E R D K U N D E

Band 53, Heft 3 Boss-Verlag, Kleve September 1999

FOREIGN-BORN GERMANS IN THE UNITED STATES: WHERE ARE THEY MIGRATING AND WHY?

With 1 figure and 5 tables

SABINE HENNING

Zusammenfassung: Deutsche in den Vereinigten Staaten: Räumliche Verteilung und Bestimmungsgründe ihrer Binnenwanderungen

Deutsche in den Vereinigten Staaten spielen als zahlenmäßig fünftgrößte Ausländergruppe nach wie vor eine wichtige Rolle innerhalb der gesamten ausländischen Bevölkerung in den U.S.A. Dieses Thema aufgreifend, untersucht die vorliegende Studie das Binnenwanderungsverhalten von Deutschen in den Vereinigten Staaten anhand der U.S.-amerikanischen Volkszählung aus dem Jahre 1990. Zunächst beschreibt dieser Artikel die sekundären Wanderungsströme der ausländischen deutschen Bevölkerung zwischen den Bundesstaaten in den U.S.A. In einem zweiten Abschnitt wird versucht, das Wanderungsverhalten mittels logistischer Regression zu erklären. Dabei werden unter anderem Hypothesen getestet, die den Einfluß von humanem bzw. sozialem Kapital auf die Wanderungen zum Inhalt haben. Diese Studie zeigt, daß Deutsche in den U.S.A. durchaus ein für sie sehr charakteristisches Wanderungsverhalten haben. Ferner macht dieser Artikel deutlich, daß sowohl das Human-Kapital der Deutschen als auch das Sozialkapital in den Bundesstaaten einen bedeutsamen Einfluß auf die Wanderungsbereitschaft und auf die Wahl einer Zielregion nehmen kann.

Summary: Although German immigrants do not dominate current migration streams directed toward the United States anymore, foreign-born Germans remain a numerically important segment of the foreign-born population stock in the United States. Using 1990 Census data, this paper sets out to describe internal migration streams of foreign-born Germans from an accounting perspective for the 1985–1990 time period. This is followed by an analysis of the determinants of the internal migration patterns applying logistic regression techniques. The goal is to test for the relevance of the economic theory in migration (i.e., human capital theory) and to test if social capital factors (i.e., social capital theory) influence migration decisions. The investigation describing the migration patterns reveals that foreign-born Germans display indeed distinct preferences to migrate to certain states or remain in others. The analysis focusing on the determinants of migration points out that human capital factors, such as education, strongly influence migration decisions. In addition, social capital, such as networks of foreign-born Germans in the states under consideration, acts as strong deterrents to interstate migration flows.

Introduction

This paper is concerned with internal migration patterns of foreign-born Germans in the United States during the 1985–1990 time period. Although Germans do not dominate recent immigration flows directed toward the United States anymore, they remain a numerically important segment of the foreign-born population stock. As of 1990, they were in fact the fifth largest foreign-born population in the United States. Because secondary migration has a significant impact on the demographic, social, political, and economic status quo of certain areas, and because the foreign-born display very distinct migration patterns, it appears to be important to study these migration flows. Because mortality and fertility have become less important in influencing place-to-place variations of populations in certain areas, migration has very often become the key demographic component in more recent years. In addition, little research has been done on foreign-born Germans in the United States.

Addressing these issues and using 1990 Census data, this paper sets out to find answers to the following questions: (1) Did foreign-born Germans relocate during the 1985–1990 time period? (2) If they migrated, where did they go? and (3) Why did foreign-born Germans move to other states? Thus, this article will provide a general overview of the internal migration patterns of foreign-born Germans in the United States.

The study is organized as follows. First, the paper describes the growth as well as the changes in the composition of the foreign-born population in the United States over time, focusing especially on foreign-born Germans. The next part of the investigation reviews the literature dealing with the patterns of migration and spatial distribution of the general foreign-born population in the United States. This is followed by an analysis of the migration flows of foreign-born Germans describing these patterns from an accounting perspective. Finally, using logistic regression techniques, the paper addresses the determinants of the migration streams. The goal is to focus on the economic theory of

Table 1: The growth of the foreign-born population in the United States, 1880–1997

Das Wachstum der ausländischen Bevölkerung in den Vereinigten Staaten vom Amerika 1880–1997

Year	Total Population[1]	Foreign-Born Population[1]	German Foreign-Born Population[1]	Total Population that is Foreign-Born %	Annual Growth Rate of the Foreign-Born Population % (over 10 years)	Annual Growth Rate of the Total Population % (over 10 years)	Annual Growth Rate of German Foreign-Born Population % (over 10 years)	Time Period	Gross Immigration to the United States[2]	Gross Immigration from Germany to the United States[2]
1870	39,818,449[a]	5,567,229	1,690,533	13.98						
1880	50,155,783	6,679,943	1,966,742	13.32	1.82	2.31	1.51	1871–80	2,812,191	718,182
1890	62,947,714	9,249,560	2,784,894	14.69	3.25	2.27	3.48	1881–90	5,246,613	1,452,970
1900	75,994,575	10,341,276	2,663,418	13.61	1.12	1.88	–0.45	1891–00	3,687,564	505,152[b]
1910	91,972,266	13,515,886	2,311,237[c]	14.70	2.68	1.91	–1.42	1901–10	8,795,386	341,498[b]
1920	105,710,620	13,920,692	1,686,108	13.17	0.30	1.39	–3.15	1911–20	5,735,811	143,945[b]
1930	122,775,046	14,204,149	1,608,814	11.57	0.20	1.50	–0.47	1921–30	4,107,209	412,202
1940	131,669,275	11,656,641	NA	8.85	–1.98	0.70	NA	1931–40	528,431	114,058[d]
1950	150,697,361	10,420,908	991,321	6.91	–1.12	1.35	NA	1941–50	1,035,039	226,578[d]
1960	179,323,175[e]	9,738,091	989,815	5.43	–0.68	1.74	–0.02	1951–60	2,515,479	477,765
1970	203,210,158[3]	9,619,302[3]	832,965[3]	4.73	–0.12	1.25	–1.73	1961–70	3,321,677	190,796
1980	226,545,805[3]	14,079,906[3]	849,384[3]	6.22	3.84	1.09	0.20	1971–80	4,493,314	74,414
1990	248,709,873[4]	19,767,316[4]	711,929[4]	7.95	3.39	0.93	–1.77[f]	1981–90	7,338,062	91,961
1997	267,636,061[5]	25,779,000[6]	NA	9.7	3.79[f]	1.00[f]	NA	1991–96	6,146,213	58,928

[1] U.S. Department of Commerce, Bureau of the Census 1975 if not noted otherwise

[2] U.S. Department of Justice, Immigration and Naturalization Service 1997

[a] Revised to include adjustment of 1,260,078 for underenumeration in the Southern States. Unrevised census count is 38,558,371

[b] From 1899–1919, data for Poland included in Austria-Hungary, Germany, and the Soviet Union

[c] Persons reported in 1910 as of Polish mother tongue born in Austria, Germany, and U.S.S.R. have been deducted from their respective countries and combined as Poland

[d] From 1938–1945, data for Austria included in Germany

[e] Denotes first year for which figures include Alaska and Hawaii

[f] Calculated over the previous seven years

[3] U.S. Department of Commerce, Bureau of the Census 1983

[4] U.S. Department of Commerce, Bureau of the Census 1993c

[5] U.S. Department of Commerce, Bureau of the Census 1998a

[6] U.S. Department of Commerce, Bureau of the Census 1998b

NA: Not available

migration (i.e., human capital theory). Furthermore, social-capital factors, such as the concentration of fellow countrymen, are considered as determinants of internal migration flows.

The Foreign-Born Population in the United States: A Definition

The United States has a long history of being a nation of immigrants (National Research Council 1997). The study of these "huddled masses" (E. LAZARUS 1889, "The New Colossus") has established itself in the academic as well as the public arena over the years. Because, as will be explained later, foreign-born are not necessarily the same people as immigrants and not clarifying these terms could lead to misunderstandings, this paper sets out to define the foreign-born and the immigrants first.

In the United States context, one can differentiate between immigrants, non-immigrants, emigrants, asylees, refugees, foreign-born, and native-born. Immigrants are defined by the Immigration and Naturalization Service as aliens (persons who are not citizens or nationals of the United States) who are granted the privilege of permanent residence in the United States. Non-immigrants are aliens admitted to the United States for a temporary time period and for a specific purpose. Emigrants are aliens who have left the country to settle elsewhere. Illegal immigrants or undocumented aliens are persons who have either entered the United States illegally or have violated the terms of their legal entry by, for example, staying beyond their authorized time period in the United States[1].

The native- and foreign-born categories are used in the Census to partition the total population by place of birth. The native-born term refers to persons born in the United States, Puerto Rico, the Outlying Areas, or born to at least one American parent abroad. The foreign-born are persons born overseas regardless of their legal status. Thus, immigrants as well as illegal immigrants or non-immigrants are a subset of the foreign-born population stock.

The Growth of the Foreign-Born Population

The foreign-born population in 1997 – 25.8 million – was the largest ever recorded in United States history. The foreign-born amounted to about 9.7% of the total United States population (Tab. 1). During the period of mass immigration (1880s to the early 1900s), there were about 6.7 million (1880) to 13.5 million (1910) foreign-born living in the United States accounting for 13.32% (1880) to 14.70% (1910) of the total population.

The size of the foreign-born population mirrors in many respects the course of immigration and changes in the volume of the migration streams can affect the foreign-born population stock after a time lag (National Research Council 1997). Thus, due to heavy immigration in the late nineteenth century, the foreign-born population grew from 5.6 million people in 1870 to 14.2 million persons by 1930. At times, the annual growth rate for the foreign-born was higher than the growth rate of the total United States population. World War I, the Great Depression, and World War II decreased the foreign-born both in numbers and proportions. During the time period from 1931–1940, the foreign-born population was reduced by 1.98%. By 1970, there were about 9.6 million foreign-born people and the percentage of the total foreign-born population had reached its all-time low of 4.73%. At about the same time, the number of immigrants admitted started to increase again, resulting in the growth of the foreign-born population in more recent years. As shown in Table 1, the annual growth rate of the foreign-born increased from –0.12% for the years 1961–1970 to 3.39% for the time period from 1981–1990. By 1997, the number of foreign-born persons had reached its highest level in the history of the United States (25.8 million). The proportion of the foreign-born (9.7%), however, remains below the levels recorded in the late nineteenth and early twentieth centuries. As indicated in the literature, recent immigration acts such as the Immigration Act of 1990 and an increasing demand for immigrant visas will lead to continued growth of the foreign-born population in the foreseeable future (CHISWICK a. SULLIVAN 1995).

The Composition of the Foreign-Born Population

Due to changes in the birthplace-specific origin of United States immigrants, the birthplace-specific composition of the United States population stock has changed significantly over the years. During the late nineteenth century, the vast majority of immigrants came from Northern and Western Europe, mainly Germany, Ireland, and the United Kingdom. From 1880–1920, a shift from Northern and Western Europe to Eastern and Southern Europe occurred, with people from Austria-Hungary, Italy, Greece, Poland, and Russia starting to dominate the immigration flows. Among

[1] For a definition of the terms refugee and asylum seeker, see U.S. Department of Justice, Immigration and Naturalization Service, 1997.

other reasons, World War I, more restrictive immigration regulations in the 1920s, the Great Depression in the 1930s, and World War II resulted in a decline in immigration from Europe (CHISWICK a. SULLIVAN 1995). Following the significant changes in immigration legislation in the 1960s coupled with a growing United States economy and strengthening immigrant networks in the destination, the United States started to attract more and more immigrants from Asia and Latin America. In 1996, Mexico followed by the Philippines and India were the top three immigration countries (U.S. Department of Justice, Immigration and Naturalization Service 1997). As a result of these changes, the proportion of foreign-born from European countries as enumerated in the Census declined from 84.9% (1900) to 22.0% (1990). At the same time, the proportion of the total foreign-born from Latin America and Asia increased from 2.5% (1900) to 67.7% (1990) (U.S. Department of Commerce, Bureau of the Census 1993 b).

In addition to a change in the composition of the flows, the United States has also experienced a greater diversity of its immigrants in recent years resulting in greater diversity of the foreign-born population stock. Between 1871 and 1880, more than 100,000 immigrants came from only six countries. About one century later (1981–1990), there were 13 countries contributing more than 100,000 immigrants (U.S. Department of Justice, Immigration and Naturalization Service 1997). The same observation holds true for the foreign-born population. In 1880, there were about 10 foreign-born groups with more than 100,000 people residing in the United States and the majority of these foreign-born came from Europe. By 1990, the number of countries had increased to 38, and in addition to European foreign-born, one could find more foreign-born from Asia, the Americas, and the Caribbean (U.S. Department of Commerce, Bureau of the Census 1975, 1993 c).

The German Foreign-Born in the United States

As shown in Table 1 and noted earlier, there has been a longstanding history of immigration flows from Germany to the United States[2]. As documented by BÄHR (1983), JONES (1992), and BADE (1993), religious, political, and socioeconomic changes in the countries of origin as well as the destination influenced the number and the composition of these streams. Table 1 reveals that the number of German immigrants admitted reached its all time high during the 1881–1890 time period (1.45 million). Eventually, industrial growth in Germany itself created new employment opportunities. The birth rate started to fall and the economic and political value of manpower received new attention. Consequently, people were less inclined to leave Germany. The numbers in Table 1 support this argument. One can see that since 1881–1890, fewer German immigrants were admitted. LUEBECKE (1990) notes that the last great wave of immigration from Germany occurred directly after World War II. Many of these immigrants tried to escape the political, social, and economic hardships in post-World War II Germany. Since then, the number of German immigrants decreased steadily until 1980. For the 1981–1990 time period, we witnessed a slight increase from 74.4 thousand (1971–1980) to 92 thousand (1981–1990) German immigrants. During the most recent time period (1991–1996), 58.9 thousand Germans were granted permanent residency in the United States.

As noted earlier for the total foreign-born population, changes in the volume of the immigration flows affect the foreign-born population stock after a time lag. One can observe in Table 1 that the German foreign-born population reached its highest value of 2.8 million persons in 1890. Since then, we have seen a more or less steady decrease in the German foreign-born population with a negative growth rate of this group for most time periods under consideration. In 1990, there were about 711.9 thousand foreign-born Germans residing in the United States and the corresponding annual growth rate of this population for the 1980–1990 time period was equal to –1.77%.

The Population Geography of the Foreign-Born Population

PLANE a. ROGERSON (1991), BELANGER a. ROGERS (1992), WALKER, ELLIS, a. BARFF (1992), and FREY (1996) argued that the immigration debate in the United States rarely takes place within a spatial context. Since the internal migration and spatial distribution of the foreign-born have labor, social, welfare, and immigration policy implications (NOGLE 1996; NEWBOLD 1996) and because the foreign-born tend to settle in certain areas, their economic, political, and social impacts on these regions are concentrated. With fertility and mortality influencing place-to-place variations of populations in certain regions to a lesser degree in recent years, immigration and internal migration flows have become the key demographic components influ-

[2] BADE (1993) notes that 19.6% of the German immigrants admitted during the 1899–1924 time period eventually migrated back home. The corresponding return migration rate for Italians was equal to 50% and for Spanish at about 45%. The Irish experienced a much lower rate of 12.4%.

encing the demographic status quo of certain regions. Many studies have addressed intended destination choices of immigrants using INS data, but secondary migration flows of the foreign-born, applying Census data, have not received much attention in the literature (DUNLEVY 1991; NOGLE 1996). Since the number of foreign-born residing in the United States is growing, more foreign-born will be at risk to move again. In addition, once they have arrived in the United States, certain factors might make the foreign-born more or less migratory than the native-born impacting the social, economic, and political status quo of certain areas (NEWBOLD 1996). For example, given their previous migration experience, one would expect greater willingness to relocate again. On the other hand, limited information or a lack of fluency in English might discourage foreign-born to migrate. By addressing these issues, this study will describe and explain secondary migration flows of foreign-born Germans in the United States.

Numerous authors have shown that the foreign-born display a distinct population geography. This has been observed for the 1990s as well as for earlier time periods (VEDDER a. GALLAWAY 1970, 1972; GALLAWAY, VEDDER a. SHUKLA 1974; DUNELVY a. GEMERY 1977; DUNLEVY 1980, 1991; FORBES 1985; LIEBERSON a. WATERS 1987, 1990; PORTES a. RUMBAUT 1990; BELANGER a. ROGERS 1992; KRITZ a. NOGLE 1994; CHISWICK a. SULLIVAN 1995). As revealed in the last Census, about 73% of the foreign-born were residing in only six states: California, New York, Florida, Texas, New Jersey, and Illinois. In contrast, only 36% of the native-born preferred to live in the same states. Much attention has been given to the population geography of the groups that dominate the immigration flows today, such as Mexicans, Filipinos, or Cubans (BOSWELL 1984; BEAN a. TIENDA 1987; MCHUGH 1989; SAENZ 1991; SAENZ a. CREADY 1997). Figure 1 shows the spatial distribution of the foreign-born German population in absolute values at the state level. Table 2 presents the corresponding absolute and percentage figures for the 10 spatial units of analysis selected for this investigation. As one can see, California followed by the Rest of the Midwest and the Rest of the South are the three primary settlement areas.

Even though the majority of immigrants does not come from Germany anymore, foreign-born Germans remain an important component of the total foreign-born population as they are the fifth largest foreign-born group in the United States today (1990). Their population geography has not been well documented and this paper sets out to investigate their patterns of internal migration.

Data and Methods

The data used in the empirical analysis are obtained from the 1990 Public Use Microdata Sample (PUMS). The microdata files are a stratified 5% sample of the long form of the 1990 Census containing the full range of housing and population information recorded in the Census. For this analysis, the sample is weighted to obtain full census estimates.

The decennial Census is one of the best data sets to study the foreign-born in the United States. CHISWICK a. SULLIVAN (1995) have stressed that due to its nearly universal coverage of the population, the Census allows the researcher to identify every nationality group that is often ignored or aggregated into broader categories. In addition, the Census offers the researcher the opportunity to study individual records of persons with respect to their demographic, social, and economic characteristics.

Information on migration in the Census is based on a question asking where the respondent lived five years ago. These data are limited in several respects. For example, multiple moves between the two points in time cannot be determined or migrant and non-migrant characteristics are measured at the end of the period (1990). Even with their limitations, the Census data are the best we have for the study of the secondary migration patterns of the foreign-born. ISSERMAN, PLANE and MCMILLEN (1982) compared various data sources available for examining internal migration in the United States. They showed that with respect to coverage and population/geographic detail, the decennial Census provides the most accurate information. As noted earlier by CHISWICK and SULLIVAN (1995), the Census appears to be the appropriate data set for the study of the foreign-born. Thus, this analysis will focus on the foreign-born as defined by the Census and will apply Census data for the statistical analysis. Migration will then be specified as a change of residence between 1985 and 1990.

Given that this paper is concerned with foreign-born Germans, the investigation describing the migration patterns centers on six major destinations at the state level and their regional remainders at the level of the four Census Regions, resulting in a total of ten spatial units of analysis. A further spatial disaggregation would lead to too few observations for too many spatial units of analysis, and the migration matrices would display too many empty cells. With respect to the major destinations, this paper focuses on California in the West, Texas and Florida in the South, Illinois in the Midwest, and New Jersey and New York in the Northeast. Because more than 52% of the total foreign-born Ger-

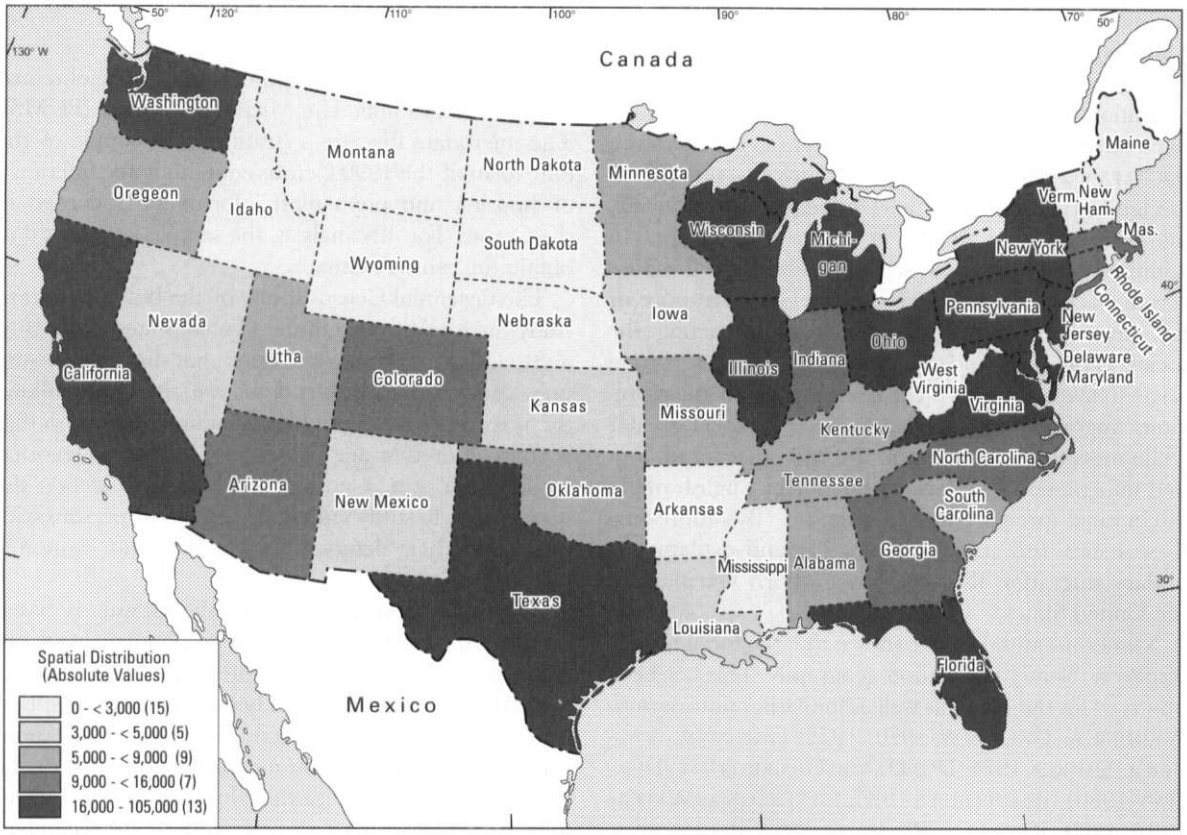

Fig. 1: Spatial Distribution of the Foreign-Born German Population in the United States, 1990
Räumliche Verteilung der Ausländischen Deutschen Bevölkerung in den Vereinigten Staaten von Amerika 1990

man population in the continental United States resided in these states in 1985 and 1990 (Fig. 1), these states are selected. The remaining states are aggregated to correspond to the Census Regions as defined by the Bureau of the Census[3].

The second part of the investigation addresses the determinants of the interstate migration flows among individual states in the continental United States. The sample is limited to heads of households 25 years and older at the time of the Census. Children, students attending college, persons in the military, and individuals living in group quarters are excluded from this part of the article. Heads of households who are 25 years and older are selected to restrict the sample to persons who decide to move independently from each other. Military personnel and students tend to be highly migratory but for reasons other than the ones investigated in this study. Out of the 709,084 foreign-born Germans studied in the first part of this paper, 586,132 persons remain in the analysis addressing the determinants of migration.

In the statistical analysis, individuals have to choose between no migration across state boundaries or interstate migration. Because the dependent variable is dichotomous, logistic regression procedures appear to be appropriate (HOSMER a. LEMESHOW 1989). The results for the independent variables are presented as odds ratios. The odds ratio of a coefficient for an independent variable [exp(b)] indicates the change in odds for a case when the value of this particular variable changes by one unit. An odds ratio equal to one indicates no relationship between the independent and the dependent variables, a ratio greater than one refers to a positive relationship, whereas a ratio less than one stands for a negative relationship. If the covariate is coded as a dummy variable, a one-unit change refers to a change from zero to one. Applying this method to interstate migration, a regression coefficient of [exp-(0.1242)] or 1.132% can be interpreted by saying that a change from not being married to being married increases the odds of relocating by 13% (Tab. 5). In other words, foreign-born Germans who are married, com-

[3] For a definition of the Census Regions and Census Division, see U.S. Department of Commerce, Bureau of the Census 1993 a.

Table 2: Migration indices and spatial distribution of foreign-born Germans in the United States, 1985–1990

Wanderungsindikatoren und Räumliche Verteilung der Ausländischen Deutschen Bevölkerung in den Vereinigten Staaten von Amerika 1985–1990

Region of Residence (1990)	In-Migrants	In-Migration Rate (%)	Out-Migrants	Out-Migration Rate (%)	Net-Migrants	Immigrants	Total Population	Total Population (%)
Rest of the Northeast	4,164	0.64	4,474	7.39	–310	3,614	64,142	9.05
New Jersey	2,352	0.35	4,022	9.40	–1,670	1,897	43,235	6.10
New York	2,034	0.33	7,343	7.91	–5,309	4,061	91,682	12.93
Rest of the Midwest	4,271	0.70	6,011	6.02	–1,740	5,087	103,452	14.59
Illinois	1,509	0.23	2,678	6.56	–1,169	1,569	41,361	5.83
Rest of the South	9,045	1.45	6,612	7.69	2,433	10,771	99,672	14.06
Florida	9,070	1.37	2,974	6.45	6,096	3,272	55,561	7.84
Texas	2,564	0.38	3,746	12.52	–1,182	5,526	34,536	4.87
Rest of the West	6,601	1.02	4,825	7.69	1,776	6,116	70,865	9.99
California	5,774	0.94	4,699	4.94	1,075	7,864	104,578	14.75
Total	47,384		47,384			49,777	709,084	100.00

pared to those who are divorced, separated, widowed, or single, experience a 13% increase in their odds of migrating.

The Patterns of Internal Migration of Foreign-Born Germans

Based on the weighted 1990 PUMS files, there were 709,084 foreign-born Germans in the continental United States[4]. During the 1985–1990 time period, the overall internal migration rate of the foreign-born German population at risk to move among the ten spatial units of analysis was equal to 7.2%. The corresponding figure for the entire United States population was 7.3%. As shown in Table 2, the majority of foreign-born Germans moved to Florida, followed by the Rest of the South and the Rest of the West. New York, the Rest of the South, and the Rest of the Midwest experienced the highest level of out-migration. In terms of net-migrants, New York, the Rest of the Midwest, and New Jersey lost foreign-born Germans to other states in the country, whereas Florida, the Rest of the South, and the Rest of the West gained foreign-born Germans. At an at-risk basis[5], the Rest of the South, followed by Florida and the Rest of the West displayed the highest in-migration rates, whereas Texas, New Jersey and New York had the highest out-migration rates. The majority of Germans immigrating to the United States from overseas between the 1985–1990 time period moved to the Rest of the South, California, and the Rest of the West. The analysis of the spatial distribution shows that California followed by the Rest of the Midwest and the Rest of the South was the region where the majority of foreign-born Germans had settled.

Table 3 displays a matrix of origin-destination-specific conditional probabilities of out-migration in the off diagonal. The values are expressed in percentage shares of the overall out-migration probability out of the region under consideration. Retention probabilities are shown along the principal diagonal. Each row corresponds to an origin and each column refers to a destination. The probabilities are conditional on survival, since the migrants as well as the stayers have to be alive at the end of the time period (LONG 1988). The

[4] Because the focus is on the continental United States, people residing in Hawaii or Alaska in 1985 or in 1990 were excluded from the analysis.

[5] The concept of the at-risk population refers to the idea that the numbers of in-migrants and out-migrants calculated have to correspond to the population at risk to move. For a definition of the correct at-risk population, see LONG (1988). More detailed information on these rates can be obtained from the author.

Table 3: Conditional retention probabilities and conditional probabilities of out-migration (percentages) of foreign-born Germans in the United States, 1985–1990

Konditionale Verharrungs- und Wanderungswahrscheinlichkeiten (in Prozent) der Ausländischen Deutschen Bevölkerung in den Vereinigten Staaten von Amerika 1985–1990

	RNE	NJ	NY	RMW	IL	RS	FL	TX	RW	CA
RNE	92.61	11.20	12.23	7.53	0.67	24.12	23.29	3.96	9.39	7.62
NJ	19.54	90.60	7.81	3.21	0.75	28.02	29.54	1.96	5.00	4.18
NY	15.47	14.29	92.09	3.35	0.12	15.93	35.78	0.91	6.32	7.83
RMW	8.07	2.68	2.88	93.98	5.89	25.12	23.77	4.38	17.15	10.06
IL	6.39	3.06	0.00	14.68	93.44	15.98	20.39	6.27	18.56	14.68
RS	8.50	2.24	5.52	18.48	6.13	92.31	19.42	12.40	13.76	13.55
FL	3.19	5.14	6.79	12.54	5.25	40.82	93.55	3.83	10.96	11.47
TX	6.35	3.28	3.84	10.62	5.05	28.67	7.42	87.48	19.89	14.87
RW	7.83	0.37	4.10	10.20	4.54	14.86	7.27	11.48	92.31	39.34
CA	6.66	2.49	1.94	14.49	2.49	15.45	6.92	6.85	42.71	95.06

probabilities are again calculated on an at-risk basis. In other words, the denominator equals the number of persons of the area five years and older at the census date, minus the number of in-migrants, plus the number of out-migrants. The numerator equals the total number of out-migrants. Thus, the numerator refers to persons aged five and over who were living in the area under consideration in 1985 but who had left the region by 1990. For example, 92.61% of the people at risk to leave the Rest of the Northeast in 1985 had not left the region by 1990. On the other hand, 12.23% of all out-migrants leaving the Rest of the Northeast and surviving until 1990 could be found in New York at the time of the Census.

One can see that foreign-born Germans had the highest retention probabilities in California, followed by the Rest of the Midwest and Florida. Lower retention probabilities were calculated for Texas, New Jersey, and New York. The analysis of the origin-destination-specific out-migration probabilities demonstrates that foreign-born Germans had a strong tendency to migrate to the Rest of the South and Florida, especially if they were residing in the Northern part of the country in 1985. For example, 29.54% of the people leaving New Jersey or 35.78% of the people leaving New York moved to Florida. There was also a strong association between the Rest of the South and Florida, and foreign-born Germans from Florida were very likely to migrate to the Rest of the South or vice versa. People leaving the Rest of the Midwest and Illinois had also a strong tendency to relocate to the Rest of the South and Florida.

Foreign-born Germans leaving California displayed a high probability of moving to the Rest of the West and vice versa. They were less inclined to follow other foreign-born Germans and resettled instead in Florida or the Rest of the South. Compared to the other states in the South and West, foreign-born Germans showed small probabilities of moving to Texas. This was especially true for people leaving the Northern states. Persons in the North apparently favored Florida, the Rest of the South, California, and the Rest of the West over Texas.

Moreover, the Northern states and Illinois were apparently less attractive to foreign-born Germans from other parts of the country than the Southern or Western states. In other words, foreign-born Germans not residing in the North or the Midwest showed little interest to move to this area. This is especially surprising, because Germans have traditionally settled in the Midwest (BADE 1993). It is important to point out, however, that following California, the retention probability estimated for the Rest of the Midwest was the second highest probability. In other words, foreign-born Germans who were residing in this region were extremely unlikely to relocate. As shown in Table 2, a large proportion of foreign-born Germans was already living in California and the Rest of the South. Given the migration patterns observed for the 1985–1990 time period, it is expected that a growing proportion of foreign-born Germans will be found in California and the Rest of the South in the years to come.

The Determinants of Internal Migration of Foreign-Born Germans

As noted by GREENWOOD (1975), the determinants of migration are those factors that influence migration decisions. Many studies that try to identify factors, which shape migration decisions, explain migration within a human capital framework (SJAASTAD 1962).

From this perspective, individuals weight the present discounted value of the expected stream of returns in each alternative destination and compare it to that of their present location. Therefore, a person will migrate if the expected present value of benefits exceeds the costs of moving. In other words, a person will relocate if the expected utility at the destination is greater than at the origin.

Certain place and person characteristics have been used in the literature to test for the micro- and macroeconomic theories in migration studies (i.e., human capital theory). For example, age, gender, marital status, education, language skills, homeownership, self-employment, urban residence, unemployment rates, or amenities have been selected in models testing for the relevance of these theories (MINCER 1978; SANDEFUR a. SCOTT 1981; KOBRIN a. SPEARE 1983; CLARK 1986; LONG 1988; TROVATO 1988; BARTEL 1989; KRITZ a. NOGLE 1994; NOGLE 1994, 1996; NEWBOLD 1996; SAENZ a. CREADY 1997). The argument is, for example, that because higher-educated persons have more and better information on potential destinations, higher education makes people more migratory. Moreover, the skills of the higher-educated persons are more marketable nationwide and it is easier for them to transfer these skills to different labor markets. Thus, a recent Ph.D. graduate will be more aware of labor market opportunities and can also expect greater benefits from relocating than a high-school graduate. This will make the recent doctoral graduate more likely to move than the high-school graduate.

In addition to the economic approach to migration, social capital theory suggests that social ties and affinities to community kin and friends embedded in networks also influence migration decisions (MASSEY 1990). SAENZ a. CREADY (1997), using United States Census data and following the research by KRITZ a. NOGLE (1994) and MASSEY a. ESPINOSA (1997) define a variable measuring nativity concentration to identify community social capital. COLEMAN (1988) refers to social capital as a variety of different entities embodied in relations among persons that allows people to achieve certain goals which they could not accomplish if social capital would be absent. Applied to immigrant populations, social capital allows the foreign-born to receive benefits through social networks, such as help in obtaining employment or finding housing. Since foreign-born very often lack close ties to other segments of the population, the social capital embodied in areas with high levels of nativity concentration might make the foreign-born less likely to relocate.

Following this literature, age, gender, marital status, education, language skills, homeownership, employment status, and urban residence are selected as person characteristics testing for the economic theory (i.e., human capital theory). The variable nativity concentration is added to test for the importance of social capital in influencing migration decisions[6]. Finally, unemployment rates by state of origin and a variable measuring temperature variation are included to analyze the impact of economic place characteristics and amenities on migration behavior. Thus, interstate migration will be studied as a function of person and context characteristics as defined by the state of residence of a potential migrant in 1985.

Table 4 gives an overview of the covariates included in the statistical analysis focusing on the determinants of migration. The person characteristics age, gender, marital status, college education, language skills, homeownership, employment status, and urban residence are taken from the 1990 PUMS files and are measured as dummy variables. KRITZ and GURAK (1996) argue that higher education and fluency in English are highly correlated. Consequently, they dropped the language variable in their migration model. A correlation analysis of these two variables for the foreign-born German population reveals the opposite. Therefore, both covariates are included in the regression model.

The U.S. Bureau of Labor Statistics provided information on the unemployment rate by state of origin in 1985. The climate covariate measuring annual temperature variations is taken from the 1990 Statistical Abstract published by the Bureau of the Census and is based on a 30-year time series (1951–1980). The nativity concentration variable is calculated by allocating foreign-born Germans back to their 1985 state of residence. Because the distribution of the German foreign-born population is highly skewed (Fig. 1), the log of the nativity concentration variable is calculated and included in the model.

About 7.6% (44,757) of the heads of households selected for this part of the analysis migrated between the states during the 1985–1990 time period. As shown in Table 4, compared to persons who did not relocate a greater percentage of interstate migrants was younger, male, married, and college-educated. On the other

[6] Other variables reflecting on state-specific social capital were tested (such as the presence of a "Goethe Institute" by state) but proved to be highly correlated with the nativity concentration variable. Person-specific variables reflecting on the different dimensions of social capital, such as the number of ties to fellow countrymen or the types of relationships and their evolution over an individual's life cycle are not included in the PUMS files.

Table 4: Definition, measurement, and frequency distribution of variables[1]

Definition, Bemessung und Häufigkeitsverteilung der Variablen[1]

Variable Name	Definition	Percentage Distribution	
Person Characteristics		Stayer (N=541,375)	Interstate Migrant (N=44,757)
AGE25–34	25–34 (=1, else=0)[2]	7.9	22.4
		92.1	77.6
AGE35–44	35–44 (=1, else=0)[2]	17.7	23.1
		82.3	76.9
AGE45–54	45–54 (=1, else=0)[2]	21.8	19.1
		78.2	80.9
AGE55–64	55–64 (=1, else=0)[2]	21.6	14.4
		78.4	85.6
AGE65–74	65–74 (=1, else=0)[2]	14.0	11.5
		86.0	88.5
GENDER	1=female	65.4	63.0
	0=male	34.6	37.0
MARRIED	1=married	32.0	32.7
	0=not married	68.0	67.3
COLLEGE	1=college education	25.0	34.0
	0=no college education	75.0	66.0
FLUENT	1=fluent in English	55.2	50.5
	0=not fluent in English	44.8	49.5
HOMEOWNERSHIP	1=homeowner	81.7	62.2
	0=no homeowner	18.3	37.8
SELF-EMPLOYEMENT	1=self-employed	10.00	7.5
	0=not self-employed	90.0	92.5
URBAN	1=MSA	91.9	85.9
	0=no MSA	8.1	14.1

[1] Means and standard deviations for all the variables included in the model are available from the author upon request
[2] Reference category: 75+

hand, a higher proportion of the stayers was self-employed, owning a home, and fluent in English. Also, a greater percentage of stayers resided in urban areas.

Table 5 displays the regression results testing for the relevance of the economic theory as well as the importance of state-specific factors in shaping migration decisions, such as social capital embodied in foreign-born networks. One can observe an age profile of migration with the younger population being more likely to relocate than the elderly. The human capital theory suggests that as age increases, the net gain of migration that can be accumulated over the years decreases, reducing the probability of migrating. In addition, age, job tenure, and annual wages are very often positively correlated, leading to higher costs of migrating for the adult population.

RAVENSTEIN (1885, 1889) was one of the first who noted that women dominate short-distance migration flows, whereas men dominate long-distance moves. NAKOSTEEN and ZIMMER (1980) studied interstate migration streams and pointed out that women are less likely to migrate than men, reflecting on the position of a male wage earner as the head of a typical household. One would expect that greater social and economic equality between the two genders in recent years has reduced the male predominance in interstate migration. The regression results indicate, however, that foreign-born German women are apparently more hesitant to relocate within the United States than their male counterparts. The odds ratio of 0.95 for interstate migration shows that women, compared to men, are 5% less likely to migrate than men are.

Moreover, there is a positive relationship between the level of education and the probability of migration. The underlying assumption is that the quantity and quality of information an individual can gather on potential locations increase with education. In addition, the labor markets for better-educated persons are assumed to be more national in scope than those for less-educated persons. By reducing the costs and increasing the benefits of migrating, expected utility in potential destinations might be greater for better-educated people than for less-educated persons (GREENWOOD 1975; SANDEFUR a. SCOTT 1981; NEWBOLD

Table 5: Logistic regression model of interstate migration flows of foreign-born Germans in the United States, 1985–1990 (results presented as odds ratios)

Logistisches Regressionsmodel der Binnenwanderung von ausländischen Deutschen in den Vereinigten Staaten von Amerika 1985–1990 (Ergebnisse sind als "odds ratio" dargestellt)

Person Characteristics	Odds Ratios
AGE25–34	3.0203*
AGE35–44	2.1255*
AGE45–54	1.6169*
AGE55–64	1.2996*
AGE65–74	1.5406*
GENDER	0.9522*
MARRIED	1.1322*
COLLEGE	1.4760*
FLUENT	1.0006
HOMEOWNERSHIP	0.3926*
SELF-EMPLOYEMENT	0.7399*
URBAN	0.5670*
Place Characteristics	**Odds Ratios**
NATIVITY CONCENTRATION	0.8654*
UNEMPLOYMENT RATE	0.9557*
UNEMPLOYMENT RATE * AGE25–34	1.0289*
TEMPERATURE VARIATION	1.0062*
N	29,139 (unweighted) 586,132 (weighted)
Chi-Square	20840.405

* $p<0.05$

1996). The regression results confirm that college education, relative to no college education, makes foreign-born Germans 47% more migratory.

As expected, since persons who have better language skills will have better information on opportunities and adapt more easily to a new location, the ability to speak English has a positive effect on migration (NOGLE 1994). The result, however, is not significant. BARTEL (1989) made a similar observation using 1980 Census data. He concluded that education is *the* person-specific human capital factor reflecting consistently on skills and experiences that distinguishes foreign-born interstate migrants from foreign-born non-movers.

Homeownership can be considered to be a form of location-specific capital. Since homeowners have presumably invested in their property or have established close ties to their community, they are very often hesitant to give up their dwelling (CLARK 1986). As shown in Table 5, foreign-born German homeowners are indeed significantly less likely to move than those who rent a housing unit.

Self-employment is very specific to a certain location and reduces a person's likelihood to relocate. The possibility of losing clientele or distributors might be considered to be a strong deterrent to interstate migration flows (NAKOSTEEN a. ZIMMER 1980; SANDEFUR a. SCOTT 1981). Thus communities with a greater percentage of people being self-employed can be expected to show more cohesion (KOBRIN a. SPEARE 1983). Table 5 reveals that self-employment has the expected negative significant effect on the odds of migrating. In other words, self-employed foreign-born Germans, relative to not self-employed persons, are 26% less likely to relocate to another state.

Living in urban areas reduces the probability of migrating. This finding corresponds to the observation made by many other scholars showing that immigration is an urban phenomenon. Thus, immigrants and foreign-born prefer very often the urban to the rural areas. Among the place characteristics, nativity concentration appears to be a strong deterrent to secondary migration flows of foreign-born Germans. Social ties and affinities to community kin and friends discourage people from leaving areas with high levels of nativity concentration by about 14%. The strong finding for the nativity concentration variable corresponds to the observation made earlier concerning the primary settlement areas of foreign-born Germans as documented in Figure 1 and Table 2. The presence of fellow countrymen at the state and Census Region level has

apparently a strong deterrent effect on the migration of foreign-born Germans reinforcing the uneven spatial distribution of the foreign-born German population stock as observed earlier in Figure 1.

Surprisingly, higher unemployment rates make foreign-born Germans less migratory. The interaction term between the unemployment rate and the young age cohort (AGE 25–34) shows that younger people respond to higher unemployment in a very similar way. In general, this finding is unexpected. Following the literature, however, unemployment does not always affect the entire population. Therefore, unemployment at the origin sometimes fails to influence migration propensities in the expected direction (GREENWOOD 1975). Finally, the climate variable was included to test for the role of amenities in influencing migration decisions. It turns out that moderate climates, similar to the ones observed in Germany, do not have a significant effect on the migration of foreign-born Germans.

Conclusion and Directions for Future Research

This investigation shows that foreign-born Germans do indeed display very distinct interstate migration patterns. Although their overall migration rate between the ten spatial units of analysis selected for this study does not differ from the migration rate calculated for the total United States population (7.2% versus 7.3%), the conditional origin-destination-specific migration probabilities vary significantly by origin and destination. Thus, foreign-born Germans display distinct preferences to migrate to certain states or remain in others. For example, there is an overall strong tendency to migrate from the Northern parts of the country to Florida and the Rest of the South. Consequently, these two regions are among the few which actually gain foreign-born German net-migrants during the 1985–1990 time period. Texas followed by New Jersey and New York experiences the highest out-migration rates and the retention probabilities calculated for foreign-born Germans in these states are among the lowest derived for the different states and regions under consideration. Although the retention probability for the Rest of the Midwest is very high, this region does not appear to be very attractive to foreign-born Germans from other parts of the nation. Traditionally, the Midwest was the primary settlement area of foreign-born Germans. Although about 20.42% of all foreign-born Germans lived in this area (including Illinois) in 1990, foreign-born Germans could also be found in high numbers and proportions in the Rest of the South, Florida, and California. Given the origin-destination-specific migration patterns described in this article, it is expected that the proportion of foreign-born Germans residing in the South and West will increase in the future.

The investigation of the determinants of the interstate migration flows reveals that age, marital status or homeownership influence migration propensities independently from each other. All else equal, persons with greater human capital resources are more migratory than those with very limited resources. Moreover, social capital at the origin can act as a strong deterrent to interstate migration. This finding is closely linked to the observation made earlier that foreign-born Germans are not evenly distributed throughout the United States. The presence of fellow countrymen apparently reinforces the uneven spatial distribution of the foreign-born German population stock.

As noted earlier, the number and proportion of foreign-born Germans in the United States have been declining over the years. As the fifth largest foreign-born group, however, foreign-born Germans continue to be an important segment of the entire foreign-born population stock. As revealed in this study, foreign-born Germans have been migrating to the same states and regions that have also been attracting more recent foreign-born (Mexicans, Chinese, or Cubans) during the 1985–1990 time period. For the future, it would be interesting to analyze the interaction between foreign-born Germans and these more recent groups as well as the native-born population in the high-immigration states. FREY notes in various articles (1994, 1995 a, 1995 b, 1996) that there appears to be a negative relationship between immigration and internal migration of certain segments of the native-born population affecting particularly high-immigration states. BARFF, ELLIS and REIBEL (1995) and WHITE and IMAI (1994) do not support FREY's argument. It would be interesting to test if FREY's "white flight hypothesis" is affecting older immigrant cohorts, such as foreign-born Germans.

In addition, one could investigate migration patterns of foreign-born Germans over time by pooling data from various Census counts. Since migration is a process rather than an event and a longitudinal study could more adequately capture the dynamic nature of the migration process, this idea appears especially intriguing. Finally, more and more different variables reflecting on state context factors could be included in the regression models. For example, one could test for the relevance of different amenity variables in influencing migration decisions of elderly foreign-born Germans. As noted in the introduction, this paper was concerned with providing a general overview of the internal migration patterns of foreign-born Germans in the

United States during the 1985–1990 time period. Therefore, analyzing the role of specific context variables on the migration rates of subgroups of the population would have been beyond the scope of this article. Overall, given the growing importance of internal migration on the demographic, social, economic, and political status quo of certain states and regions, further work in this area is needed.

References

BADE, K. J. (Ed.) (1993): Deutsche im Ausland – Fremde in Deutschland: Migration in Geschichte und Gegenwart. München.

BÄHR, J. (1983): Bevölkerungsgeographie: Verteilung und Dynamik in globaler, nationaler und regionaler Sicht. Stuttgart.

BARFF, R., ELLIS, M., a. REIBEL, M. (1995): The Links between Immigration and Internal Migration in the United States: A Comparison of the 1970s and the 1980s. Working Paper Series No.1. Dartmouth College.

BARTEL, A. P. (1989): Where Do The New U.S. Immigrants Live? In: Journal of Labor Economics 7 (4), 371–391.

BARTEL, A. P. a. KOCH, M. J. (1991): Internal Migration of U.S. Immigrants. In: ABOWD, J. M. a. FREEMAN, R. B. (Eds.): Immigration, Trade, and the Labor Market. Chicago, 121–134.

BEAN, F. D. a. TIENDA, M. (1987).: The Hispanic Population of the United States. New York.

BELANGER, A. a. ROGERS, A. (1992): The Internal Migration and Spatial Redistribution of the Foreign-Born in the United States: 1965–70 and 1975–80. In: International Migration Review 26 (4), 1342–1369.

BOSWELL, TH. D. (1984): The Migration and Distribution of Cubans and Puerto Ricans Living in the United States. In: Journal of Geography 83 (2), 65–72.

CHISWICK, B. R. a. SULLIVAN, T. A. (1995): The New Immigrants. In: FARLEY, R. (Ed.): State of the Union: America in the 1990. Volume Two: Social Trends. New York, 211–270.

CLARK, W. A. V. (1986): Human Migration. Beverly Hills, CA.

COLEMAN, J. S. (1988): Social Capital in the Creation of Human Capital. In: American Journal of Sociology 94 (Supplement), 95–120.

DUNLEVY, J. A.(1980): Nineteenth-Century European Immigration to the United States: Intended versus Lifetime Settlement Patterns. In: Economic Development and Cultural Change 29 (1), 77–90.

– (1991): On the Settlement Patterns of Recent Caribbean and Latin Immigrants to the United States. In: Growth and Change 22 (1), 54–67.

DUNLEVY, J. A. a. GEMERY, H. A. (1977): British-Irish Settlement Patterns in the U.S.: The Role of Family and Friends. In: Scottish Journal of Political Economy 24 (3), 257–263.

FORBES, S. S. (1985): Residency Patterns and Secondary Migration of Refugees. In: Migration News 34 (1), 3–18.

FREY, W. H. (1994): The New White Flight. In: American Demographics, April 1994, 1–6.

– (1995a): The New Geography of Population Shifts: Trends Toward Balkanization. In: FARLEY, R. (Ed.): State of the Union: America in the 1990s. Volume Two: Social Trends. New York, 271–336.

– (1995b) : Immigration and Internal Migration "Flight": A California Case Study. In: Population and Environment 16 (4), 353–375.

– (1996): Immigration, Domestic Migration, and Demographic Balkanization in America: New Evidence for the 1990s. In: Population and Development Review 22 (4), 741–763.

GALLAWAY, L. E., VEDDER, R. K., a. SHUKLA, V. (1974): The Distribution of the Immigrant Population in the United States: An Economic Analysis. In: Explorations in Economic History 11 (3), 213–226.

GREENWOOD, M. J. (1975): Research on Internal Migration in the United States: A Survey. In: Journal of Economic Literature 8 (2), 397–433.

HOSMER, D. W. a. LEMESHOW, S. (1989): Applied Logistic Regression. New York.

ISSERMAN, A. M., PLANE, D. A., a. MCMILLEN, D. B. (1982): Internal Migration in the United States: An Evaluation of Federal Data. Review of Public Data Use 10, 285–311.

JASSO, G. a. ROSENZWEIG, M. R. (1990): The New Chosen People: Immigrants in the United States. New York.

JONES, M. A. (1992): American Immigration, 2nd Edition. Chicago.

KOBRIN, F. E. a. SPEARE, A. Jr. (1983): Out-Migration and Ethnic Communities. In: International Migration Review 17 (3), 425–444.

KRITZ, M. M. a. NOGLE, J. M. (1994): Nativity Concentration and Internal Migration among the Foreign-Born. In: Demography 31 (3), 509–524.

KRITZ, M. M. a. GURAK, D. T. (1996): Context Determinants of Interstate Migration of U.S. Immigrants. Working Paper No. 96.08. Population and Development Program. Cornell University.

LAZARUS, E. (1889): The New Colossus. In: LAZARUS, M. a. LAZARUS, A. (Eds.): The Poems of E. Lazarus in Two Volumes. Narrative, Lyric, and Dramatic. Boston and New York 1889 (microfiche).

LIEBERSON, S. a. WATERS, M. C. (1987): The Location of Ethnic and Racial Groups in the United States. In: Sociological Forum 2 (4), 780–810.

– (1990): From Many Strands: Ethnic and Racial Groups in Contemporary America. New York.

LONG, L. (1988): Migration and Residential Mobility in the United States. New York.

LUEBCKE, F. C. (1990): Three Centuries of Germans in America. In: LUEBCKE, F. C. (Ed.): Germans in the New World. Urbana-Chicago, 157–189.

MASSEY, D. S. (1990): Social Structure, Household Strategies, and the Cumulative Causation of Migration. In: Population Index 56 (1), 3–26.

MASSEY, D. S. a. Espinosa, K. E. (1997): What's Driving U.S. Migration?: A Theoretical, Empirical, and Policy Analysis. In: American Journal of Sociology 102, 939–999.

MCHUGH, K. E. (1989): Hispanic Migration and Population Redistribution in the United States. In: Professional Geographer 41 (4), 429–439.

MINCER, J. (1978): Family Migration Decisions. In: Journal of Political Economy 86 (5), 749–773.

NAKOSTEEN, R. A. a. ZIMMER, M. (1980): Migration and Income: The Question of Self-Selection. In: Southern Economic Journal 46 (3), 840–851.

National Research Council (1997): The New Americans: Economic, Demographic, and Fiscal Effects of Immigration. Panel on the Demographic and Economic Impacts of Immigration, Washington, D.C..

NEWBOLD, K. B. (1996): Internal Migration of the Foreign-Born in Canada. In: International Migration Review 30 (3), 728–747.

NOGLE, J. M. (1994): Internal Migration for Recent Immigrants to Canada. In: International Migration Review 28 (1), 31–48.

– (1996): Internal Migration Patterns for U.S. Foreign-Born, 1985–1990. In: International Journal of Population Geography 3 (1), 1–13.

PLANE, D. A. a. ROGERSON, P. A. (1991): The Ten Commandments of Migration Research. In: BOYCE, D. E., NIJKAMP, P., a. SHEFER, D. (Eds.): Regional Science: Retrospect and Prospect. Berlin-Heidelberg-New York, 15–41.

PORTES, A. a. RUMBAUT, R. G. (1990): Immigrant America. Berkeley, CA.

RAVENSTEIN, E. G. (1885): The Laws of Migration. In: Journal of the Royal Statistical Society, XLVIII, Part II, 167–227.

– (1889): The Laws of Migration: Second Paper. In: Journal of the Royal Statistical Society, LII, 214–301.

SAENZ, R. (1991): Interregional Migration Patterns of Chicanos: The Core, Periphery, and Frontier. In: Social Science Quarterly 72 (1), 135–148.

SAENZ, R. a. CREADY, C. M. (1997): Adios Aztlan: Mexican American Outmigration from the Southwest. Paper presented at the Annual Meeting of the Population Association of America, Washington D.C., March 27–29.

SANDEFUR, G. D. a. SCOTT, W. J. (1981): A Dynamic Analysis of Migration: An Assessment of the Effects of Age, Family, and Career Variables. In: Demography 18 (3), 355–368.

SJAASTAD, L. A. (1962): The Costs and Returns of Human Migration. In: Journal of Political Economy 70 (5), Part 2, 80–93.

TROVATO, F. (1988): The Interurban Mobility of the Foreign-Born in Canada, 1976–81. In: International Migration Review 22 (3), 59–86.

U.S. Department of Commerce, Bureau of the Census (1975): Historical Statistics of the United States. Colonial Times to 1970. Part 1. Washington, D.C.

– (1983): 1980 Census of Population. Volume I. Characteristics of the Population. Chapter C. General Social and Economic Characteristics. Part 1. United States Summary. (PC80–1-C1). Washington, D.C.

– (1993a): Census of Population and Housing, 1990 [United States]: Public Use Microdata Sample: 5-Percent Sample [Computer file]. 2nd release. Washington, D.C.: U.S. Department of Commerce, Bureau of the Census [producer]. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor]. Washington, D.C.

– (1993b): We the American Foreign-Born Population. (P20–494). Washington, D.C.

– (1993c): 1990 Census of Population. Social and Economic Characteristics. United States. (1990 CP–2–1). Washington, D.C.

– (1998a): State Population Estimates: Annual Time Series, July 1, 1990 to July 1, 1998. Internet Release Date: December 31, 1998.

– (1998b): The Foreign-Born Population in the United States: March 1997 (Update). (P20–507). Washington, D.C.

U.S. Department of Justice, Immigration and Naturalization Service (1997): 1996 Statistical Yearbook of the Immigration and Naturalization Service. Washington, D.C.

VEDDER, R .K. a. GALLAWAY, L. E. (1970): Settlement Patterns of Canadian Emigrants to the United States, 1850–1960. In: Canadian Journal of Economics III (3), 476–486.

– (1972): The Geographical Distribution of British and Irish Emigrants to the United States after 1880. In: Scottish Journal of Political Economy 19 (1), 19–35.

WALKER, R., ELLIS, M. a. BARFF, R. (1992): Linked Migration Systems: Immigration and Internal Labor Flows in the United States. In: Economic Geography 68 (3), 234–248.

WHITE, M. J. a. IMAI, Y. (1994): The Impact of U.S. Immigration Upon Internal Migration. In: Population and Environment 15 (3), 189–209.