in educational attainment is largely explained by class background. In contrast to prior research, however, my study finds that significant differences in educational achievement between Germans and different national origin groups remain even after controls for social background. Most importantly, I find evidence of *higher* achievement among many immigrant groups – including Turks - after controlling for class background. By introducing categorical interactions between parental education and immigrant origin, I link this new finding to the fact most second generation groups are less adversely affected by low parental human capital than are Germans without a migration background: this results in greater convergence in the educational attainment of children with and without a migration

background than would be expected by their parental background alone. Including an indicator for non-citizens further explains why my findings diverge from prior Mikrozensus research (which included only non-citizens), as non-citizens display consistently lower educational attainment than do citizens with a migration background, even after parental background controls. In my conclusion, I discuss the implications of these findings on the applicability of competing assimilation models drawn from the United States. I argue that the findings of *greater* convergence than would be expected from the class background of migrants, combined with the significant, *positive* effect of naturalization as an indicator of integration, shows initial support for revised assimilation models in the US (Alba and Nee 2003; Brubaker 2001).

II. Background

This paper takes into account the fact that the second generation in Germany stems from diverse origins, testing in particular for the impact of parental socioeconomic background and migration origins, and nationality on second generation educational attainment. To motivate this research, I first briefly review the German case and then draw on theoretical perspectives on second generation integration to develop hypotheses.

The German Case

The most studied immigrant group in Germany is the former “guest workers.” To aid in post-WWII reconstruction, Germany recruited over one million (mostly male) workers primarily from Italy, Spain, Greece, Turkey and the former Yugoslavia from 1955 until 1973. The guest worker contract was originally set at one year and contingent upon continued employment for renewal. Very low skilled immigrants, many from rural backgrounds, were recruited for unskilled or semiskilled manufacturing jobs. The provisional nature of the program discouraged investment in learning the German language or networking with Germans (Dustmann 1999; Diehl and Schnell 2006). Recruitment into the worst jobs marginalized guest workers in the labor market, blocking their mobility (Constant and Massey 2003; Bender and Seifert 1998; Fertig and Schmidt 2001). Though guest worker employment was high until the recession of 1973, since then guest workers

are more susceptible to entering unemployment, experience longer unemployment durations, and are more likely to exit unemployment into unskilled jobs (Kogan 2004; 2007). Through draconian naturalization laws and the introduction of return incentive schemes, the German government attempted to encourage migrants to return home throughout the 1970s and 1980s². Public policy during this time mirrored the attitudes of the German public towards the guest workers, as guest worker immigrants drew negative media attention (Frick and Wagner 2001). The wishes of Germans notwithstanding, most guest workers stayed and through their right to family reunification (Joppke 1999) called their families to them.

Guest worker immigrants in Germany represent an exemplary case of a negative context of reception. Though the workers were officially recruited by German employers and facilitated through the German state, their permanent settlement was never desired and actively discouraged. The initial isolation of former guest workers has had lasting consequences in the low rates of social integration reported, for instance that only a third of foreign born Turks report a German friend (Diehl 2006) and continuing low rates of language learning (Haug 2008). Finally, though unemployment was low upon arrival, guest workers found themselves essentially “trapped” in the secondary labor market of low skilled, blue collar work, with little evidence of much upward mobility across the career in terms of wages or occupation (Constant and Massey 2003; Bender and Seifert 1998; Fertig and Schmidt 2001).

Though former guest worker “foreigners” receive the bulk of research attention, German nationals currently represent nearly half of the foreign born population in Germany (Statistisches Bundesamt 2007). While they are difficult to identify in national data, ethnic Germans, or foreign nationals of German descent, comprise a large share of this group. Ethnic Germans are German minorities living in Eastern Europe after WWII, where many of them faced considerable discrimination. To be recognized as ethnic Germans, potential migrants need to prove German

² After the end of the recruitment, the German government attempted to discourage immigrant settlement by restricting working permits for family members and prohibiting continued immigration into regions with guest worker concentrations over 12% (Eryilmaz and Jamin 1998: 397). In 1984, the German government also offered a lump sum to defray travel costs for guest workers to return home.

ancestry, discrimination, and since 1997, some German language ability. Immediate granting of German citizenship and integrative assistance, including language assistance, recognition of foreign credentials, and housing support, are a legal guarantee for ethnic Germans, following the Basic Law of 1949. In addition to state support, ethnic Germans have historically enjoyed a higher level of societal support, though opinion polls and national discourse have shown that this has begun declining in the 1990s, as more mixed and less “German” eastern Europeans began arriving (Groenendijk 1997; Dietz 2000; Eckert et al 1999).

While the legal and societal context of reception of ethnic Germans is more positive, and more permanent, than that of guest workers, Konietzka and Kreyenfeld (2001) find that ethnic Germans receive very little returns on their education, and are much more likely than Germans without a migration background to be mismatched in terms of their job qualifications (Greif et al 1999; Kreyenfeld and Konietzka 2002). Ethnic Germans from the Soviet Union and the highly skilled, in particular, face downward mobility in Germany (Kogan 2007; Dietz 2000; Greif et al 1999). It is likely that the disruption of migration in both the career and social fields of *Aussiedler* may have outweighed their positive context of reception, resulting in their downward mobility. Still, we would expect that their German-born children should benefit from their legal status, greater familiarity with German, and integrative assistance.

Finally, there is much less literature on the remaining immigrant groups in Germany. EU migrants, which I count here as immigrants from the EU before the 2004 enlargement,³ generally enjoy the legal right to live and work in Germany, with a high level of social acceptance. Many of the EU members are highly skilled workers, business owners, and students taking advantage of the free movement of workers within the EU (Geddes 1998; see also high levels of entrepreneurship and human capital among this group reported by Tolciu and Schaland 2008). Third country nationals typically entered Germany either as family members of guest workers under the family reunification programs or as asylum seekers. Third country nationals therefore were not selected as

³ Immigrant parents of second generation children under consideration in this paper immigrated before 1993

economic migrants, nor do they share the political advantages of *Aussiedler* or EU nationals. An important distinction should first be made between third country nationals who are family members of permanent residents, those who are immediately accepted as refugees, and those who never become officially recognized, resulting in a large number of “de-facto” refugees with no residency permit at all (OECD 2007). For instance, I include Southeast Asians in my analysis, many of whom arrived as refugees in West Germany fleeing the Vietnam War in 1975, whereas others were recruited as contract workers by the former German Democratic Republic (Wolf 2007). While those who arrived in West Germany with asylum status enjoyed help from the government and residence allowances, the former East German contract workers lost their right to work after Unification. Other groups, such as those from Africa, the Middle East, and Eastern Europe, display the bifurcated skill and labor market distributions characteristic of refugee streams. While more of the first generation of these groups is employed as service sector salary earners, rather than blue collar *Arbeiter* (own tabulations with Mikrozensus 2005/2006), they are also much more likely to be unemployed. The diversity found among third country nationals makes their context of reception difficult to generalize, therefore I disaggregate the groups as far as my data will allow in analyses, and maintain a more descriptive aim by including them in my paper.

The Education System and Second Generation Performance in Germany

It is clear that there is great diversity in the origins, general characteristics and legal and societal reception of immigrants in Germany. The central question of this paper is if, and how, this diversity might explain variation in the educational performance of the second generation.

The German educational system is highly stratified: children are streamed into different kinds of secondary schools after only 4 years of schooling, based on their previous achievements. The most common options are *Hauptschule*, *Realschule*, and *Gymnasium*. *Hauptschule* is the lowest track, covers general topics from grades 5-9 or 10 and concludes with a *Hauptschulabschluss* that has relatively little worth on the labor market but serves as a basis for further vocational training. *Realschule* is a middle track, also from grades 5-10, but providing a more extensive general

education and ending in a *Realschulabschluss* (formerly known as a *Mittlere Reife*) allowing for the opportunity to go on to higher secondary level courses that lead to vocational or higher education entrance qualifications. Finally, *Gymnasium* is academically orientated and vigorous preparation for tertiary education, lasting from 5 to 13th grade.

The choice of secondary schooling track has lasting implications, because while switching between school types is allowed, only 3% of eligible students switch every year, and downward switches are over 5 times as common than upward switches (Education Report 2008: 65-66). In order to continue schooling at the tertiary level, either in a *Fachhochschule* (University of Applied Sciences) or at a *University*, students must obtain a *Fachhochschulreife* (for the former) or an *Abitur* (for the latter). Only those students enrolled in *Gymnasium* or those who progressed to an upper secondary school after obtaining the *Realschulabschluss* can obtain this necessary certification.

This critical “transition” point of obtaining the *Fachhochschulreife* or *Abitur* is the focal point of this paper. Research from multiple data sources confirm that children with a migration background are much more likely than Germans to be streamed into a *Hauptschule* and thus are navigated away from pursuing or obtaining a *Fachhochschulreife* or *Abitur*⁴ (Kirsten 2002; Education Report 2008; Nordrhein Westfalen Report 2008; Gamorolla and Radtke 2002; Kirsten 2007). Currently, the poor performance of second generation youth is taken for granted as fact in both scholarly and policy literature⁵; therefore, rather than trying to explain variation in educational attainment, the majority of second generation educational research aims to identify the barriers to second generation attainment.

The most dominant explanation for this inequality in second generation achievement is the social background of migrant families. The relatively high level of class reproduction in Germany (Breen 2004), and its negative effect on the educational attainment of second generation youth, has

⁴ Though the Educational Report 2008 finds considerable heterogeneity by national origin, which this study confirms.

⁵ Hence the ironic title of a recent dissertation by Ulrich Raiser: “Erfolgreiche Migranten im deutschen Bildungssystem - es gibt sie doch „ (Successful migrants in the German educational system: they actually do exist)

been documented in recent studies using PISA 2000 and 2003 data (OECD 2006), the GSOEP (Zimmerman 2000), and the German Mikrozensus (Kalter et al 2007; Kirsten 2007). Controlling for class background generally accounts for most of the inequality between the children of immigrants and Germans without a migration background. However, negative national origin coefficient sometimes remains for the children of especially Italian (Kristen 2007) and Turkish (Alba et al 1994; Riphahn 2003) children, and a positive coefficient remains for Greek children (Alba 1994; Kristen 2007). While the degree of inequality in second generation educational attainment that remains net of background controls differs by the data set, Turkish and Italian youth fairly consistently continue to suffer an “ethnic disadvantage;” unfortunately, due to the different variables available in different datasets, there is little consensus of *why* ethnic disadvantage remains (for a discussion of inconsistencies between results, see Diefenbach 2007). In contrast, the *positive* coefficients observed for Greek youth are rarely theorized (though Alba (1994) and Kirsten (2007) both attribute Greek academic success to the presence of alternative Greek-language schools).

The most common explanations for national origin differences after class are citizenship, discrimination, language ability and social and school segregation.

Citizenship has been identified as a “bright” boundary with important social consequences in Germany (Alba 2005): though the actual rights or status conferred by citizenship may be minimal (Soysal 1994), we might expect naturalization to represent a host of other (usually) unmeasured characteristics such as permanent settlement aims and cultural and social belonging that are positively associated with achievement (Dustmann 2000; Alba and Nee 1997). Empirical tests on the children of guest workers with the GSOEP have generally shown that, net of social class background, citizenship appears to play little or no role in the educational attainment of the second generation (Riphahn 2001; Gang and Zimmerman 2000), but need to be extended with larger data and on non-guest worker origin youth.

Unlike citizenship, the importance of language ability on second generation educational attainment finds consistent empirical support. Language ability is frequently at the forefront of

discussions of integration in Germany (OECD 2006; Integrationsbericht 2008). Even after background controls, speaking another language in the home as a significant negative effect on achievement scores in Germany (PISA 2006), and second generation children who speak German well are shown to have a higher likelihood of entering higher academic tracts and completing schooling certifications (Riphahn 2003). Even during primary school, findings from the IGLU study show that controlling for the language spoken in the home accounts for over 25% of the initial reading disadvantage of Turkish fourth graders (Kirsten 2008:Table 3).

A further obstacle to second generation attainment could be discrimination against immigrants, or certain ethnic groups. Self reports of former guest workers as well as experimental tests reveal that foreigners of all backgrounds, but in particular those of Turkish backgrounds, experience discrimination in access to jobs and housing (Goldberg et al 1996; Faist 1993; Nauck 2001) as well as in daily life interactions such as visiting a bar or making friends at a university (Klink and Wagner 1999). A groundbreaking study of “institutional discrimination” by Gromolla and Ramdtke (2002) in Bielefeld reveals that migrant children are systematically disadvantaged – less likely to attend kindergarten, and therefore less likely to be prepared for school and more likely to be placed in “special schools” or be recommended for *Hauptschule*, due in large part to their perceived difficulty with German by their teachers.

Finally, the social ties and school environment are a final explanation of second generation disadvantage. Second generation students are unequally distributed in Germany, both regionally and due to their overrepresentation in *Hauptschule* (PISA 2006; Education Report 2008). Children of ethnic Germans and former guest workers both display less interaction with Germans without a migration background. Dietz (1999) finds that among young ethnic Germans, for instance, over 50% have a friendship circle which is entirely ethnic German immigrants; likewise, Diehl and Schnell (2006) find that 40% and 30% of both Turks and Yugoslavs, respectively, do not name a German native as one of their closest friends. These findings are confirmed by Nauck (2001), who finds that Italians, Turks, Greeks and Ethnic Germans report no more than 25% of their friendship

network as German. While the effect of a high percentage of minority youth on educational achievement is debated, both Stanat (2006) und Kirsten (2002) find that the representation of foreign children in a school has an inverse relationship with the likelihood of recommendation for *Gymnasium* or *Realschule* among the children of guest workers. Conversely, there is considerably less evidence of a positive effect of ethnic ties on socioeconomic outcomes in Germany (Kalter 2007). Therefore, it is possible that continued segregation in German schools and a lack of social integration with Germans negatively impacts the educational attainment of the second generation.

Unfortunately, no data set exists that allows researchers to test *all* of these competing explanations (Diefenbach 2007; Kalter 2008); moreover, none of these explanations could explain second generation advantage of the kind found among the Greeks. I therefore opt for a different tactic in understanding second generation attainment, applying explanatory hypotheses drawn from the recent assimilation models in the US migration literature on the German case. My theoretical contribution therefore differs from previous work in that, in contrast to testing for specific sources of second generation educational disadvantage that are hypothesized to impact all immigrant groups *uniformly*, I draw hypotheses from more general models of immigrant incorporation that seek to explain *variation* in the intergenerational integration of different immigrant groups. Empirically, my work differs from the majority of previous research in that in order to obtain the necessary variation in class background, context of reception, and integration levels of the immigrant generation necessary to test assimilation models, I include guest worker, *Aussiedler* and other immigrant children, and control both for class background *and* integration measures such as naturalization and parental intermarriage with nonmigrant Germans.

III. Theoretical Perspectives

As reviewed above, the German literature on the educational attainment of second generation youth has traditionally focused on the impact of specific barriers to attainment. Yet we know that not all immigrants are equally disadvantaged, and that some migrant groups have even higher levels of human capital and better labor market outcomes than Germans (Tolciu and

Schaland 2008; Statistisches Bundesamt 2007). Will these migrants be able to transfer their advantage to the second generation, and how? How much variation in second generation performance can be explained by class background, might naturalization also explain the advantage in educational outcomes found among some children of immigrants (as suggested by the Nordrheinwestfalen Study 2008)? Controlling for the effect of the different barriers outlined above cannot answer these questions.

Instead, the answers to some of these remaining questions might be found in an emerging literature in the US. A related literature on the “new” second generation in the United States, similar in age and in the diversity of its demographics to the second generation in Germany, has developed in parallel⁶ to the German one. Recent integration research in the United States has revolved around a debate between two competing revisions of assimilation theory, the so-called “neo-assimilation theory” (Alba 2008) and the “segmented assimilation theory (Portes and Zhou 1993; Portes and Rumbaut 2001), which use very difficult models to predict and explain variation in immigrant and second generation stratification outcomes. Below, I briefly outline the major tenets behind each of these theories and draw from them hypotheses to explain educational attainment among the second generation in Germany, which I will test empirically with Mikrozensus data.

Though assimilation theory has deep roots in the US, the concept of immigrants “melting” into a common culture and social system lost legitimacy during the 1950s and 1960s, as new research and social movements brought attention to the continuing inequality and ethnic differentiation that continued to exist in the US. As the children of the “new” post-1965 mass migration come of age, however, assimilation models have gained new currency in the US. In the “neo-assimilation” model, the concept of a core culture has been softened to a less Anglo-centric, more diverse “mainstream,” and the assimilation path reconceived to allow for greater variation in intergenerational mobility (Brubaker 2001). To state the argument briefly, assimilation theorists argue that the majority of immigrants will become increasingly similar – culturally, socially, and in

⁶ Though with some cross pollination with the German case, see in particular the work by Faist (YR), ALba (1994;1997) and the edited volume by Kurthen et al (1998)

terms of their educational and labor market outcomes - to the native born population across time and across generations. While not all immigrant groups will converge with the native born population at the same rate, nor across all dimensions, convergence will be the dominant trend.

Convergence between immigrants and their descendants and those with no migration history occurs at both the societal and individual level. At the individual level, both Alba and Nee (2003) and Esser (2001; 2004) utilize basic rational choice modeling: insofar as German language skills, employment in German firms, and German contacts afford greater material rewards than skills and social ties from the sending country, immigrants and their children face an incentive structure that encourages them to become more like native Germans. In other words, immigrants can “cross” socioeconomic, linguistic, and institutional boundaries from “migrant” to “German. The new assimilation models also expand on this more unidirectional conceptualization of assimilation, arguing that at the societal level, boundaries between migrants and natives are malleable and thus can shift – move outward to include migrants, or blur- become less important to the social stratification of the society. Assimilation theory predicts that across time and generations, both individual level crossings as well as societal boundary blurring and shifts will lead immigrants and their descendants to have *distributions* across social, cultural, and stratification outcomes that are more like those of Germans without a migration background.

Proponents of the “segmented assimilation” model, criticize the assumption of an incentive structure for boundary crossing as well as the possibility of shifts in social boundaries. First, participation in an ethnic economy and the delay of assimilation are hypothesized to be viable, even preferable, alternatives to the convergence outlined above. Capitalizing on “ethnic capital”, foreign language abilities and social contacts with the sending countries may provide a path to upward mobility in an ethnic economy that is independent of receiving country skills and institutions. Moreover, assimilating culturally and socially may even have a *negative* effect on upward mobility for the second generation, as they stand to lose their ethnic capital without which they are at the

mercy of a system that provides little upward mobility for the lower classes (Portes 1997; Portes and Rumbaut 2001).

Second, the malleability of social boundaries between immigrants and their descendents and the mainstream is also questioned. Segmented assimilation scholars point to the importance of the context of reception as a determining factor in immigrant integration: while some immigrants are accepted and encouraged by the receiving state and society, others suffer a negative context of reception that can make mobility highly improbable. If the boundaries of citizenship, religion, or ethnicity are too “bright” and durable (Alba 2005) - if immigrants, Muslims, or “foreigners” can never be seen as German- than immigrants may find their entrance into the mainstream effectively blocked by discrimination from the dominant natives.

These scholars do not predict a master trend of increasing convergence but rather one of lasting inequality and even *divergence*, or dissimilation (Riphahn 2003). For migrants who enter at the bottom of the labor market and face a negative context of reception, such as guest worker migrants, segmented assimilation theory hypothesizes that they would be effectively blocked from upward mobility, instead “stagnating” in the very low socioeconomic standing of their parents (Portes et al 2008). Migrants who are negatively received, but can draw on ethnic capital for upward mobility, will remain separate from Germans without a migration history culturally and socially but experience upward mobility in terms of their educational and labor market success. Only the children of migrants who are positively received (and for whom the boundaries are therefore the most “blurred”), such as ethnic Germans, are expected to rapidly experience both cultural and socioeconomic convergence with Germans without a migration history.

Hypotheses

From this very brief summary of these two theoretical perspectives it is possible to formalize several competing hypotheses that can be applied to explain variation in the educational attainment of the second generation in Germany:

1. The main effect of class background

Both assimilation and segmented assimilation theories allow for a large and significant main effect of class background on second generation educational performance, agreeing that immigrants of higher class background, on average, will perform better than immigrants of lower class background.

H1: Parental income and occupational and educational status will have a positive relationship to their children's educational attainment.

In addition to the pure stratification argument above, however, both theories also predict continued variation between immigrants and natives. Assimilation theory argues for greater *convergence* than would be expected from the class background of immigrants alone, whereas segmented assimilation predicts greater *divergence*.

2. The effect of parental education by origin:

For the assimilation prediction to be true, national origin groups with low levels of education among the foreign born will have to experience *higher* levels of intergenerational mobility than the native born population of the same educational background (in order to “catch up” and converge). While the theory is less explicit regarding highly skilled groups, we might also expect that groups with higher levels of education should experience *lower* levels of upward and lateral mobility than the native born population of the same background (so that their educational distributions will become more like those of native Germans, some of their children will have to experience *downward* mobility).

H2_a: Immigrants with very low average education levels will experience higher levels of upward intergenerational mobility than Germans without a migration background. National origin groups with very high education levels will experience more downward mobility than Germans without a migration history.

Segmented assimilation theory, in contrast, predicts lasting inequality between immigrants and Germans without a migration background, with negatively received and poor groups stagnating

in their low position, whereas more positively received and higher status immigrant groups maintain or increase their advantage.

H2_{sa}: National origin groups who have a positive context of receptions (ethnic Germans and EU migrants) should experience more upward mobility than native Germans and other migrant groups with a neutral or negative context of reception (guest workers and third country nationals). National origin groups with a negative context of reception should experience higher levels of *downward* or *lateral* mobility than other groups.

3. The effect of integration:

Finally, assimilation theorists argue that cultural and social assimilation are positively associated with upward mobility, whereas segmented assimilation scholars argue that at best they have little effect and at worse they diminish the likelihood of upward mobility.

H3_a Citizenship and intermarriage with Germans will have a positive effect on the educational attainment of the second generation.

H3_{sa} Citizenship and intermarriage will have a negative effect or no effect on the educational attainment of the second generation.

The remainder of this paper utilizes these models to explain variation in second generation educational attainment in Germany, assessing the four sets of competing hypotheses with 2005 German Mikrozensus data. In the sections to follow, I describe my data, sample and variables, and then provide results. Finally, I conclude with a discussion on the implications of my findings further second generation research and for the application of assimilation and segmented assimilation models to the German case.

IV. Data and Sample

I utilize the 2005 Original German Mikrozensus that includes 100% of the original observations⁷. The Mikrozensus is a nationally representative survey containing structural

⁷ The majority of research with the Mikrozensus is conducted with the 70% public use files (PUF), however, researchers can access the 100% files at secure data sites within Germany.

population and labor market data in which 1 percent of all households in Germany are involved in an ongoing household sample, with one quarter of the sample exiting each year. While the rotation sample disallows combining adjacent years together⁸ (as is possible in the CPS), the very large sample size and representativeness of the Mikrozensus enables finer national origin distinctions than other datasets. Each member of the household is included in the survey, enabling links between parents' and children's information. Critical to my research objective, in 2005 the Mikrozensus began to ask about naturalization, enabling the identification of ethnic Germans and the naturalized first and second generation for the first time. Previous studies with the Mikrozensus have restricted their definition of the second generation to those who are still categorized as foreign nationals, possibly overestimating the educational disadvantage of immigrants and their offspring and disallowing comparisons with ethnic German *Aussiedler* as well as tests of the effect of citizenship on the mobility process. A further strength of this dataset is that it is a legal obligation (*Pflicht*) to complete and thus missing information is much less than in voluntary surveys.

In order to control for both class and migration background, I must restrict my analysis to only those second generation youth still living at home with their parents, allowing me to take advantage of the household sampling structure to obtain parental characteristics. This means that I can only model earlier educational transitions in the life course. A related weakness is that though the Mikrozensus reports the grade in school attended by a respondent, it does not differentiate by kind of school (*Gymnasium*, *Realschule*, etc) until after the 10th grade. To adjust for these difficulties, I include in my sample only respondents ages 18-20 who are living at home with their parents. These respondents should have progressed past the 10th grade, but are still young enough to be living at home. As 96% of the respondents with a migration background live in the West, I also restrict my sample to respondents living in the western German states (including former West Berlin). Finally, in order to control for the schooling history of my respondents, I include only respondents born in Germany or who arrived before the age of 6, omitting the "first" generation youth from my sample.

⁸ Though as stated above, I am currently awaiting access to the variables necessary to combine 2006 data.

This sample is largely representative of the German-schooled West German 18-20 year old age group in Germany, though youth who have already left the home as well as those who are “behind” their age group in schooling – either due to failing grades or a late start in school- are omitted from the analysis⁹. To account for correlations between siblings and other youth living in the same household, all standard errors are adjusted for clustering by household, and weights are used in all analyses to account for the probability sampling¹⁰.

V. Variables

Dependent Variable

The overarching goal of this paper is to explain variation in second generation educational attainment. Given the constraints of my data, I operationalize educational attainment as being en route to or obtaining an *Abitur* or *Fachhochschulreife*: the highest degree obtainable for youth ages 18-20 and a strong predictor of attendance at a tertiary institution and an independent predictor of future labor market performance as well (Müller and Polack 2004, as cited by Kalter and Granato 2007). This variable is a binary variable, coded positive (=1) if respondents already have obtained one of these certifications, or are in grades 11-13 (at a Gymnasium), or in another upper secondary school that confers an *Abitur* or a *Fachhochschulreife* at its completion¹¹. All other respondents are counted as 0.

Independent Variables

⁹ At age 17, 94% of the sample lives with their parents, but 20% are still in the 10th grade. Sensitivity analysis revealed considerable positive bias in the odds of pursuing an *Abitur* amongst those who are in 11th grade or above in this age group (in particular second generation members), I therefore omit them from the analysis. At ages 18-20, less than 5% of the sample is still in 10th grade, but 11%, 18%, and 27% of the sample no longer lives at home, thus introducing the possibility of bias due to our “at home” restriction. It is true that respondents who no longer live at home at this young age are less likely to do well in school; at the same time, I observe no origin differences in the percent of 18-20 year olds living at home and thus do not think this should unduly impact conclusions regarding the national origin differences that are the focus of this study. A sensitivity analysis that included only 18 year olds found similar coefficients, though diminished significance due to the smaller sample size.

¹⁰ The Mikrozensus is a stratified cluster sample. Unfortunately, the Mikrozensus files lacks all of the necessary stratification variables to adjust for the sampling design (see discussion by Schimpel-Neimanns and Mueller 2001). Sensitivity tests including the stratification variables that were present (Bundesland and Housing size) plus the primary sampling unit (Auswahlbezirknummer), finds less conservative standard errors than the weights plus robust standard errors method currently used. I opt for the conservative method as no difference in substantive results or significance levels are observed between the two methods.

¹¹ Models excluding *Fachhochschulreife* not shown here were largely indistinguishable in their substantive results.

In order to test the competing hypotheses outlined above, I include the following control and independent variables:

1. Control Variables

In order to control for compositional differences between the different origin groups that may impact educational attainment, I insert dummy variables to control for sex and *Bundesland* of residence in all analyses.

2. Class Background

A central determinant of educational attainment is the social background of the parents. The social background is operationalized here with three different indicators: the highest educational attainment of the parent(s), the occupational attainment of the parent(s), and the household income.

The educational attainment of the respondents' parents is hypothesized to have both main effects (H1) as well as interactive effects with national origin (H2). To control for educational attainment, I use the following collapsed educational categories for the highest educated parent living in the household: a) parent has no or only a general or intermediate educational certification with no further training, b) general or immediate general certification with vocational training, c) a higher level vocational certification, such as a master technician certification or d) tertiary certification. Though somewhat rough, these categories capture the distinctions between parents with and without vocational training, those with high level vocational training, and those with tertiary education, which are particularly important to the "dual training" system in Germany, and are not possible with a continuous "years of education" variable. Though educational attainment has been found to be the most important predictor of child's educational attainment (Kristen 2007) it is also well known that even immigrants with the same level of education as native Germans are likely to have lower earnings and worse labor market performance (Konietzka and Kreyenfeld 2001). This is likely to impact the financial resources and social capital they can pass on to their children; it is therefore important to include in social background not only human capital of the parents but their income and occupational status as well.

Occupational status is indicated with dummies for four large occupational categories: a) out of the labor force or unemployed, b) wage worker (*Arbeiter*) or family helper, c) salary worker (*Angestellte*) or public servant (*Beamte*), or d) self employed. Though large, these categories are fairly accurate indicators of general class standing such as prestige and pay (Müller and Polack 2004, as cited by Kirsten and Kalter 2007). I record the parental occupational status as father's occupational status and substitute mother's occupational status if father is out of the labor force or missing information.

The final measure of social background is the adjusted household income, the most direct measure of the financial capital available to the respondent. Household income is the total monthly wage and nonwage income of the household, reported in the Mikrozensus as a series of 24 categories. As it is well known that immigrant families are larger, on average, than German families, I recode this variable into a continuous variable, and used the "modified OECD equivalence scale" (Hagenaars et al 1994) to adjust for the number of people in the household. From this adjusted household income I created three income categories: "low income" households are those who earn less than 40% of the median adjusted income (less than 120 euros adjusted household income), "middle income" are those who earn between 40% of the median income and the median income (120-300 adjusted), and "affluent" or those who earn more than the median income (greater than 300 Euros adjusted). Because families must divide not only financial resources, but also time and attention as well, I further add a control for the number of children under the age of 18 in the household.

3. Origins

The 2005 Mikrozensus inquires into the *nationality* history of each respondent and their parents. In order to maximize the information I have at hand, I utilize both parents and the respondent's information to identify origin. I give preference first to the reported origin of the respondent himself: if the respondent reports a foreign nationality *or* is a naturalized German who reports a foreign nationality before naturalization, I characterize him as that nationality. If the respondent is

missing foreign nationality information or is a non-naturalized German, I use the nationality (or reported pre-naturalization nationality) of the mother to characterize the respondent. If both the respondent and the mother are non-naturalized Germans or are missing nationality information, I use the father's nationality information. In this way, I am clearly giving preference to the foreign nationality over the German for identification purposes – however, I do control for “mixed parentage” households (see below) to adjust for this preference¹².

The classification above accounts for the children of “foreigners” though does not distinguish *Aussiedler* from other migrants. As reviewed above, the *Aussiedler* represent a very special case of positive governmental reception and legal status, and thus need to be separately modeled.

Unfortunately, there is no direct question in the Mikrozensus about *Aussiedler* status. To identify this group, I utilize the following definition: if the respondent and/or *both* parents naturalized in less than three years since their arrival in Germany, and report an Eastern European country as their former nationality, I count them as *Aussiedler*. As a fairly large percentage of *Aussiedler* report that they are Germans without naturalization (Birkner 2007), I also include as *Aussiedler* respondents who report both parents as born abroad as non-naturalized Germans. Finally, I create a catch-all “migratory German” category for all non-naturalized German respondents who report either self or a parent as foreign born but are missing origin information and do not fulfill the requirements to be marked as *Aussiedler*. It is possible that some respondents who are classified as migratory German may have one *Aussiedler* parent, but I choose this restrictive definition of *Aussiedler* to exclude the children of foreign spouses of German nationals, who can naturalize after 3 years of more of residence in Germany.

The full origin information of my sample can be found in Appendix A. For the purpose of analysis, I collapse the national origin categories into the following categories, with Germans without a migration history as my base category: Turkish, Former-Yugoslavian, Italian, Greek, Iberian

¹² Five percent of the respondents reporting a foreign origin have either naturalized or foreign nationality parents who were both born in Germany; they can thus be conceptualized as third generation. Omitting these respondents from the analysis had little effect on the results.

(Portugal and Spain), Polish, Austrian, and other-EU, USSR/Russia, other-Eastern Europe, Southeast Asian, Africa, Americas, Near/Middle East, “Other” Foreign Nationality, *Aussiedler*, and Migratory German.

4. Integration

I measure integration in two ways: first, I include “non-citizen” as a dummy variable to assess the impact of naturalization on educational attainment. The direction of causation between naturalization and stratification outcomes is difficult to determine – naturalizing, and the assumption of permanent residence that it entails – might prompt an increased investment in German educational credentials. By the same token, increased effort in German education might likewise prompt political integration, as found in the case of Turks by Diehl and Blohm (2003). Fortunately, given the youth of my sample, the majority of whom are still in school, it is unlikely that their school performance prompted them to naturalize. Rather, their naturalization is likely correlated with the level of acculturation and permanent residence intentions of their *entire family*¹³. Thus, while naturalization is by definition a measure of political integration, it likely serves as a proxy for family acculturation as well.

A further measure of family acculturation is intermarriage among parents. I include an indicator for the “2.5 generation”, children who report a German parent without a migration background. These respondents represent perhaps the most integrated family background, one where the boundaries between native and immigrant are the most blurred. The number of “binational” marriages has risen slowly in the past two decades, reaching 40% of all marriages among men of Spanish origin, for instance (Schroedter and Kalter 2008:354). It is important to test whether this increasing “marital assimilation” will positively or negatively impact the educational performance of the second generation.

¹³ This interpretation is likewise supported by the fact that the naturalization of parents and children in the sample coincide.

Citizenship, generation and origin information for all respondents is complete. All respondents missing information on the dependent variable (N=343), parental education (N=215) or occupational status (N=3) are excluded from the sample. Respondents missing family income information (N=1,186) are coded as missing on this variable and included in the model. My final sample totals 13,224 Germans, 2nd generation, and 2.5 generation 18-20 year olds living at home with their parents.

VI. Results

I now turn to the empirical findings of the paper, first providing descriptive statistics and then the results of the multivariate models. When interpreting these results, a note of caution is first advisable: the numbers of many migrant origin groups in my sample are quite small (see table 1). Because of these small numbers, sensitivity analysis with 2006 data revealed that the characteristics of some of the smallest groups (those with N<80) are slightly unstable, differing for my sample by up to 5% across survey years. I chose to keep these small N groups separate, rather than collapsing them, because I believe there are interesting and important theoretical differences between, for instance, Russians, Poles, and other Eastern Europeans (who differ in proximity and migration history). However, given their small size, results for these groups should be interpreted as preliminary until I can combine the 2005 and 2006 data to increase my sample size. In addition, I wish to reiterate to the reader that my sample only includes a very small segment of the total population (households with children 18-20 years old), and therefore the descriptive statistics described below *cannot* be interpreted as averages for the entire origin groups.

Descriptive Statistics

Distributions for all model variables are available in Table 1. An initial look at the distributions across our independent and dependent both confirms prior research on German *Aussiedler* and guest worker immigrants and provides more detailed information about newer migrant groups. As noted in prior research (see Kristen 2007), youth of Turkish, Italian and former-Yugoslavian descent are much less likely to pursue or obtain an *Abitur* or *Fachhochschulreife* (AFH) than are Germans

without a migration history, whereas Greek and Iberian origin youth approach or surpass their German peers in their educational attainment. I add here several other migrant groups, and already this initial look shows the importance of including non-guest worker migrants to capture the full picture of second generation educational attainment. Many second generation youth, among them the children of EU, Middle Eastern, Southeast Asian, and Polish immigrants, have much higher percentages pursuing or obtaining an AFH than native Germans. Among the other groups, including *Aussiedler*, Eastern Europeans, Africans and Americans, we see rates of AFH obtainment comparable to those of Germans. Clearly, the experience of second generation youth in Germany is marked by a great deal of variation that needs to be further explained – in particular advantages that cannot be explained by the barriers outlined above.

The level of legal and marital integration reveals a similarly high level of variation. Whereas only 28% of former Yugoslavians have naturalized, nearly *all* respondents of Southeast Asian, Austrian, former USSR, and Middle Eastern descent are naturalized Germans. Despite the fact that former guest workers have generally lived in Germany longer than other migrant groups, they are less likely to have naturalized, suggesting the importance of the original temporary context of reception for the legal integration of even the second generation. It is also clear that the third country migrants most likely to be refugees, along with EU migrants who raise families in Germany, have the highest percentages of German citizenship. Clearly, omitting the naturalized second generation youth in analyses presents at best a partial picture of their educational attainment.

The percentage of youth in mixed parent households are mostly as expected, with about a third of most former guest worker origin youth in mixed households, though much lower rates (only 5%) among Turks.¹⁴ Spouse choice appears to be an important consideration in permanent settlement in Germany for the richest sending regions: over 70% of EU, Austrian, and American origin youth

¹⁴ The number of former Yugoslavians from mixed parent households is lower than would be expected from other research (Schroedter and Kalter 2008). This is possibly a result of my sample, which only observes older migrants who have migrated at least 12 (18-6) years ago and thus might have been less likely to intermarry.

come from households where at least one parent is German without a migration background¹⁵. All other groups (with the exception of migratory Germans) have moderate percentages reporting intermarriage, between 20-40%. The very low percentage of *Aussiedler* reporting intermarriage is likely a result of my attempt to provide a conservative definition of *Aussiedler*, omitting non-naturalized German youth from my *Aussiedler* definition unless both parents were foreign born. Finally, the number of children also differs by national origin, most notably the larger family size of Turks, Greeks, Africans and Middle Easterners.

Turning to socioeconomic background, when we consider all immigrants, rather than only former guest workers, more heterogeneity is revealed. Guest workers are relatively poorly educated, low income and low status workers, with Turks being particularly disadvantaged in terms of employment, education and income, even relative to other guest workers. Also in line with prior research, the more highly educated, and much more positively received *Aussiedler* still show disadvantage relative to Germans in terms of their much higher percentages working as *Arbeiter* and their correspondingly lower percentages in the affluent income category. In contrast, Austrians and other EU migrants, as well as Americans, have similar education and labor market characteristics than Germans without a migration history, in some cases reporting even higher levels of education. Finally, third country origin families suffer much lower income and higher unemployment relative to Germans without a migration background, though Middle Eastern and South Asian immigrants also have high rates of self employment critical to the development of ethnic capital (Portes and Rumbaut 2001).

The question that remains is how this socioeconomic heterogeneity will impact the educational attainment of the second generation (H1). The descriptive statistics suggest that national origin differences in socioeconomic background are not congruent with national differences in second generation attainment: while the most socioeconomically advantaged groups (EU members, Americans) perform well, many disadvantaged groups have high percentages of second generation

¹⁵ Austrian and American origin groups also have the highest percentages of third generation respondents.

attainment as well – for instance Africans, Iberians and Southeast Asians. To understand this apparently inconsistent impact of class background, and to assess competing hypotheses regarding convergence or divergence by origins (H2 and H3) and by legal and marital integration (H4), I now turn to the multivariate models.

Predicting the Pursuit and Obtainment of Abitur or Fachhochschulreife (AFH)

To model the likelihood of pursuing or obtaining an AFH, I use weighted binomial logistic regression with clustered standard errors at the household level. For ease of interpretation, the results are reported in odds ratios, or the antilogs (e^b) of the logged odds beta coefficients. The results of all models are found in tables 2 and 3.

The first model in table 2 represents a baseline model including only national origins and the control variables for *Bundesland* of residence and sex. Immediately apparent is that both of these controls are highly significant and have quite large effects. This is line with previous research: Bundesländer maintain relative autonomy in terms of the organization of their secondary schools (Deutsche Bildungsserver 2008), and the tracking processes and *Abitur* success rates can vary widely between the states (Bildungsbericht 2008). Gender differences in the pursuit and obtainment of the *Abitur* in this age group are likewise important: men are much less likely to have obtained or pursue an AFH, particularly among youth with a migration background (Nordrhein-Westfalen Integrationsbericht 2008:153). Most important to this topic, we see pronounced origin differences in the likelihood of pursuing or obtaining an AFH. Net of sex and regional composition, Italian, former-Yugoslavian, and Italian origin youth have less than half the odds of obtaining or pursuing an AFH than Germans without a migration history. Not only guest worker origin youth display lower percentages of attainment: the positively received *Aussiedler* also report 18% lower odds of AFH than Germans. In contrast, other groups display superior educational attainment relative to Germans without a migration background. The children of EU migrants, migratory Germans, and Southeast Asians are more likely than Germans without a migration history to pursue or obtain an AFH.

While compositional effects are large and important, they do not account for differences in AFH between origin groups. I now turn to the first hypothesis (H1) and include controls for parental education in model 2, adding parental labor force status and income in model 3. As seen in both these models, H1 is supported: the odds ratios for each higher parental education category, relative to the omitted lowest parental educational attainment category, are very large and highly significant, showing its positive main effect on the educational attainment of their children. Important to note is that the addition of parental education *alone* in model 2 appears to account for the lower odds of pursuing an AFH among Turks and Italians, as well as *Aussiedler*. Yet large and significant coefficients remain for many other groups, both positive and negative. In other words, children from the former USSR and Yugoslavia do worse than would be expected given their parents' educational attainment, whereas children of Southeast Asian, Middle Eastern, and Iberian origins do much better. Thus, despite the importance of parental education in predicting the odds of pursuing or obtaining an AFH, important ethnic differences remain.

It is possible that these differences may still be explained within the more general class origin/stratification framework through the addition of occupational and income controls. It is well documented, for instance, that Russian immigrants face particular difficulties transferring their skills on the labor market (Greif et al 1999; cite), perhaps decreasing the amount of ethnic and financial capital available to their children; in contrast, the higher levels of self employment observed among Southeast Asians and the lower unemployment observed among Iberian origin parents might provide a substitutive form of financial or ethnic capital that compensates for their relatively lower levels of human capital.

A look at model 3 shows that even these expanded measures of social origins do not account for differences in educational attainment among the second generation; to the contrary, the addition of parental labor market performance and household income *increases* the number of immigrant origin groups who differ significantly from native Germans, and increases the relative educational advantage of Iberian, Southeast Asian, and Middle Eastern origin second generation over Germans.

Moreover, with the addition of class to the parental education and control variables, Turks, Greeks, Poles and African origin youth also become significantly more likely to pursue or obtain an AFH. This model shows that out of the 17 origin groups under consideration, 8 of them are *more* likely than Germans without a migration background to pursue or obtain an AFH, net of controls for education and class background.

Though the fact that background controls account for second generation *disadvantage* is confirmed in other studies, the net *advantage* of so many immigrant groups is a new finding and thus deserves further discussion. My finding of a significant positive coefficient net of educational background for Turkish youth diverges from previous work with the Mikrozensus, where no such advantage is found, as well as other data sources that often continue to find a net *disadvantage* after the application of background controls. A further new finding is the net advantage among *Aussiedler*.¹⁶ Finally, the finding that many of the refugee third country origin groups – Southeast Asians, Middle Easterners, and Africans- have higher odds of pursuing or obtaining an AFH net of background lacks comparable research. Obviously, while class background can account for immigrant disadvantage, class background alone cannot account for *all* of the variation in educational attainment among second generation youth, due to the significant advantages that remain for so many immigrant origin youth net of their parental background.

The new findings are the result of the more complete sample used in this paper, which diverges from prior research by including naturalized members of the second generation, and includes migrants with more permanent, and positive, contexts of reception – namely *Aussiedler* and refugees. Competing explanations for continued origin differences in educational attainment net of background controls can be found in hypotheses 2 and 3 for both of the assimilation models outlined above. In short, assimilation theory would attribute the positive origin effects to higher mobility among the lower classes (H2_a) and the inclusion of more integrated (naturalized and 2.5

¹⁶ This finding differs from recent findings by Fuchs and Sixt (2008b) with the SOEP, that can be attributed to the larger number of *Aussiedler* in my sample, and the fact that I count students pursuing *Abitur*, whereas their work only test for finished degrees.

generation) second generation (H3_a), whereas segmented assimilation theory would attribute the positive origin effects to the inclusion of immigrants with a more *positive* context of reception (H2_{sa}) and would predict no effect from the inclusion of more integrated migrants (H3_{sa}). Model 3 provides a first assessment of H2, followed by a formal test of the significance of interactions between origins and the effect of parental education in model 4, and add controls for naturalization and 2.5 generation status in model 5.

A further look at model 3 shows considerable support for the assimilation model (H2_a). With the exception of *Aussiedler*, all groups with significantly higher odds of AFH achievement and pursuit are groups with relatively poor average socioeconomic profiles. These groups experience *better* outcomes than Germans with similar backgrounds; as they are clustered at the bottom of the socioeconomic hierarchy, this advantage is necessary for the upward mobility necessary for convergence. In contrast, (H2_{sa}) receives less support. On one hand, of all the most positively received groups, Austrians, EU migrants, and *Aussiedler*, only *Aussiedler* maintain a significantly positive advantage in educational attainment after the application of background controls. On the other hand, *no* group has significantly lower odds of AFH pursuit or attainment net of background controls, and three out of the five guest worker groups, including the arguably most negatively received immigrant group, the Turks, have significant positive coefficients, as well as refugee third country youth with African, Southeast Asian and Middle Eastern origins.

In order to test for the formal statistical significance of the mobility differences observed in model 3, I also introduce interaction effects between parental educational and origins in model 4. Here, I ask whether the positive origin effects of second generation youth can be explained by higher mobility among the lower classes, as predicted the assimilation perspective (H2_a). Does the second generation with low human capital background experience the greater upward mobility

necessary for convergence with the German mainstream? The results of this model are found in table 3¹⁷.

The addition of interactive effects between parental education and origins are significant at the .01 level (Wald Test $\chi^2(42)=70.28$, $p=.004$), and after their addition to the model, the main effect of five of the eight formerly advantaged origin groups are no longer significantly different from Germans without a migration history. Most important to note is that the majority of the significant interactions are those interacting the lowest educational category with origins, and that these coefficients (both significant and not) are, with two exceptions, uniformly positive. In other words, it is primarily the greater likelihood of upward intergenerational mobility among the least educated migrants that is driving this interaction effect – the second generation is less adversely effected by the low educational profiles of their parents than are Germans without a migration history. Model 4 also provides statistical support for (H2_a): migrants with low levels of human capital experience greater upward mobility than Germans with low levels of human capital, increasing their likelihood of convergence.

While the greater educational mobility among lower class second generation youth is the dominant trend, there are important exceptions. As has been found in previous research (Kirsten 2007), Italians do not enjoy this greater mobility, nor do Eastern Europeans (Dietz 2000; Greif et al 1999). Moreover, *Aussiedler*, Iberians and Africans, while not enjoying a significantly positive interaction effect among the lowest skilled, continue to report a positive main origin effect on the odds of pursuing or obtaining an AFH. The positive context of reception of the sort posited by the segmented assimilation model (H2_{sa}), or perhaps the higher likelihood of German language in the home, might account for this continued advantage among *Aussiedler*, but it is less clear why this might be the case for Africans or Iberians. This needs to be explored with other data.

A final explanation for positive origin effects found in this study is the inclusion of more

¹⁷ In order to estimate this model, I had to collapse some of the smaller origin groups to avoid perfect prediction. I recoded Poles and former USSR origin youth into the “Eastern European” category, and Austrians into the “EU” category. This likely had a dampening effect on the interactions but could not be avoided to obtain an estimable model.

integrated - naturalized and 2.5 generation youth – in the sample. Therefore, the final set of hypotheses (H4) cannot be addressed with models that control for socioeconomic background alone. To address the role of integration in second generation academic attainment, I include indicators for “noncitizen status” as well as for the children of mixed households including one German parent without a migration history. These indicators for the 2.5 generation and noncitizens were introduced into each model (1-4) described above. Shortly summarized, second generation youth with one non-immigrant German parent do not differ in their odds of obtaining or pursuing and FHA in the baseline model 1, or any subsequent model, though the coefficient is positive in all models. This is likely because 2.5 generation status it is highly correlated with both origins, as seen in the descriptive statistics, and with socioeconomic status (Schroedter and Kalter 2008). The other indicator of integration, obtaining German citizenship, is consistently significant across all models¹⁸.

I therefore include the main effect of noncitizenship in the final preferred model (model 5) in table 4. Model 5 provides support for (H4_a): even independent of socioeconomic background, political integration has a positive impact on the educational attainment of the children of immigrants. This finding is particularly important in explaining the new finding of a statistically significant positive coefficient for Turkish origin in model 3, and the higher degree of advantage observed among Greeks and Iberians, than has been found with prior work with the Mikrozensus (Kirsten 2007). This is because previous research has excluded the most integrated guest workers: those who have naturalized. By excluding naturalized Germans, who make up about a third of guest worker youth in my sample, one also excludes the more integrated youth, and those most likely to experience upward mobility. While the findings reported here for the individual guest worker origin groups differ from previous research primarily in the size of the positive coefficient, for Turks, the findings reported here vary in the *direction* as found by Riphahn (2005) and Alba (1994). This can perhaps be explained by the work with the GSOEP by Diehl and Blohm (2003), who find greater

¹⁸ Noncitizen status was included in each of models 1-4 and found significant in all (not shown)

correlation between integration and naturalization amongst Turks than among other labor migrant groups - thus we can expect the selectivity effect of including only foreigners to be strongest for Turks¹⁹. The addition of interaction effects between noncitizen status and origin, however, did not reveal any statistically significant differences in the effect of citizenship on national origin (Full results not shown: Wald Test $\chi^2=5.82$, $P=.953$).

VII. Conclusion

Modeling the pursuit of an *Abitur* or *Fachhochschulreife* for several immigrant origin groups, and including naturalized respondents with a migration history, I find considerably more variation in the educational attainment of the second generation than has been previously documented; many groups perform on par with or better than native Germans, and even former guest labor migrants have *higher* attainment net of parental background. While I confirm prior research that finds that second generation *disadvantage* is largely attributed to class background, this does not account for all the variation in educational performance. Instead, some of this variation can be linked to *higher* levels of intergenerational educational mobility found among many of the most disadvantaged immigrant groups, as well as the superior performance of the naturalized second generation and non-guest worker migrant groups.

A final, “at a glance” view of these results can be found in table 5: here, I display predicted probabilities from the preferred model, adjusting the probabilities across independent variables critical to each of the hypotheses in this paper. The first panel shows the probability of receiving or pursuing an AFH net of the control variables for gender and *Bundesland* of residence. In line with prior research, we see that the baseline differences in the probability of pursuing or obtaining an AFH are lowest among Turks, former-Yugoslavians, and Italians, with *Aussiedler* also experiencing slightly lower probability of AFH pursuit than Germans without a migration history. Greeks and Iberians perform on par with Germans without a migration history. When we turn to non-guest

¹⁹ Performing the same analysis with only foreigners (not shown here) makes the relative advantage of Turks in model 3 insignificant (though the coefficient is still positive).

worker groups, we also see superior performance among many other second generation youth, with predicted probabilities of AFH pursuit and attainment among Southeast Asians, Middle Easterners, and EU members that are over 10% higher than those of Germans without a migration history. The addition of controls for education and class background in the second and third panels does not account for this the variation in educational attainment. Rather, we can see that while the advantage of EU members, and the disadvantage of former Yugoslavians and Italians, can be attributed to class background, the relative advantage of Greeks, Iberians, Southeast Asians, and Middle Easterners only grows larger, and the probabilities of AFH pursuit or attainment among Turks, Africans and *Aussiedler* now surpass those of Germans.

The relative success of second generation youth is partially explained by key suppositions of the assimilation theory, namely higher mobility among the lower class second generation and the role of integration in encouraging upward mobility. The predicted probabilities for model 4, where returns to education are set at the sample mean, show that Turks, former Yugoslavians, Southeast Asians, and Middle Easterners all benefited from their greater returns on their parental education, though the interaction effects *do not* account for the superior performance Greek, Iberian, and African youth. Finally, model 5 shows that groups with low naturalization rates would benefit from naturalization: with naturalization rates set at the sample mean (94%), all former guest worker groups experience around a 4 or 5% increase in their probability of AFH pursuit or attainment.

While the results shown here provide some first evidence of convergence across immigrant generations, and thus are encouraging for the future of ethnic stratification in Germany, it must be stated that these findings present only a first test of the explanatory power of the two theories used in this paper. Though I am able to model here a critical element of educational attainment, the pursuit and obtainment of an *Abitur* or *Fachhochschulreife*, the German educational system is marked by many alternative paths. A critical source of inequality remains the very high overrepresentation of immigrant youth in the lowest educational track, the *Hauptschule* (Education Report 2008); unfortunately, assessment of the chances of this lowest path cannot be addressed

here. Moreover, my respondents are still at the very early stages of their adult lives, the transition to the pursuit of the AFH represents just one of the first critical stratification transitions that will determine the eventual convergence or divergence of the second generation in Germany.

A further issue for theory testing is that education has a stronger hierarchical element than many other stratification outcomes: more years of schooling, and higher certifications, are nearly always desirable; in contrast, occupational or regional inequality can also encompass horizontal distinctions (for instance, residences or occupations that are truly “separate but equal” in terms of prestige and quality) that allow for a “parallel” mobility process critical to the segmented assimilation perspective. With educational attainment as the dependent variable and no way of distinguishing by school, it is difficult to model for the possibility of alternative or “ethnic” mobility strategies. Some of my findings could be explained with a ethnic mobility argument, in particular the superior performance of Southeast Asians, whose positive context of reception, combined with high self employment, might suggest a strong ethnic community and mobility strategy - or the work done on Greeks and their private schools (Alba et al 1994) is also suggestive of an ethnic effect, that need further work to be adequately tested.

These important caveats aside, it is clear that the children of immigrants are moving in the direction of greater similarity in their educational distributions to that of Germans without a migration background. This is the central supposition of assimilation theory. Further in line with assimilation theory, this convergence in educational attainment among many groups is at least partially powered by higher rates of mobility among the working class, and accelerated by legal incorporation into the state. Segmented assimilation receives less support: context of reception bears no consistent relationship to the educational attainment of the second generation net of class, nor do we see evidence of significantly higher educational “stagnation” or downward mobility among any origin group. The segmented assimilation framework shows promise, however, in perhaps providing an explanation for the fact that some groups appear to have an “ethnic advantage,” even net of educational mobility differences, that might stem from a utilization of

social/ethnic capital central to the segmented assimilation framework. Further qualitative work, and work with different quantitative sources, can be used to assess this potential in the future.

REFERENCES

- Alba, Richard. 2005. Bright versus blurred boundaries: second generation assimilation and exclusion in France, Germany and the United States. *Ethnic and Racial Studies* 28:1 p. 20-49
- Alba, Richard. 2008. „Why we still need a theory of mainstream assimilation“ in Frank Kalter(ed) *Migration und Integration: Kölner Zeitschrift für Soziologie und Sozialpsychologie* Sonderheft 48/2008
- Richard Alba and Victor Nee. 1997. "Rethinking assimilation theory for a new era of immigration," *International Migration Review* 31 (Winter, 1997): 826-74.
- Alba, Richard, and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge, Mass: Harvard University Press.
- Alba, Richard, Johann Handl, and Walter Müller. 1994. "Ethnische Ungleichheit im Deutschen Bildungssystem," *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 46: 209-37.
- Bender, Stefan and Wolfgang Seifert. 1998. "Migrants in the German labor market: ationality and gender specific labor market opportunities" in Immigration, Citizenship, and the Welfare State in Germany and the United States: Immigrant Incorporation, Kurthen, Fijalkowski, and Wagner (eds) JAI Press, Stamford, Connecticut.
- Birkner, Elizabeth. 2007. „Aussiedler im Mikrozensus 2005“, Presentation given at the Conference Integrationschancen von Spätaussiedlern, 29.-30. März 2007, Nürnberg
- Breen, Richard und Ruud Luijkx. 2004. “ Social Mobilty in Europe between 1970 and 2000” pp.37-75 in: Richard Breen (ed): *Social Mobility in Europe*. Oxford: Oxford University Press.
- Brubaker, Rogers. 2001. "The Return of Assimilation? Changing Perspectives on Immigration and Its Sequels in France, Germany, and the United States." *Ethnic and Racial Studies* 24 [4] 531-548
- Constant, Amelie and Douglas Massey. 2003. "Labor Market Segmentation and the Earnings of Guest Workers". *IZA Discussion Papers* 774.
- Deutscher Bildungsserver. 2008. „Institutions in the school sector“, http://www.bildungsserver.de/zeigen_e.html?seite=579 (accessed 08.12.2008).
- Diehl, Claudia and Micheal Blohm. 2003. „Rights or Identity? Naturalization Processes among "Labor Migrants" in Germany“ *International Migration Review* 37:1 pp.133-162.
- Diehl, Claudia and Rainer Schnell. 2006. “Reactive ethnicity" or "assimilation"? Statements, arguments, and first empirical evidence for labor migrants in Germany,” *International Migration Review* 40:4, p786.
- Dietz, Barbara. 1999. “Jugendliche Aussiedler in Deutschland: Risiken und Chancen der Integration.”in Bade, K. J. and Oltmer, J. eds. *Aussiedler: Deutsche Einwanderer aus Osteuropa*. Osnabrück
- Dietz, Barbara. 2000. German and Jewish migration from the former Soviet Union to Germany: Background, trends and implications. *Journal of Ethnic and Migration Studies* 26:4, pp. 635–652.

Diefenbach, Heike. 2007. Kinder und Jugendliche aus Migrantenfamilien in deutschen Bildungssystem: Erklärungen und empirische Befunde. Wiesbaden: VS Verlag für Sozialwissenschaften.

Dustmann, Christian, 1999. "[Temporary Migration, Human Capital, and Language Fluency of Migrants](#)," *Scandinavian Journal of Economics*, 101(2), pp. 297-314

Dustmann, Christian. 2000. "Temporary Migration and Economic Assimilation." *IZA DiskussionsPapier* No. 186.

Eckert, R. et al. 1999. Bilder und Begegnungen: Konflikte zwischen einheimischen und Aussiedlerjugendlichen. In: Bade, K.J./Oltmer, J. (ed.): *Aussiedler: deutsche Einwanderer aus Osteuropa*. Osnabrück 1999, pp. 191-205.

Esser, Hartmut. 2004. "Does the 'new' immigration require a 'new' theory of intergenerational integration?" *International Migration Review* 38:3, pp. 828-85

Esser, Hartmut. 2001. "Integration und ethnische Schichtung." *MZES-Arbeitspapier Nr. 40*. Mannheim, Mannheimer Zentrum für Europäische Sozialforschung.

Educational Report 2008. Autorengruppe Bildungsberichterstattung im Auftrag der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland und des Bundesministeriums für Bildung und Forschung (ed.). *Bildung in Deutschland. Ein indikatorengestützter Bericht mit einer Analyse zu Übergängen im Anschluss an den Sekundarbereich I*, Bielefeld: Bertelsmann, http://www.bildungsbericht.de/daten2008/bb_2008.pdf

Faist, Micheal. 1993. "From School to Work: Public Policy and Underclass Formation amongst Turks in Germany." *International Migration Review*, Vol. 27:2, pp. 306-331

Frick, Joachim R. & Wagner, Gert G., 2001. "Economic and Social Perspectives of Immigrant Children in Germany," *IZA Discussion Papers 301*, Institute for the Study of Labor (IZA).

Fertig and Schmidt. 2001. "First- and Second-Generation immigrants in Germany - What Do We Know and What Do People Think". IZA Discussion Paper 286

Fuchs, Marek; Sixt, Michaela. 2008a.: Zur Verwertung von Hochschulabschlüssen auf dem Arbeitsmarkt. Die erste berufliche Position der Bildungsaufsteiger unter den Hochschulabsolventen. In: Kehm, Barbara (ed.): *Hochschule im Wandel. Die Universität als Forschungsgegenstand*. Frankfurt a. M., New York: Campus, S. 81- 95.

Fuchs, Marek and Micheala Sixt. 2008b. „Die Bildungschancen von Aussiedlerkindern“ *SOEP Working Paper* 105

Gang and Zimmerman (2000) "Is child like parent? Educational Attainment and Ethnic Origin" *Journal of Human Resources*. 35:3 p. 550-569.

Geddes, Andrew. 1998. The Representation of 'Migrants' Interests' in the European Union *Journal of Ethnic and Migration Studies*

Goldberg, Andreas, Dora Mourinho and Ursula Kulke. 1996. "Labor market discrimination against foreign workers in Germany. *ILO Working Papers* 7.

Gomolla, Mechthild and Frank-Olaf Radtke. 2002. *Institutionelle Diskriminierung. Die Herstellung ethnischer Differenz in der Schule*. Opladen: Leske und Budrich.

Greif, S., G. Gediga and A. Janikowski. 1999. "Erwerbslosigkeit und beruflicher Abstieg von Aussiedlerinnen und Aussiedlern, in K.J. Bade and J. Oltmer (Eds), *Aussiedler: deutsche Einwanderer aus Osteuropa*, Osnabrück: Rasch, 81- 106

Groenendijk 1997. „Regulating ethnic immigration: the case of Aussiedler.“ *New Community* 23(4):461-82

Hagenaars, Aldi de Vos, Klaas Zaidi, Asghar .1994 *Poverty Statistics in the Late 1980s*, Luxembourg: Eurostat.

Haug, Sonja. 2008. „Sprachliche Integration“ from the *Bundesamt für Migration und Flüchtlinge* Integrationsreport:2

Hout, Micheal and Thomas A. Diprete. 2005. "What we have learned: RC28's contributions to knowledge about social stratification" *Research in Social Stratification and Mobility* 24:1 pp. 1-20.

Joppke, Christian.1999. *Immigration and the Nation State: The United States, Germany, and Great Britain*. Oxford: Oxford University Press.

Kalter, Frank, Nadia Granato and Cornelia Kristen. 2007 „Disentangling recent trends of the second generation's structural assimilation in Germany“ pp.214-245 in: Stefani Scherer, Reinhard Pollak, Gunnar Otte, Markus Gangl(eds): *From Origin to Destination: Trends and Mechanisms in Social Stratification Research*. Frankfurt/New York: Campus Verlag.

Klink, Andreas and Ulrich Wagner.1999. "Discrimination Against Ethnic Minorities in Germany: Going Back to the Field" *Journal of Applied Social Psychology* 29 (2), 402–423.

Kogan, Irena. 2007. " A study of immigrants' employment careers in West Germany using the sequence analysis technique" *Social Science Research* 36:2 pp. 491-511

Kogan, Irena. 2004. Last Hired, First Fired? The Unemployment Dynamics of Male Immigrants in Germany, *European Sociological Review* 20: 5 pp. 445-461.

Konietzka, Dirk and Micheala Kreyenfeld. 2001. "Die Verwertbarkeit auslaendischer Ausbildungsabschluesse: Das Beispiel der Aussiedler auf dem deutschem Arbeitsmarkt" *Zeitschrift fuer Soziologie*, 30:4 267-282

Kreyenfeld, M. and Konietzka, D. 2002. "The performance of migrants in occupational labour market. Evidence from Aussiedler to Germany", *European Societies* 4: 53-78.

Kristen, Cornelia. 2002. Hauptschule, Realschule oder Gymnasium? Ethnische Unterschiede am ersten Bildungsübergang, *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 54 (3): 534-552.

Kristen, Cornelia and Nadia Granato. 2004. "Bildungsinvestitionen in Migrantenfamilien" pp. 123-141 in: Klaus Bade and Micheal Bommes: *Migration – Integration – Bildung* (IMIS-Beiträge No. 23) Osnabrück: Institute for Migration Research and Intercultural Studies.

Ministerium für Generationen, Familie, Frauen und Integration des Landes Nordrhein-Westfalen. 2008. *Nordrhein-Westfalen: Land der neuen Integrationschancen: 1. Integrationsbericht der Landesregierung*. <http://www.integration.nrw.de/>

Nauck, Bernhard. 2001. "Social Capital, Intergenerational Transmission and Intercultural Contact in Immigrant Families" *Journal of Comparative Family Studies* 24:3

OECD. 2006. *International Migration Outlook*. Organization for Economic Co-Operation and Development: Paris.

OECD. 2006. *Where immigrant students succeed: A comparative review of performance and engagement in PISA 2003*. OECD ISBN: 9264023607

Ohlinger, Rainer. 2007. Zuwandererintegration und -monitoring in Deutschland: Ergebnisse eines europäischen Projekts, in Indikatoren zur Messung von Integrationserfolgen
Ergebnisse des transnationalen Projekts "Indikatoren für die Zuwandererintegration"
ISBN: 978-3-938352-16-8

Pollak, Reinhard and Walter Müller. 2004 „Social mobility in West Germany. The long arms of history discovered?“S. 77-113 in: Richard Breen (ed.): *Social Mobility in Europe*; Oxford: Oxford University Press.

Portes, Alejandro and Min Zhou. 1993. "The New Second Generation: Segmented Assimilation and Its Variants." *The Annals of the American Academy of Political and Social Science* 530 (November): 74-96.

Portes, Alejandro. 1997. "Immigration Theory for a New Century: Some Problems and Opportunities," *International Migration Review*, 31:4, pp. 799-825.

Portes, Alejandro and Ruben Rumbaut. 2001. *Legacies: the story of the immigrant second generation* University of California Press: Berkeley.

Portes, Ruben, Patricia Fernandez-Kelly and William Haller. 2008. "The Adaptation of the Immigrant Second Generation in America: Theoretical Overview and Recent Evidence" CMD Working Paper #08-02

Riphahn, Regina T. 2003. "Cohort effects in the educational attainment of second generation immigrants in Germany: An analysis of census data," *Journal of Population Economics*, Springer, vol. 16(4), pages 711-737, November.

Riphahn, Regina T. 2001. "Dissimilation? The Educational Attainment of Second Generation Immigrants," CEPR Discussion Papers 2903, C.E.P.R. Discussion Papers.

Schroedter, Julia H. and Frank Kalter 2008. „Binationale Ehe in Deutschland. Trends und Mechanismen der sozialen Assimilation“ in Frank Kalter(ed) *Migration und Integration: Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft 48/2008* p. 351-379

Soysal, Yasemin. 1994. *Limits of Citizenship: Migrants and Postnational Membership in Europe*. Chicago: University of Chicago Press.

Stanat, Petra. 2006. Schulleistungen von Jugendlichen mit Migrationshintergrund: Die Rolle der Zusammensetzung der Schülerschaft. p. 189-219 in J. Baumert, P. Stanat & R. Watermann (eds),

Herkunftsbedingte Disparitäten im Bildungswesen: Differenzielle Bildungsprozesse und Probleme der Verteilungsgerechtigkeit. Wiesbaden: VS Verlag für Sozialwissenschaften.

Statistisches Bundesamt 2007. *Bevölkerung und Erwerbstätigkeit: Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus 2005.* Wiesbaden: Statistisches Bundesamt.

Tolciu and Schaland. 2008. „Selbständige Migranten in Deutschland.“ *Wirtschaftsdienst* 8 pp. 536-546

Weiss, Karin. & Thränhardt, D. 2005. *SelbstHilfe. Wie Migranten Netzwerke knüpfen und soziales Kapital schaffen.* Freiburg: Lambertus.

Wolf, Bernd. 2007. “Die vietnamische Diaspora in Deutschland: Struktur und Kooperationspotenzial mit Schwerpunkt auf Berlin und Hessen.“ *Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung.*

Worbs, Susanne. 2003. “The Second Generation in Germany: Between School and Labour Market,” in: Crul, M./Vermeulen, H. (Hrsg.): *The Future of the Second Generation. The Integration of Migrant Youth in Six European Countries.* Special Issue of the *International Migration Review*, pp. 1011-1038.

TABLES

Table 1. Distribution of Model Variables of German and Second Generation Youth, Ages 18-20 Living in their Parents Home

	<i>Parental Labor Force Status</i>								
	Attained/ Pursuing Abi or FH- reife	Male	Non Citizens	2.5 Gen	Number of Kids in HH	OLF/ Unemp	Workers	Salary/Pub Servant	Self- Employed
German	.483	.539			.605	.069	.238	.541	.152
Turkish	.325	.516	.644	.045	1.144	.230	.578	.121	.071
Former Yugo	.309	.446	.720	.157	.639	.195	.553	.172	.080
Italian	.314	.571	.574	.304	.689	.105	.530	.255	.110
Greek	.470	.513	.653	.249	.992	.100	.542	.213	.144
Iberian	.537	.426	.618	.271	.478	.056	.521	.307	.116
Polish	.601	.567	.331	.215	.491	.172	.379	.351	.098
Austria	.483	.646	.112	.834	.602	.055	.292	.495	.159
Other EU	.671	.538	.207	.725	.612	.098	.181	.540	.180
USSR/Russia	.456	.493	.189	.260	.503	.143	.436	.258	.164
Other Eastern Europe	.399	.528	.364	.308	.628	.171	.390	.355	.083
Southeast Asian	.602	.502	.169	.405	.693	.212	.284	.311	.193
African	.498	.514	.257	.260	1.567	.417	.321	.252	.010
American	.533	.594	.147	.826	.761	.098	.177	.627	.098
Middle East	.605	.568	.316	.207	1.075	.361	.131	.330	.178
Other	.482	.507	.369	.404	.815	.186	.302	.334	.178
Aussiedler	.455	.522		.044	.678	.053	.633	.261	.053
Migratory German	.542	.534		.742	.471	.121	.219	.549	.112
	<i>Parental Education</i>				<i>Household Income</i>				
	(1)Gen/Inter Education or Less	(2)+Vocation	Higher Vocation	Tertiary	Low	Medium	High	Missing	N
German	.057	.558	.187	.198	.164	.305	.435	.096	10534
Turkish	.674	.270	.032	.024	.555	.250	.131	.064	633
Former Yugo	.309	.567	.050	.074	.360	.297	.295	.048	155
Italian	.378	.496	.083	.043	.336	.322	.294	.048	199
Greek	.405	.368	.091	.137	.320	.422	.152	.107	61
Iberian	.416	.474	.052	.059	.155	.443	.286	.116	71
Polish	.039	.415	.379	.166	.185	.327	.415	.074	78
Austria	.077	.539	.137	.247	.126	.390	.369	.115	62
Other EU	.019	.306	.210	.464	.168	.245	.460	.127	136
USSR/Russia	.139	.233	.278	.350	.133	.391	.411	.065	33
Other Eastern Europe	.229	.339	.202	.229	.230	.371	.350	.049	64
Southeast Asian	.261	.361	.139	.240	.388	.319	.219	.075	106
African	.501	.199	.154	.146	.603	.259	.115	.023	79
American	.095	.325	.181	.399	.182	.339	.370	.110	89
Middle East	.310	.249	.197	.244	.444	.279	.222	.054	67
Other	.225	.328	.189	.258	.330	.328	.241	.101	80
Aussiedler	.081	.606	.189	.124	.260	.401	.293	.045	686
Migratory German	.084	.468	.208	.241	.131	.301	.464	.105	291

Source: 2005 Mikrozensus

Table 2. Odds Ratios of Pursuing or Obtaining a Abitur or Fachhochschulreife, German and Second Generation Youth, Ages 18-20 Living in their Parents Home

	Model 1: Controls		Model 2:(1) + Education		Model 3: (2) + Class	
	OR	s.e.	OR	s.e.	OR	s.e.
<i>Origin (German omitted)</i>						
Turkish	.448**	.042	1.095	.118	1.343**	.151
Former Yugoslavian	.420**	.080	.681**	.143	.829	.173
Italian	.462**	.080	.834	.150	.930	.169
Greek	.885	.243	1.451	.468	1.712*	.549
Iberian	1.057	.299	2.095**	.631	2.236**	.703
Polish	1.420	.356	1.310	.361	1.579*	.431
Austria	1.208	.315	1.184	.354	1.213	.375
Other EU	1.936**	.409	1.135	.251	1.204	.262
USSR/Russia	.745	.292	.469*	.194	.584	.251
Other Eastern Europe	.673	.192	.644	.205	.736	.240
Southeast Asian	1.468*	.320	1.766**	.411	1.960**	.465
African	.862	.198	1.404	.396	1.758**	.492
American	1.179	.270	.824	.222	.851	.225
Middle East	1.450	.443	1.773**	.597	2.012**	.718
Other	.904	.223	.882	.240	.996	.280
Aussiedler	.822**	.070	.953	.089	1.207**	.116
Migratory German	1.258*	.160	1.203	.167	1.226	.175
Male	.596**	.022	.555**	.022	.549**	.022
<i>Bundesland (Schleswig-Holstein omitted)</i>						
Hamburg	1.675**	.274	1.719**	.303	1.720**	.300
Niedersachsen	1.074	.120	1.122	.138	1.191	.147
Bremen	1.514*	.345	1.660*	.436	1.773**	.483
Nordrhein-Westfalen	1.826**	.185	2.018**	.226	2.176**	.246
Hessen	1.614**	.181	1.503**	.185	1.578**	.196
Rheinland-Pfalz	1.175	.142	1.185	.158	1.222	.163
Baden Württemberg	1.075	.112	1.004	.115	1.050	.122
Bayern	.770**	.079	.711**	.080	.742**	.085
Saarland	1.574**	.293	1.898**	.381	2.141**	.435
Berlin	1.961**	.294	1.859**	.294	1.959**	.318
<i>Parental Education (intermediate or general only and less omitted)</i>						
General or Intermediate with Vocational			2.038**	.164	1.740**	.144
Higher Vocational			5.126**	.460	3.729**	.350
Tertiary			18.046**	1.748	12.443**	1.265
<i>Parental Labor Force Status (Salary and Public Servant omitted)</i>						
Unemployed or OLF					.573**	.047
Arbeiter					.530**	.028
Self Employed					1.010	.064
<i>Household Income (Low income omitted)</i>						
Middle Income					1.172**	.079
Affluent					1.128*	.079
Income Missing					.911	.071
Number of Kids					.980	.028

**p<.05 *p<.1

Source: 2005 Mikrozensus

**p<.05 *p<.1

Table 3. Odds Ratios of Pursuing or Obtaining a Abitur or Fachhochschulreife with Interactions, German and Second Generation Youth, Ages 18-20 Living in their Parents Home

Model 4: (3) + Interactions			Education*Origin Interactions (General or Intermediate with Vocational omitted)					
			*General/Intermediate		*Higher Vocational		*Tertiary	
			Main Effect		Only or Less			
Origin (German omitted)	OR	s.e.	OR	s.e.	OR	s.e.	OR	s.e.
Turkish	1.095	.197	1.963**	.473	.893	.443	.510	.294
Former Yugoslavian	.697	.191	2.639**	1.215	.589	.453	1.266	1.055
Italian	1.200	.279	.772	.352	.292**	.183	2.253	2.533
Greek	1.640	.741	1.876	1.232	.507	.511	.721	.878
Iberian	2.354*	1.147	1.454	.961	.302	.279	.597	.761
Polish ¹								
Austria ²								
Other EU	1.226	.325	2.007	2.018	1.053	.475	.805	.328
USSR/Russia ¹								
Other Eastern Europe	1.072	.320	.814	.596	1.134	.487	.717	.392
Southeast Asian	1.453	.554	2.605*	1.416	1.721	1.300	1.215	.931
African	2.632**	1.244	1.207	.714	.603	.483	.108**	.076
American	.557	.284	5.939**	4.877	2.163	1.565	1.236	.825
Middle East	1.271	.603	2.775	2.347	8.461**	9.828	.574	.451
Other	1.152	.489	1.464	1.152	.791	.575	.586	.378
Aussiedler	1.221*	.146	1.228	.486	1.361	.319	.450**	.129
Migratory German	.983	.191	5.328**	2.626	1.303	.463	1.161	.490
Male	.548*	.022						
Bundesland (Schleswig-Holstein omitted)								
Hamburg	1.643**	.288						
Niedersachsen	1.179	.147						
Bremen	1.773**	.487						
Nordrhein-Westfalen	2.157**	.244						
Hessen	1.550**	.193						
Rheinland-Pfalz	1.216	.163						
Baden Württemberg	1.033	.120						
Bayern	.729**	.083						
Saarland	2.220**	.449						
Berlin	1.895**	.304						
Parental Education (intermediate or general with vocational omitted)								
General or Intermediate	.409**	.049						
Higher Vocational	2.094**	.126						
Tertiary	7.604**	.556						
Parental Labor Force Status (Salary and Public Servant omitted)								
Unemployed or OLF	.572**	.047						
Arbeiter	.528**	.028						
Self Employed	1.008	.064						
Household Income (Low income omitted)								
Middle Income	1.170**	.079						
Affluent	1.125*	.079						
Income Missing	.912	.071						
Number of Kids	.977	.028						
¹ Now collapsed into Eastern Europe								
² Now collapsed into EU								

¹ Now collapsed into Eastern Europe

² Now collapsed into EU

**p<.05 *p<.1

Source: Mikrozensus 2005

Table 3. Odds Ratios of Pursuing or Obtaining a Abitur or Fachhochschulreife with Interactions, German and Second Generation Youth, Ages 18-20 Living in their Parents Home

Model 5: (4) + Noncitizen			Education*Origin Interactions (General or Intermediate with Vocational omitted)					
			*General/Intermediate		*Higher Vocational		*Tertiary	
			Main Effect		Only or Less			
Origin (German omitted)	OR	s.e.	OR	s.e.	OR	s.e.	OR	s.e.
Turkish	1.304	.247	2.059	.495	.812	.398	.486	.272
Former Yugoslavian	.883	.250	2.703	1.260	.510	.381	1.156	.931
Italian	1.385	.332	.875	.402	.300	.181	2.277	2.665
Greek	2.017	.942	2.021	1.336	.445	.432	.685	.861
Iberian	2.850	1.434	1.561	1.044	.286	.279	.494	.631
Polish ¹								
Austria ²								
Other EU	1.263	.337	2.093	2.080	1.078	.485	.855	.351
USSR/Russia ¹								
Other Eastern Europe	1.169	.349	.909	.674	1.149	.487	.716	.394
Southeast Asian	1.473	.557	2.928	1.619	1.695	1.277	1.285	.987
African	2.922	1.359	1.195	.705	.562	.453	.104	.072
American	.565	.289	6.597	5.605	2.128	1.540	1.300	.866
Middle East	1.354	.667	3.109	2.607	9.041	10.713	.558	.447
Other	1.299	.564	1.633	1.295	.786	.587	.525	.343
Aussiedler	1.221	.146	1.227	.485	1.358	.318	.450	.129
Migratory German	.983	.191	5.321	2.623	1.303	.462	1.160	.489
Male	.549	.022						
Bundesland (Schleswig-Holstein omitted)								
Hamburg	1.638	.286						
Niedersachsen	1.178	.146						
Bremen	1.747	.483						
Nordrhein-Westfalen	2.155	.244						
Hessen	1.555	.194						
Rheinland-Pfalz	1.218	.163						
Baden Württemberg	1.035	.120						
Bayern	.729	.083						
Saarland	2.206	.446						
Berlin	1.899	.304						
Parental Education (intermediate or general with vocational omitted)								
General or Intermediate	.409	.049						
Higher Vocational	2.095	.126						
Tertiary	7.607	.556						
Parental Labor Force Status (Salary and Public Servant omitted)								
Unemployed or OLF	.576	.047						
Arbeiter	.530	.028						
Self Employed	1.010	.065						
Household Income (Low income omitted)								
Middle Income	1.167	.078						
Affluent	1.118	.079						
Income Missing	.911	.071						
Number of Kids	.975	.028						
Non-Citizen	.718	.090						

¹ Now collapsed into

Eastern Europe

²Now collapsed into EU

**p<.05 *p<.1

Source: Mikrozensus 2005

Table 5: Predicted Probabilities with Variables Set at Sample Means, German and Second Generation Youth, Ages 18-20 Living in their Parents Home

	Variables Set at Sample Mean				
	Model 1: Control Variables	Model 2 : (1) + Education	Model 3: (2) + Class	Model 4: (3) + Interactions	Model 5: (4) + Noncitizen
German	.490	.473	.462	.470	.465
Turkish	.293	.512	.590	.487	.531
Former Yugo	.277	.388	.444	.386	.434
Italian	.296	.429	.471	.508	.546
Greek	.480	.577	.617	.594	.637
Iberian	.527	.657	.677	.679	.712
Polish	.500	.451	.475	.488	.504
Austria	.553	.528	.520	.520	.523
Other EU	.673	.511	.494	.513	.523
USSR/Russia	.533	.446	.470	.499	.504
Other Eastern					
Europe	.456	.436	.459	.484	.504
Southeast Asian	.614	.625	.642	.556	.561
African	.453	.558	.623	.709	.717
American	.537	.428	.415	.325	.329
Middle East	.657	.646	.661	.527	.540
Other	.487	.454	.469	.512	.530
Aussiedler	.432	.455	.505	.520	.515
Migratory German	.559	.526	.519	.466	.461

Source: Mikrozensus 2005