THE IMPACT OF LIFETIME MOBILITY ON THE NATIVE MIGRATORY RESPONSE TO IMMIGRATION*

Regina M. Bures and Hideki Morooka

University at Albany, SUNY

* Address correspondence to Dr. Regina M. Bures, University at Albany--SUNY, Dept. of Sociology, Arts and Sciences 360, 1400 Washington Ave., Albany, NY, 12222. email: rbures@albany.edu. This research was partially supported by grants to the University at Albany Center for Social and Demographic Analysis from NICHD (P30 HD32041) and NSF (SBR-9512290). The authors would like to thank Douglas Gurak and Mary Kritz for their assistance with matching the foreign-born sample.

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ABSTRACT

This paper examines the importance of past migration experience among the native population on their migratory response to immigration. Building on the work of Kritz and Gurak (2001), we distinguish between natives residing in their state of birth and native lifetime migrants to better understand the native migratory response. We find that lifetime migrants are significantly more likely to move from states with high immigration than either the foreign born or natives living in their state of birth. The planning and policy implications of this finding are significant: To fully understand the impact of immigration on state and local population change researchers need to take into account the lifetime mobility of the native population.

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INTRODUCTION

Debates about the consequences of immigration often focus on its impact on local social and economic conditions. One way that scholars have evaluated this impact is by examining the native migratory response to immigration (Card 2001; Card and DiNardo 2000; Ellis and Wright 1998; Frey 1995; Gurak and Kritz 2000; Kritz and Gurak 2001; White and Imai 1994; White and Liang 1998; Wright et al. 1997). These studies generally interpret increases in native out-migration as reflecting decreases economic opportunities due to the influx of immigrants.

Taking this interpretation a step further, the Balkanization interpretation characterizes the migration of natives away from high immigration areas as an extension of ongoing inequality and a reflection of the growing social costs of immigrants (Frey 1995). The Balkanization metaphor has been criticized for its assumption that residential assimilation is an accurate measure of immigrant integration (Ellis and Wright 1998). Recent work on native receptivity to immigrants finds that both the economic and social contexts contribute to levels of receptivity (DeJong and Tran 2001). Because increased immigration is associated with social and economic change, whether communities can adapt socially to these changes is one of the current challenges facing California and other high immigration states (see Clark 1998).

This paper extends the native migratory response model by taking into account the lifetime mobility of natives as well as the foreign born. Traditionally the native migratory response has implied that all natives are equally likely to move when, in fact, individuals who have migrated in the past have a higher probability of moving: Since the late 1950's most

interstate migrants are persons who have moved before (Long 1988). If this is the case, research that does not take into account the migration experiences of the native population may overestimate the impact of immigrants on native's economic opportunities in local labor markets as well as native out-migration.

To illustrate this point, Table 1 presents the nativity percentages for the 10 states with the largest foreign-born populations and the US as a whole. In 1990, 61.8% of the total US population were 'true' natives who lived in their state of birth, 30.3% of the population were lifetime migrants living outside their state of birth, and 7.9% of the population were foreign-born. Among the high immigrant states, California (31.9), Florida (56.5), New Jersey (32.7), and Washington (45.2) all have higher proportions of lifetime native in-migrants than did the US as a whole. Comparing the migration behavior of natives and the foreign-born for these states, Kritz and Gurak (2001) find a positive relationship between immigration and native out-migration for California and Florida--the only two states with less than 50% 'true' native population and more than 10% foreign-born.

[TABLE 1 ABOUT HERE.]

DATA AND METHODS

This paper builds on the work of Kritz and Gurak (2001). We begin by replicating their work comparing the out-migration of native and foreign born men. We then distinguish between natives who live in their state of birth and those who live outside their state of birth while examining the relationship between immigration and internal migration. We use data from the

5% sample of the 1990 Public Use Microdata Files (PUMS). Our sample is restricted to men aged 25-60 who did not live in group quarters, were not enrolled in school, did not move to the US between 1985 and 1990, and were not born abroad to American parents. The sample was constructed using data from the Integrated Public Use Microdata Series (IPUMS; Ruggles and Sobek 1997). The analytic sample includes 174,777 foreign-born men and 2,075,052 native-born men. In the unweighted sample of native-born men, 36% had experienced lifetime mobility and 64% resided in their state of birth.

The dependent variable is a dichotomous measure reflecting whether the respondent moved between states in the five-year period prior to the census. We distinguish between whether an individual is foreign-born, a 'true' native (living in their state of birth), or a native lifetime migrant. The key independent variable is a categorical measure of the respondent's lifetime mobility: native living in state of birth, native not living in state of birth, and foreign-born. Table 2 summarizes the means for the variables used in our analyses by lifetime mobility status. Like Kritz and Gurak (2001), we find that 11% of native-born (not shown) and 9% of foreign-born men moved between states in the 1985 to 1990 period. We also find that, among natives, whether a respondent's 1990 state of residence differs from his 1985 state of residence varies substantially by lifetime mobility status: 6% of men living in their state of birth experienced an interstate move between 1985 and 1990 compared to 20% of men who were lifetime migrants.

[TABLE 2 ABOUT HERE.]

Additional independent variables include: age, education, ability to speak English, self-employment status, and year of immigration. Age is a continuous variable measured in years. Education is measured using a series of categorical variables: less than high school (reference category), high school education, some college, and college graduate. A respondent's ability to speak English is measured using a categorical variable coded 1 if he reported speaking English only or speaking English very well. Self-employment status is coded 1 if the respondent was self-employed in 1990; 0 otherwise.

For the foreign born, we control for year of immigration: immigrated before 1965 (reference category), immigrated 1965-74, immigrated 1975-1984. Logistic regression is used to estimate whether a respondent out-migrated from his 1985 state of residence during the 1985 to 1990 period.

RESULTS

Table 3 summarizes the results from the foreign-born / native-born contrast. The results originally reported by Kritz and Gurak (2001; Table 5, column A) using a sample comprised of a 5% sample of foreign-born men and a 1/2000 sample of native-born, non-Hispanic white men are presented in Table 3, Column 1. In Column 2, we repeat their basic analysis using a full 5% sample of both foreign-born and native-born, non-Hispanic white men.

Overall, our findings are consistent with the Kritz and Gurak analysis. The two sets of results are quite similar for California, New York, Florida, Michigan, and the residual category, Other States. However, there are also some differences that should be noted. The odds of out-migration among foreign-born men residing in Pennsylvania, the high-immigration state with the

lowest proportion of lifetime in-migrants, are slightly greater in our sample (1.96 versus 2.25). For Texas, the odd of foreign-born men out-migrating decreases (1.25 versus 0.93) and becomes significant. The odds of out-migration for foreign-born men residing in New Jersey, Washington, Illinois, and Massachusetts remain slightly higher than those for native-born men, but decrease substantially.

One possible explanation for these differences is that the larger sample of native-born men contains a larger sample of lifetime migrants, men who have a much higher probability of out-migrating than 'true' natives. This would be consistent with the general pattern of decreased odds of out-migration for the foreign-born men relative to the larger native sample. We hypothesize that, given the greater migration propensity of lifetime migrants, their migratory response to immigration may be significantly stronger than that of 'true' natives living in their state of birth.

[TABLE 3 ABOUT HERE.]

In Table 4, we explore this possibility. Column I presents the odds of out-migration for native-born, non-Hispanic white men compared to foreign born men. These results are the complements of the odds ratios presented in the second column of Table 2. Compared to the foreign-born, natives are significantly more likely to have moved out of the states of California, Florida, and Texas. Column II in Table 4 summarizes the results comparing the out-migration behavior of 'true' natives, lifetime migrants, and the foreign-born (reference). These results demonstrate that the native migratory response to immigration varies significantly by the lifetime

migration status of the native born population. 'True' natives of even the highest immigration states are less likely to move than the foreign born. Lifetime migrants are significantly more likely to move from high immigration states than either the foreign born or 'true' natives (not shown).

[TABLE 4 ABOUT HERE.]

Looking at the results for the states that had demonstrated higher native out-migration (California, Florida, and Texas) demonstrates that subdividing the native-born population into two groups, i.e. 'true' natives and lifetime migrants, more accurately captures the migratory response to foreign-born immigrants. In California, 'true' natives are slightly less likely to out-migrate than the foreign born, although this difference is not statistically significant. However, lifetime migrants are 3.90 times more likely to move from California than the foreign-born. Similarly, the odds of out-migrating among 'true' natives in Florida and Texas are 0.62 and 0.36, respectively. Lifetime migrants are 2.3 times more likely than the foreign-born to move from Florida and 2.27 times more likely to move from Texas.

Looking back at the results comparing all natives with the foreign-born (column I), native-born non-Hispanic white men appeared to be 2.3 times more likely to move out of California than foreign-born men. In states (like California) that have experienced growth through in-migration from other states, pooling the native population overshadows an important dimension of population composition and could result in overestimating the impact of immigration on the likelihood of out-migration among the 'true' native population. For example,

the magnitude of the odds ratio between true Texas natives (0.36) and lifetime migrants (2.27) reveals a greater substantive difference between the two native groups than between all natives and the foreign-born (OR = 1.07).

For all the states examined, we find that 'true' natives, those living in their state of birth, are less likely to out-migrate than either native lifetime migrants or the foreign born. We do find evidence suggestive of a weak native migratory response comparing the odds of out-migration among 'true' natives of high immigration states (ranging from 0.29 to 0.96) with those of 'true' natives from low immigration states (the 'other states' category; 0.26). However, more research is needed to determine whether this finding is truly a native migratory response or whether the foreign born are more likely to leave states with small immigrant populations.

High proportions of lifetime migrants living in a state both generate and contribute to the strength of the native migratory response. Therefore, considering the migratory response of the native-born population without considering their lifetime mobility status could result in a misleading interpretation of the impact of immigration on state population change. Dividing the native-born population into 'true' natives and lifetime migrants allows us to observe the distinct migration patterns of the two different groups and their migratory responses to immigration.

CONCLUSION

To date, researchers examining the effects of immigration on the native migratory response have relied on a basic categorization of migrants into natives and the foreign-born. This categorization overlooks the migration history of native population. Past migration

experiences shape future migration behavior and play an important role understanding the native migratory response.

This paper illuminates a significant gap in the literature on the native migratory response: To fully understand the impact that immigrants have on state and local economies, planners and policymakers need to recognize that the native response may depend on the lifetime mobility status of the native population. Distinguishing between natives residing in their state of birth and lifetime migrants will help us to better understand the true native migratory response.

Some limitations of the present analyses should be noted. For example, we do not know how long a lifetime migrant has resided in a specific state. A "lifetime migrant" who has lived in an area since childhood would be less likely to move, leading to an underestimation of the mobility of lifetime migrants. At the same time, an interstate move may not necessarily reflect a long-distance move: Moves within many metropolitan areas may result in crossing a state line. In this case, lifetime mobility would reflect local adjustments more than regional shifts. While important to note, these limitations are artifacts of the information that is available in the US Census.

Further research is needed to fully evaluate the relationship between lifetime mobility and the migratory response to immigration. Particularly salient questions include: Which lifetime migrants are most likely to move? What are the social consequences of growth via both immigration and interstate in-migration? How do lifetime mobility and immigration affect both state and local settlement patterns? The answers to these questions will have significant implications for planners and policymakers who are interested in promoting growth by attracting either in-migrants, immigrants, or both.

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TABLE 1. NATIVITY PERCENTAGES FOR THE 10 STATES WITH THE LARGEST FOREIGN-BORN POPULATIONS, 1990

State	% Living in State of Birth	% Not Living in State of Birth	% Foreign-Born
California	46.4	31.9	21.7
New York	67.5	16.6	15.9
Florida	30.5	56.6	12.9
New Jersey	54.8	32.7	12.5
Massachusetts	68.7	21.8	9.5
Texas	64.7	26.3	9.0
Illinois	69.1	22.6	8.3
Washington	48.2	45.2	6.6
Michigan	74.9	21.3	3.8
Pennsylvania	80.2	16.7	3.1
Total United States	61.8	30.3	7.9

Sources: http://www.census.gov/population/www/documentation/twps0029/tab13.html; http://www.census.gov/population/socdemo/migration/pob-rank.txt

TABLE 2. WEIGHTED SUMMARY STATISTICS FOR ANALYSIS VARIABLES, NATIVE NON-HISPANIC WHITE AND FOREIGN-BORN MEN AGE 25-60, 1990

		Living in State of Birth		Not Living in State of Birth		Foreign-Born	
Variable	Measure	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Interstate Migration	1 = R's 1990 state of residence differs from 1985 state	0.06	0.23	0.20	0.41	0.09	0.29
Foreign-Born Status	1 = Foreign-born	-	-	-	-	1.00	0.00
Age	R's age in years (25-60)	40.02	9.83	42.24	9.94	40.63	9.73
Education							
Low Education	1 = Some high school or less (reference category)	0.17	0.37	0.11	0.32	0.40	0.49
High School Graduate	1 = High school is R's highest level of education	0.35	0.47	0.24	0.44	0.17	0.38
Some College	1 = R has some post-high school education	0.26	0.44	0.28	0.46	0.18	0.39
College Graduate	1 = R has 4-year college degree or higher	0.22	0.41	0.36	0.49	0.24	0.43
Speaks English	1 = R speaks English only or speaks English very well	0.99	0.08	0.99	0.08	0.54	0.50
Self-employed	1 = R is self-employed in 1990	0.14	0.34	0.13	0.34	0.15	0.35
Year of Immigration to U.S.							
Immigrated Before 1965	1 = R immigrated to U.S. before 1975	-	-	-	-	0.23	0.42
Immigrated 1965-1974	1 = R immigrated in 1965-1974	-	-	-	-	0.30	0.46
Immigrated 1975-1984	1 = R immigrated in 1975-1984	-	-	-	-	0.47	0.50
n		1,328,858		746,194		174,777	

Data: IPUMS 1990 5%

TABLE 3. ODDS OF OUT-MIGRATION FOR FOREIGN-BORN MEN VERSUS NATIVE-BORN, NON-HISPANIC WHITE MEN, 1990

State	Foreign-Born Men		Foreign-Born Men	
	Kritz and Gurak (2001)		IPUMS-based sample	
California	0.43	***	0.45	***
New York	1.24		1.21	***
Florida	0.65	***	0.55	***
New Jersey	1.35		1.10	*
Massachusetts	1.87	***	1.09	
Texas	1.25		0.93	*
Illinois	1.24		1.02	
Washington	1.71	**	1.26	**
Michigan	1.58	**	1.43	***
Pennsylvania	1.96	***	2.25	***
Other States	1.73	***	1.62	***

Notes: Dependent variable is whether an individual moved out of their state of residence in 1985. All models control for age, education, English language ability, and self employment.
* $p<0.05$; ** $p<0.01$; *** $p<0.001$

TABLE 4. ODDS OF OUT-MIGRATION FOR NATIVE-BORN, NON-HISPANIC WHITE MEN VERSUS FOREIGN-BORN MEN, 1990

	I	II	
State	All Natives	Living in State of Birth	Not Living in State of Birth
California	2.23 ***	0.96	3.90 ***
New York	0.83 ***	0.61 ***	2.17 ***
Florida	1.81 ***	0.62 ***	2.30 ***
New Jersey	0.91 *	0.58 ***	1.49 ***
Massachusetts	0.92	0.57 ***	2.13 ***
Texas	1.07 *	0.36 ***	2.27 ***
Illinois	0.98	0.57 ***	2.30 ***
Washington	0.79 **	0.32 ***	1.30 ***
Michigan	0.70 ***	0.42 ***	1.78 ***
Pennsylvania	0.45 ***	0.29 ***	1.20 **
Other States	0.62 ***	0.26 ***	1.22 ***

Notes: Foreign-born is the reference group (odds=1). Dependent variable is whether an individual moved out of their state of residence in 1985. All models control for age, education, English language ability, and self employment.

Data: IPUMS 1990 5%

* $p<0.05$; ** $p<0.01$; *** $p<0.001$