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Multivariate Explanation of the 1985–1990 and 1995–2000 Destination Choices of Newly Arrived Immigrants in the United States: The Beginning of a New Trend?

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ABSTRACT

This paper identifies the salient features in the 1985–1990 and 1995–2000 destination choices of newly arrived immigrants, and performs multivariate explanation of these choices, based on an application of a multinomial logit model to the state-specific immigration data of the 1990 and 2000 censuses. The salient features are that: (1) the destination choice pattern of the newly arrived immigrants became more dispersed from the late 1980s to the late 1990s; (2) the change was pervasive in the sense that it was true for all combinations of five broad ethnic groups and four levels of educational attainment; (3) the change was much greater for Hispanics and Blacks than for Asians and Whites; (4) the lower the level of education, the greater the increase in dispersion; and (5) the Hispanics with the lowest education experienced the greatest increase in dispersion. Our multivariate analysis reveals that: (1) while the attraction of co-ethnic communities as destinations remained strong for both periods, it became much less intense in the late 1990s, especially for Hispanics and Blacks; (2) the newly arrived immigrants were subject to the strong pull of higher income level in both periods; (3) the pull of employment growth became stronger and more industry-specific from the late 1980s to the late 1990s; and (4) the pull of *service* employment growth, especially for the least-educated Hispanic immigrants, became much stronger in the later period. In the context of the progressive entrenchment of neoliberalism and the major changes in immigration policies, our empirical findings suggest that the ethnically selective dispersal of immigrants in the late 1990s is probably the beginning of a new trend. Copyright © 2007 John Wiley & Sons, Ltd.

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INTRODUCTION

The widespread dispersal of immigrant population (i.e. foreign-born residents), especially those of Hispanic origin, can be considered as the most salient demographic feature of the USin the 1990s. It is a marked reversal of a long-term concentration trend that can be dated all the way back to the 1890s[1] (Passel and Zimmermann, 2001). A clear pattern of an increase in dispersal first emerged for the Mexican immigrant population in the early 1990s. Based on the March supplement of the 1996 Current Population Survey (CPS), Durant *et al.* (2000) found that the shares of the Mexican

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immigrant population by the two most important gateway states, California and Texas, decreased substantially from 57.8% and 22.1% in 1990 to 46.6% and 16.7% in 1996. These sharp decreases were accompanied by very rapid growth of Mexican immigrant population in states like Idaho, North Carolina and Minnesota, which used to have relatively few Hispanic residents. However, the concentration trend probably persisted for other immigrant groups into the early 1990s. We learn from Passel and Zimmermann (2001) that despite the clear decline in its share of the Mexican immigrant population, Texas experienced an increase in its share of the country's total immigrant population from 8.4% in 1990 to 8.9% in 1996, and that the share of the total immigrant population by the top six states remained the same at 72.9% in 1990 and 1995. Nonetheless, by the late 1990s, the decline in the concentration of the total immigrant population became quite clear: the share by the top six states declined first to 72.4% in 1996 and then to 69.9% in 1999 (Passel and Zimmermann, 2001).

The geographical dispersal of the immigrant population has brought new opportunities and challenges to both immigrants themselves and many host communities that used to have little direct contact with people of foreign origin. Small communities experiencing declining population and tax base as a consequence of the substantial out-migration of their working-age natives were revitalised or prevented from losing their local plants by the arrival of hardworking immigrants who were willing to accept practically any kind of job, including the cold, wet, repetitive and injury-prone jobs in meat-processing plants where the low wages were nonetheless higher than farm wages and several times the wages in the immigrants' home countries (Grey and Woodrick, 2002; Johnson-Webb, 2003; Gozdziak and Bump, 2004). But many immigrant workers were followed by their spouses and young children who in some cases incurred serious impacts on the health, social and educational service systems of the small communities. In some cases the impact can be traumatic. For example, the number of Hispanic students in the public schools of Dalton (the 'Carpet City of the World', with a population of 21,761 in 1990) in northwestern Georgia increased sharply from 151 in 1989–90 to 1,992 in 1998–99, with an average annual growth rate of 28.7%, resulting in a sharp increase in the Hispanic share of the total students in public schools from 4% in 1989–90 to 42% in 1998–99. Within the nine years, the white share of the total enrolment decreased from 80.1% to 44.6%, while the size of the total enrolment increased from 3876 to 4794 students (Hernandez-Leon and Zuniga, 2000: 56). This drastic transformation implies a greater need for ESL (English as a Second Language) teachers and more frequent turnover of students during the school year, as their immigrant parents move in and out of the community as 'flexible labour'. In a recent review of research on immigrant assimilation, Waters and Jimenez (2005) identified the numerous small communities with rapid growth of the immigrant population as presenting a 'golden opportunity' to social scientists for building better empirical and theoretical understandings.

The social and economic significance of this geographical dispersal depends to a large extent on whether it is the beginning of a new trend. It is useful to realise that this ending of a long historical trend is analogous to the counter-urbanisation phenomenon that took place in the 1970s. In light of the reversal of counter-urbanisation that occurred in the 1980s (Frey, 1990) and the strengthening of large metropolitan areas like New York and Los Angeles as 'global cities' (Sassen, 1991), it is wise to refrain from immediately declaring the beginning of a new trend before seeking a better understanding of the mechanisms of this dispersal.

An important mechanism in the widespread dispersal of foreign-born residents is the change in their internal migration. In terms of interstate net transfers of migrants, their internal migration in the late 1990s showed three salient features (Table 1). Firstly, it became more similar to that of US-born residents in the sense that states like Arizona, Nevada, North Carolina and Georgia, which have been powerful attractors of US-born migrants, became major net gainers of foreign-born interstate migrants as well. Secondly, it resulted in positive net gains for quite a few Midwestern states such as Michigan, Ohio, Nebraska and Kansas, which continued to be net losers of US-born interstate migrants. Thirdly, among the seven states with the greatest foreign-born population, five were net losers of foreign-born interstate migrants. The net losses of California and New York were much greater than the net gains

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Table 1. The 1995–2000 interstate net migration rates of foreign-born and US-born populations aged 5 and over in 2000.

State	Foreign-born population				Net migration rate of the US-born (%)	Foreign-born share of the 1995 State population (%)
	Population size		Net migration			
	1995	2000	Volume	Rate (%)		
A. The seven states with greatest foreign-born population						
CALIFORNIA	8,147,426	7,903,298	–244,128	–3.00	–2.26	26.5
NEW YORK	3,947,306	3,717,867	–229,439	–5.81	–4.53	22.1
TEXAS	2,464,708	2,483,381	18,673	0.76	0.76	13.4
FLORIDA	2,399,494	2,508,251	108,757	4.53	4.31	17.4
NEW JERSEY	1,380,165	1,377,261	–2,904	–0.21	–2.82	17.9
ILLINOIS	1,362,819	1,334,790	–28,029	–2.06	–3.08	11.8
MASS.	732,994	727,428	–5,566	–0.76	–1.03	12.6
Sub-total	*20,434,912*	*20,052,276*	*–382,636*	*–1.87*	*–1.26*	*19.7*
B. The states with moderate foreign-born population						
PENN.	530,482	532,274	1,792	0.34	–1.24	4.6
WASHINGTON	530,264	552,874	22,610	4.26	1.10	10.1
ARIZONA	511,015	554,256	43,241	8.46	7.57	12.0
VIRGINIA	498,958	517,298	18,340	3.68	0.88	7.9
MARYLAND	448,850	457,812	8,962	2.00	–0.37	9.3
MICHIGAN	432,505	443,053	10,548	2.44	–1.15	4.7
GEORGIA	405,207	469,305	64,098	15.82	4.35	5.8
CONNECTICUT	387,186	390,018	2,832	0.73	–2.04	12.4
OHIO	327,872	328,895	1,023	0.31	–1.04	3.1
N. CAROLINA	296,239	341,972	45,733	15.44	4.50	4.2
COLORADO	281,937	313,209	31,272	11.09	3.64	7.6
OREGON	233,132	248,493	15,361	6.59	2.39	7.7
HAWAII	218,965	204,914	–14,051	–6.42	–6.51	18.9
NEVADA	217,212	276,775	59,563	27.42	13.54	14.1
MINNESOTA	193,858	208,090	14,232	7.34	0.12	4.3
WISCONSIN	169,344	172,283	2,939	1.74	–0.01	3.4
INDIANA	151,953	163,171	11,218	7.38	–0.01	2.7
NEW MEXICO	140,480	138,527	–1,953	–1.39	–1.75	8.4
MISSOURI	132,206	136,292	4,086	3.09	0.86	2.6
LOUISIANA	125,218	122,221	–2,997	–2.39	–1.72	3.0
TENNESSEE	125,198	139,439	14,241	11.37	2.66	2.5
OKLAHOMA	116,592	117,627	1,035	0.89	0.43	3.7
UTAH	116,294	126,130	9,836	8.46	0.55	6.0
RHODE ISLAND	115,648	116,814	1,166	1.01	0.57	12.1
KANSAS	110,569	116,159	5,590	5.06	–0.88	4.5
S. CAROLINA	101,579	110,764	9,185	9.04	3.30	2.8
ALABAMA	90,488	91,689	1,201	1.33	0.71	2.2
IOWA	69,333	67,820	–1,513	–2.18	–1.27	2.5
D.C.	67,497	58,176	–9,321	–13.81	–8.08	12.1
Sub-total	*7,879,075*	*8,243,778*	*364,703*	*4.63*	*0.77*	*5.8*
C. The states with small foreign-born population						
KENTUCKY	66,731	69,649	2,918	4.37	0.89	1.8
ARKANSAS	58,837	64,950	6,113	10.39	1.46	2.4
IDAHO	58,739	59,764	1,025	1.75	3.03	5.1
NEBRASKA	54,399	59,844	5,445	10.01	–1.34	3.4
N HAMPSHIRE	51,032	51,358	326	0.64	2.27	4.6
DELAWARE	42,934	45,401	2,467	5.75	2.21	6.2
MAINE	41,896	41,373	–523	–1.25	0.33	3.5
ALASKA	41,262	40,441	–821	–1.99	–5.82	6.9
MISSISSIPPI	40,068	40,418	350	0.87	1.00	1.5
W. VIRGINIA	24,073	22,501	–1,572	–6.53	–0.66	1.4
VERMONT	21,709	21,829	120	0.55	–0.03	3.8
MONTANA	19,768	20,166	398	2.01	–0.59	2.3
N. DAKOTA	15,499	13,093	–2,406	–15.52	–3.63	2.5
WYOMING	14,488	13,326	–1,162	–8.02	–3.25	3.1
S. DAKOTA	13,526	13,215	–311	–2.30	–2.10	1.9
Sub-total	*564,961*	*577,328*	*12,367*	*2.19*	*0.24*	*2.8*
USA	**28,145,954**	**28,145,954**	**0**	**0.0**	**0.00**	**11.0**

Source: The PUMS of the US 2000 Census.

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of Florida and Texas, so that these seven states had a combined net loss of 383,000 foreign-born interstate migrants, implying a net migration rate of –1.9% which was greater in magnitude than that of the US-born population (–1.3%).

Another important mechanism in the widespread dispersal of foreign-born residents is the marked change in the destination choices made by the newly-arrived immigrants in the 1990s. According to the annual estimates made by Passel and Suro (2005), the combined share of the newly-arrived immigrants by the top six states decreased from 72.7% in 1990 to 66.3% in 1995 and 58.9% in 2000. The decrease by 6.4% from 1990 to 1995 was magnified to a decrease of 7.4% from 1995 to 2000. In contrast, the corresponding share by the 22 'new growth States'[2] increased by 4.0% from 15.0% in 1990 to 19.0% in 1995, and by another 3.9% from 19.0% in 1995 to 22.9% in 2000, implying further dispersal to other states in the late 1990s. Based on the Integrated Public Use Samples and the 1996 CPS, Durand *et al.* (2000) found that California's share of Mexican immigrants arriving in the previous five years remained nearly constant at 59.0% in 1970, 58.7% in 1980 and 62.9% in 1990, and then suddenly dropped to 39.5% in 1996. The sudden and sharp decline in California's share of the recently arrived Mexican immigrants between 1990 and 1996 was accompanied by a large increase in their share for non-gateway states from 12.8% to 30.9%. The non-gateway states are defined in Durand *et al.* (2000) as all states other than California, Texas, Arizona, New Mexico and Illinois.

The main purpose of this paper is to identify the salient features of, and to perform a multivariate explanation for, the 1985–1990 and 1995–2000 destination choices of newly-arrived immigrants, based on the migration data of the 1990 and 2000 population censuses. In creating the explanatory variables for our multivariate model, we incorporate both the place attributes of the potential destinations and the personal attributes of the new immigrants. Among the personal attributes, we pay particular attention to the roles of race-ethnicity and educational attainment, for two main reasons. Firstly, it has been shown that the destination choice behaviours of new immigrants in host countries are subject to the attractions of the co-ethnic communities, and that higher educational attainment tends to weaken co-ethnic attractions and result in a more dispersed destination choice pattern (Liaw and Frey, 1998; Xu and Liaw, 2006). Secondly, these two personal attributes have been shown to play important roles in the assimilation and integration of immigrants into the host society (Alba and Nee, 2003; Waters and Jimenez, 2005).

The structure of the remaining part of the paper is as follows. The next section identifies the salient features of the 1985–1990 and 1995–2000 destination choice patterns for the new immigrants. Then we specify the multivariate model for explaining the destination choice patterns, and present our empirical findings. We identify several contextual features that help to enrich the substantive meanings of our empirical findings. The last section summarises and discusses the main points.

SALIENT FEATURES

Based on a special tabulation of all 'long-form records' (weighted to 100%) of the 1990 Census and the 5% PUMS of the 2000 Census, we focus on the foreign-born residents who resided outside of the US five years before the census date. For simplicity, we call them 'new immigrants'. Their chosen destination is defined as the state of residence on the census date. Considering Washington, DC, as a 'state', there are 51 potential destinations in their choice set. For readers who are interested in the destination choices at the metropolitan level, we refer to Frey (2005), who carried out a descriptive analysis of not only the destination choices of new immigrants, but also the domestic migration of both native-born and foreign-born individuals in 1985–1990 and 1995–2000, with particular attention to racial and educational selectivity.

Overall Patterns

For all the new immigrants aged 5 and over, as of the census date, we find the following salient features. The first is that *the volume of new immigrants increased substantially* from the late 1980s to the late 1990s, and that every state except California experienced an increase. For the whole country, the volume increased from 4.04 million in 1985–90 to 5.90 million in 1995–2000, implying a growth rate of 46%. In contrast, California's

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new immigrants decreased by 10% (or 136,000 immigrants), from 1,357,000 in 1985–1990 to 1,221,000 in 1995–2000.

The second feature is *deconcentration*. The combined share of the top seven destinations decreased sharply from 73.8% in 1985–1990 to 62.4% in 1995–2000 (see the top panel of Table 2). Among the top seven destinations, the decrease in the combined share for California, New York, New Jersey and Massachusetts was much greater than the increase in the combined share for Florida, Texas and Illinois. While maintaining the top two positions over the two periods, the dominance by California and New York was weakened substantially: California's share decreased from 33.6% in the late 1980s to 20.7% in the late 1990s; the corresponding decrease in New York's share was from 13.6% to 10.3%. By taking, respectively, 9.8% and 9.1% of the new immigrants in the late 1990s, Texas and Florida became nearly as attractive as New York.

The third feature is *widespread dispersal*. Among the remaining 44 states, as many as 34 states experienced an increase in their shares of the new immigrants from the late 1980s to the late 1990s (see the middle panel of Table 2). Among these 34 gainers, we find not only the major magnets of domestic migrants in the sunbelt (Georgia, North Carolina, Arizona and Nevada), but also chronic net losers of domestic migrants in the 'rust belt' (e.g. Michigan, Ohio and Pennsylvania) and slow-growing agricultural states in the Midwest (e.g. Iowa, Nebraska and Kansas). It is useful to note that as many as 13 states in this panel of gainers of new immigrants were net losers of US-born interstate migrants in 1995–2000. This finding suggests that *increasingly higher proportions of new immigrants were taking jobs that were unattractive to native-born workers*.

Overall, the combined share of the top seven destinations decreased by 11.5%. The combined share of the 34 gaining states in the middle panel of Table 2 increased by 12.3%, while the combined share of the remaining 10 losing states decreased by 0.8%. The dissimilarity index between the destination choice patterns of the late 1980s and the late 1990s is 17.4.[2]

To avoid over-emphasising the change in the destination choice pattern of new immigrants between the late 1980s and the late 1990s, we draw attention to a persistent aspect. In the set of the top seven destinations, only Massachusetts was replaced. It was replaced by Georgia and became the eighth destination in the late 1990s.

Selectivity with Respect to Ethnicity and Educational Attainment

To study the effects of ethnicity and educational attainment, we classify the new immigrants into five ethnic categories (Whites, Blacks, Asians, Hispanics and Others) and four educational categories (less than high school graduation, high school graduation, some college education, and college graduation). Whites, Asians and Blacks include only those who are non-Hispanic. Since the category 'Others' contains very few individuals and is more seriously affected by the change of questionnaire between the two censuses, we will pay little attention to it. For brevity, we use 'ethnicity' to represent 'race' in the remainder of the paper.[3]

In our study of the effects of ethnicity and educational attainment, we restrict the new immigrants to be in the 20–59 age cohorts for two reasons. Firstly, the educational categories are not quite meaningful for those younger than 20. Secondly, because we are mainly interested in the destination choice of the new immigrants as a labour market phenomenon, it is better to set aside the relatively few new immigrants at age 60 or over for a separate study that focuses on issues related to population ageing.

To characterise ethnic and education-specific destination choice patterns, we use two measures. The first measure is the joint percentage share of the new immigrants by the top five destinations. It is a measure of *concentration*. The second measure is the relative entropy, which is defined in the following way. For a given group of immigrants, let P[j] be the proportional share by state j so that its value is bounded between 0 and 1. Then the relative entropy for characterising the destination choice pattern of this group is defined as:

$$E = \{\sum P[j] * \log_2(1/P[j])\} / \log_2(51) * 100\%$$

where the summation is across all 51 potential destinations. Since the value of the entropy shown within the brackets can never be less than 0 (when all immigrants go to only one state) or greater than $\log_2(51)$ (when all states have the same share of immigrants), the value of the relative entropy is conveniently bounded between

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Table 2. Change in destination choice patterns of the new foreign-born immigrants (aged 5+ at Census) from 1985–1990 to 1995–2000: all ethnicities (including the 'other' category).

Destination	Volume (persons)		Increase from 1985–90 to 1995–2000		Destination choice (%)		
	1985–1990	1995–2000	Persons	%	1985–1990	1995–2000	Change
A. Top seven destinations in 1985–1990							
California*	1,356,920	1,220,530	–136,390	–10	33.58	20.70	–12.88
New York*	550,846	609,355	58,509	11	13.63	10.33	–3.30
Florida	314,039	537,240	223,201	71	7.77	9.11	1.34
Texas	268,498	576,290	307,792	115	6.64	9.77	3.13
New Jersey*	186,510	271,080	84,570	45	4.62	4.60	–0.02
Illinois*	173,548	291,781	118,233	68	4.29	4.95	0.65
Massachusetts*	133,897	170,879	36,982	28	3.31	2.90	–0.42
Subtotal	*2,984,258*	*3,677,155*	*692,897*	23	*73.84*	*62.36*	*–11.48*
B. Other destinations: gainers (ranked by change in destination choice proportion)							
Georgia	51,419	183,680	132,261	257	1.27	3.12	1.84
North Carolina	32,059	144,450	112,391	351	0.79	2.45	1.66
Arizona	56,518	145,829	89,311	158	1.40	2.47	1.07
Colorado	31,182	101,081	69,899	224	0.77	1.71	0.94
Michigan*	53,641	121,204	67,563	126	1.33	2.06	0.73
Washington	67,145	131,320	64,175	96	1.66	2.23	0.57
Tennessee	15,744	51,721	35,977	229	0.39	0.88	0.49
Nevada	22,267	60,080	37,813	170	0.55	1.02	0.47
Minnesota	26,744	66,187	39,443	147	0.66	1.12	0.46
Indiana*	19,641	53,946	34,305	175	0.49	0.91	0.43
Utah	14,049	45,551	31,502	224	0.35	0.77	0.42
South Carolina	12,021	37,233	25,212	210	0.30	0.63	0.33
Oregon	31,773	65,218	33,445	105	0.79	1.11	0.32
Missouri	18,934	42,450	23,516	124	0.47	0.72	0.25
Ohio*	45,705	79,726	34,021	74	1.13	1.35	0.22
Oklahoma	16,379	36,470	20,091	123	0.41	0.62	0.21
Nebraska*	6,073	20,798	14,725	242	0.15	0.35	0.20
Iowa*	12,570	30,202	17,632	140	0.31	0.51	0.20
Kansas*	17,928	37,420	19,492	109	0.44	0.63	0.19
Arkansas	5,950	19,790	13,840	233	0.15	0.34	0.19
Kentucky	10,736	26,445	15,709	146	0.27	0.45	0.18
Virginia	90,133	141,601	51,468	57	2.23	2.40	0.17
Wisconsin*	24,276	43,999	19,723	81	0.60	0.75	0.15
Alabama	12,543	24,917	12,374	99	0.31	0.42	0.11
Pennsylvania*	73,650	113,540	39,890	54	1.82	1.93	0.10
New Mexico*	13,584	24,660	11,076	82	0.34	0.42	0.08
Delaware	4,936	11,053	6,117	124	0.12	0.19	0.07
Idaho	6,966	13,793	6,827	98	0.17	0.23	0.06
South Dakota*	1,819	5,602	3,783	208	0.05	0.10	0.05
Mississippi	5,258	10,095	4,837	92	0.13	0.17	0.04
New Hampshire	6,636	10,962	4,326	65	0.16	0.19	0.02
Vermont*	2,468	4,659	2,191	89	0.06	0.08	0.02
West Virginia*	2,676	4,539	1,863	70	0.07	0.08	0.01
Wyoming*	1,500	2,252	752	50	0.04	0.04	0.00
Subtotal	*814,923*	*1,912,473*	*1,097,550*	135	*20.16*	*32.43*	*12.27*
C. Other destinations: losers (ranked by change in destination choice proportion)							
Montana*	2,603	3,136	533	20	0.06	0.05	–0.01
North Dakota*	2,556	2,930	374	15	0.06	0.05	–0.01
Maine	4,926	6,303	1,377	28	0.12	0.11	–0.01
Alaska*	5,695	6,845	1,150	20	0.14	0.12	–0.02
Louisiana*	16,176	21,009	4,833	30	0.40	0.36	–0.04
Connecticut*	58,763	81,744	22,981	39	1.45	1.39	–0.07
Washington, DC*	18,780	22,801	4,021	21	0.46	0.39	–0.08
Rhode Island	18,511	19,280	769	4	0.46	0.33	–0.13
Maryland*	80,465	108,131	27,666	34	1.99	1.83	–0.16
Hawaii*	33,694	34,660	966	3	0.83	0.59	–0.25
Subtotal	*242,169*	*306,839*	*64,670*	27	*5.99*	*5.20*	*–0.79*
Total	**4,041,350**	**5,896,467**	**1,855,117**	**46**	**Dissimilarity Index →**		**17.39**

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0% and 100%. Since it depends on the proportional shares of all 51 states, the relative entropy is a measure of *overall dispersal*.

Our main finding on ethnic and education-specific destination choice patterns of the new immigrants is that the *deconcentration* and the *increase in overall dispersal* from the late 1980s to the late 1990s were *pervasive*. For every ethnic group and every level of education, as well as every combination of ethnicity and educational attainment, there is clear evidence of deconcentration and an increase in overall dispersal; from 1985–1990 to 1995–2000, the joint share of new immigrants for the top five destinations decreased, whereas the relative entropy increased (Table 3).

The decrease in concentration and the increase in overall dispersal were highly selective with respect to ethnicity – they were much stronger for Hispanics and Blacks than for Whites and Asians. The decrease in the joint share of new immigrants by the top five states was 17.6% for Hispanics and 17.8% for Blacks, compared with 5.3% for Whites and 6.1% for Asians. The increase in relative entropy was 16.2% for Hispanics and 13.2% for Blacks, compared with 3.9% for Whites and 5.5% for Asians.

With respect to educational attainment, the deconcentration and the increase in overall dispersal tended to be stronger at lower level of education. The decrease in the joint share of new immigrants by the top five states was 17.4% for those with less than high school graduation, 12.7% for high school graduates, 8.0% for those with some college education, and only 4.3% for college graduates. The increase in relative entropy was 16.6% for those with less than high school graduation, 10.4% for high school graduates, 6.5% for those with some college education and only 3.7% for college graduates.

Among all the groups shown in Table 3, the Hispanics with the lowest level of education experienced the greatest deconcentration and the greatest increase in overall dispersal from the late 1980s to the late 1990s. This is precisely the group that attracted the greatest attention of the media and social scientists. For this group, the decrease in the joint share of new immigrants for the top five states was as large as 21.3%, whereas the increase in relative entropy was 20.4%.

A salient feature of the destination choice pattern of the 1985–1990 new immigrants was that the joint share for the top five states and the relative entropy had very clear and strong monotonic relationships with educational attainment: the lower the attainment, the higher the joint share for the top five states and the smaller the relative entropy. For the 1995–2000 new immigrants, these relationships became weaker and somewhat irregular.

Another feature is that the joint share for the top five states was the highest for Hispanics and the lowest for Whites, while the relative entropy was the lowest for Hispanics and the highest for Whites. This was true at every level of education. In between these two extremes, Asians were more similar to Whites, whereas Blacks were more similar to Hispanics. For the 1995–2000 new immigrants, the contrast between Hispanics and Whites persisted but became weaker, while the intermediate statuses of Asians and Blacks became more complicated and irregular.

MULTIVARIATE EXPLANATION

Model Specification

Our multivariate statistical model is a multinomial logit model formulated in the following way. For an immigrant with personal attributes s who entered the country in period i, we specify that the migration behaviour depends upon a set of destination choice probabilities, $P(j \mid s,i)$ for all potential destinations j. These probabilities are specified to be functions of observable explanatory variables in the following form:

$$P(j|s,i) = \frac{\exp(b'[i]x[j,s,i])}{\sum_k \exp(b'[i]x[k,s,i])} \quad (1)$$

where $x[j,s,i]$ is a column-vector of observable explanatory variables; $b'[i]$ is a row-vector of unknown coefficients for period i; and the summation in the denominator is across all 51 potential destinations.

In applying this model, we assume that the choices of destinations made by the new immigrants were affected by both the personal attributes of the immigrants and the place attributes of the alternatives in the choice set. In addition to ethnicity and educational attainment, we also include age as a potentially influential personal attribute. In creating the input data for each of the two periods in question, we remove all the new

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Table 3. Selectivity in deconcentration and dispersal of new immigrants' destination choice patterns by ethnicity and educational attainment: from 1985–1990 to 1995–2000.

	Joint share of top 5 destinations (%)			Relative entropy (%)		
	1985–1990	1990–2000	Change	1985–1990	1990–2000	Change
All new immigrants	65.8	54.3	–11.5	67.5	77.6	10.0
Ethnicity						
Whites	53.7	48.5	–5.3	76.3	80.2	3.9
Blacks	70.5	52.7	–17.8	62.1	75.3	13.2
Asians	61.5	55.4	–6.1	69.8	75.3	5.5
Hispanics	76.7	59.1	–17.6	57.3	73.5	16.2
Other	59.5	51.4	–8.1	72.1	78.4	6.3
Educational attainment						
Less than high school	75.3	57.9	–17.4	57.8	74.4	16.6
High school graduate	66.5	53.8	–12.7	67.5	77.9	10.4
Some college	61.3	53.4	–8.0	71.8	78.3	6.5
College graduate	55.7	51.4	–4.3	74.6	78.3	3.7
Whites of different educational attainments						
Less than high school	62.5	50.0	–12.4	70.3	78.6	8.3
High school graduate	57.7	48.6	–9.1	74.6	80.4	5.8
Some college	52.4	47.6	–4.8	78.3	81.6	3.3
College graduate	52.8	49.4	–3.4	76.7	79.0	2.3
Blacks of different educational attainments						
Less than high school	81.9	64.9	–17.0	50.8	65.4	14.6
High school graduate	74.5	55.6	–18.9	57.5	71.9	14.5
Some college	63.5	48.3	–15.2	69.1	78.6	9.5
College graduate	55.5	46.9	–8.6	74.2	78.6	4.4
Asians of different educational attainments						
Less than high school	65.1	60.3	–4.9	64.3	71.0	6.7
High school graduate	67.7	56.9	–10.8	67.3	72.5	5.1
Some college	62.2	56.5	–5.7	67.9	73.0	5.1
College graduate	59.0	53.9	–5.1	73.2	76.7	3.5
Hispanics of different educational attainments						
Less than high school	80.2	58.9	–21.3	51.8	72.3	20.4
High school graduate	75.9	57.4	–18.5	59.6	74.9	15.3
Some college	72.0	62.2	–9.8	64.0	72.3	8.3
College graduate	68.0	62.4	–5.6	67.7	71.6	3.9
Other ethnics of different educational attainments						
Less than high school	67.0	52.4	–14.7	64.9	79.0	14.1
High school graduate	58.0	48.8	–9.2	74.0	80.4	6.3
Some college	53.8	48.2	–5.6	74.6	80.9	6.3
College graduate	60.4	51.7	–8.7	68.9	78.3	9.3

Note: In this table, the new immigrants are restricted to those aged 20–59 on the census date.

immigrants who belonged to the 'Other' ethnic group and were outside of the 20–59 age interval. The remaining new immigrants in each period are then used to create a multidimensional table with the dimensions being (1) ethnicity (Whites, Blacks, Asians and Hispanics), (2) educational attainment (less than high school graduation, high school graduation, some college education and college graduation), (3) five-year age groups (20–24, 25–29, . . . , 54–59), (4) gender, and (5) state of residence as of the census date.

Assuming that the migration behaviours of all persons in the same cell of the multidimensional table depend on the same $P(j|s,i)$, we calculate

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the unknown coefficients in equation (1) for each of the two periods separately by the maximum quasi-likelihood method (McCullagh, 1983; Liaw and Ledent, 1987).

In the model, each personal attribute is represented by a set of dummy variables. These dummy variables are entered into the logit model as *interactions* with the variables representing *place attributes*. An interaction between two variables is simply the product of the two variables. Some interactions in our model are products of three or four variables. For example, to test the hypothesis that construction employment growth (a place attribute) has a significant drawing power for low-skilled male Hispanics, we use an interaction that is the product of the following four variables: construction employment growth rate, a dummy variable representing less than high school graduation, a dummy variable representing male gender, and a dummy variable representing Hispanic ethnicity. If the estimated coefficient of this interaction turns out to be positive and if the associated t-ratio (i.e. the estimated coefficient divided by its asymptotic standard error) is greater than or equal to 2.0, we may then infer that the hypothesis is substantiated by the empirical data. Because our sample size is very large, the t-ratio can be considered as having a standard normal distribution so that a magnitude of at least 2.0 can be considered as an indication of statistical significance.

In constructing a relatively concise specification of the model (to be called the best specification for simplicity) for each time interval, we only include the explanatory variables whose estimated coefficients are statistically significant and substantively sensible.

The goodness of fit of a given specification of the model is to be measured by

$$\text{Rho - square} = 1 - L_g / L_o, \tag{2}$$

where L_g is the maximum quasi-log-likelihood of the given specification and L_o is the quasi-log-likelihood of the corresponding null model (i.e. the model with $b'[i] = 0$). Note that the ceiling of rho-square is much less than 1.0, so that a value of 0.2 may indicate a very good fit (McFadden, 1974).

To help to evaluate the relative importance of one subset of explanatory variables (say conventional labour market variables) against another subset, we delete the two subsets of variables in turn from the best specification and then compare the resulting decreases in rho-square: the greater the decrease, the more important the deleted subset of variables. The decrease in rho-square resulting from the deletion of a subset of explanatory variables is called *marginal contribution in rho-square*.

It is important to note that when an explanatory factor (e.g. income per capita, which may be represented by a set of interaction variables in the model) is deleted from the best specification, the values of the coefficients of the remaining explanatory variables that are generated by the maximum quasi-likelihood method will become different from those in the best specification, unless the explanatory power of the deleted factor does not overlap with those of the remaining explanatory variables. When the overlap is substantial, the resulting marginal contribution in rho-square will seriously understate the explanatory power of the deleted factor. One way to avoid getting such a misleading result is to assess the importance of a deleted factor by keeping the estimated coefficients of remaining explanatory variables of the best specification unchanged. The authors call these two alternative methods of assessing the explanatory power of a deleted factor as (1) the *maximising method* and (2) the *fixed-coefficient method* respectively.

Specification of Place Attributes

It has been well demonstrated that the destination choice behaviours of both new immigrants and domestic migrants of minority ethnic groups are subject to the drawing power of co-ethnic communities (Liaw and Frey, 1996, 1998; Frey and Liaw, 2005; Xu and Liaw, 2006; Liaw and Ishikawa, 2007). There are various reasons for this drawing power (Portes, 1995). Friends and relatives in co-ethnic communities can provide relatively reliable information on employment opportunities in both enclave economies and formal labour markets. They can also provide shelter and support for the initial settlement. Furthermore, co-ethnics can be a source of social capital for setting up small businesses. To represent the drawing power of co-ethnic communities, we specify the following explanatory factor.

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Ethnic Similarity
For the immigrants of a specific ethnic group arriving in 1985–1990, this place attribute is defined as the logit of the specific ethnic group's proportional share of the potential destination's population in 1985, computed indirectly from the data of the 1990 Census, and similarly for the 1995–2000 immigrants using the data of the 2000 Census. The data for computing this variable are restricted to the 20–59 age interval.[4]

It is likely that the primary motivation for most immigrants to come to the US is to look for income-generating jobs. The new immigrants' choice of destinations can be expected to be influenced by employment and income prospects of the potential destinations. To represent income prospect, we use the following place attribute.

Income Level
For each state, this place attribute is the state's 1985 income per capita for the 1985–1990 new immigrants and the state's 1995 income per capita for the 1995–2000 new immigrants. The 1995 values have been adjusted by the change in the consumer price index between 1985 and 1995 so that they are comparable to the 1985 values in real terms. The unit is $10,000.

Both employment growth rate and unemployment rate have been used as proxies for employment opportunities. It is worth keeping in mind that when many young adults in an economically stagnant state decide to leave the state soon after finishing schooling, the state's unemployment rate may become unusually low, so unemployment rate may be a very misleading indicator of the state's employment opportunities.

With respect to employment growth as a proxy for employment opportunities, it is useful to consider not only the growth of total employment but also the growth of employment in service, construction and manufacturing industries which may be particularly relevant to low-skilled immigrants.

Based on the above considerations, we specify the following place attributes as proxies for employment opportunities. For the first four attributes the unit is % per five years.[5]

Total Employment Growth Rate
For each state, this place attribute is the state's 1984–1989 growth rate of total employment for the 1985–1990 new immigrants and the state's 1994–1999 growth rate of total employment for the 1995–2000 new immigrants.

Service Employment Growth Rate
For each state, this place attribute is the state's 1984–1989 growth rate of service employment for the 1985–1990 new immigrants and the state's 1994–1999 growth rate of service employment for the 1995–2000 new immigrants.

Construction Employment Growth Rate
For each state, this place attribute is the state's 1984–1989 growth rate of construction employment for the 1985–1990 new immigrants and the state's 1994–1999 growth rate of construction employment for the 1995–2000 new immigrants.

Manufacturing Employment Growth Rate
For each state, this place attribute is the state's 1984–1989 growth rate of manufacturing employment for the 1985–1990 new immigrants and the state's 1994–1999 growth rate of manufacturing employment for the 1995–2000 new immigrants.

Unemployment Rate
For each state, this place attribute is the state's 1985 unemployment rate for the 1985–1990 new immigrants and the state's 1995 unemployment rate for the 1995–2000 immigrants as a percentage.[6]

With an increasing proportion of the American population finishing at least high school education, population ageing in the US has resulted in disproportionately high net depletion of the low-skilled labour force in many parts of the country. Some immigrant workers might have been attracted to various states to replace retiring low-skilled, blue-collar workers. This may be especially true in the meat-processing industry that is highly concentrated in the Midwest and the South (Kandel and Parrado, 2005). To look into this possibility, the following definitions of place attributes were used:

Retirement of Low-skilled Labor Force
For each potential destination state of the 1985–1990 new immigrants, the 1990 Census data were used to compute the value of this place attribute. It was calculated as the difference between (1) the percentage share of the 1985 resident male population with less than high school graduation by the 60–64 age group and (2) the

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percentage share of the 1985 resident population with less than high school graduation by the 20–64 age interval. We assume that most of the individuals in the first term retired as a consequence of entering into the 65–69 age group in 1985–1990. For each state as a potential destination for the 1995–2000 new immigrants, this place attribute was computed from the 2000 Census data in an analogous way.

Coldness

For each state, this variable was defined as a weighted average of the heating degree-days of cities with records from 1951 to 1980, using city populations as the weights. The unit was 1000 degree (F)-days.[7]

Since some of the new immigrants in the 20–29 age interval at the census date might have entered the US as students in post-secondary educational institutions, they might have been subject to the attraction of states with better opportunities for pursuing post-secondary education. To detect this possibility, we specify the following place attribute:

College opportunity

For each state as a potential destination of the 1985–1990 new immigrants, this place attribute is defined as the difference between (1) the state's percentage share of the country's total enrolment in degree-granting institutions in the autumn of 1985, and (2) the state's percentage share of the country's 1985 resident young adults (i.e. those aged 20–24 in 1990). For each state as a potential destination of the 1995–2000 new immigrants, this place attribute is defined as the difference between (1) the state's percentage share of the country's total enrolment in degree-granting institutions in the autumn of 1995, and (2) the state's percentage share of the country's 1995 resident young adults (i.e. those aged 20–24 in 2000).

Since the US is divided into states of very unequal sizes, it is important to control for the size of ecumene in our assessment of the roles of theoretically meaningful explanatory factors. For this purpose, we specify the following place attribute.

Ln (Population Size)

For each state as a potential destination of the 1985–1990 new immigrants, this place attribute is the natural log of a state's population size in 1985, computed indirectly from the data of the 1990 Census. For each state as a potential destination of the 1995–2000 new immigrants, this place attribute is the natural log of a state's population size in 1995, computed indirectly from the data of the 2000 Census. The unit is ln(1,000,000 persons).

FINDINGS OF MULTIVARIATE ANALYSIS

Interpretation of the Estimated Coefficients

With respect to the role of ethnic similarity, the study found that Black, Asian and Hispanic new immigrants in both 1985–1990 and 1995–2000 were subject to the attractions of co-ethnic communities, whereas their White counterparts were not (Table 4). We also found some evidence that less educated and older immigrants tended to be more subject to the attraction of co-ethnic communities. Among Asian and Hispanic immigrants of both periods, the attraction of co-ethnic communities was stronger for those in the two lowest educational categories. This was also true for the Black immigrants entering in 1985–1990. Among the Asian immigrants of both periods, the attraction of co-ethnic communities was stronger for those aged 40 or over. Among Hispanic immigrants entering in 1995–2000, the attraction of co-ethnic communities was stronger for those aged 50 or over.

An important insight revealed by the estimated coefficients is that for Hispanics and Blacks, the attraction of co-ethnic communities weakened substantially from the late 1980s to the late 1990s. For the Hispanics who had at least some college education and were less than 50 years old, the coefficient of ethnic similarity decreased substantially, from 0.424 in 1985–1990 to 0.352 in 1995–2000. For the Hispanics who had less than some college education and were less than 50 years old, the corresponding coefficient decreased sharply from 0.732 (i.e. 0.424 + 0.308) in 1985–1990 to 0.391 in 1995–2000.[8] For the Blacks who had at least some college education, the coefficient of ethnic similarity decreased substantially from 0.503 in 1985–1990 to 0.303 in 1995–2000, while for Blacks who had less than some college education the coefficient decreased sharply from 0.641 in 1985–1990 to 0.303 in 1995–2000.

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Table 4. Estimation results of the destination choice model for the new foreign-born immigrants (aged 20–59 at census) arriving in (1) 1985–1990 and (2) 1995–2000.

	(1) 1985–1990		(2) 1995–2000	
Explanatory variable	Coeff.	t-ratio	Coeff.	t-ratio
1. Effects of ethnic similarity				
Ethnic similarity * Black	0.503	13.4	0.303	12.1
Ethnic similarity * Asian	0.312	24.1	0.386	28.0
Ethnic similarity * Hispanic	0.424	31.6	0.352	24.0
Ethnic similarity * Black with less than some college education	0.138	2.8	–	–
Ethnic similarity * Asian with less than some college education	0.141	8.8	0.126	5.5
Ethnic similarity * Hispanic with less than some college education	0.308	20.6	0.039	2.6
Ethnic similarity * Asian aged 40 and over	0.157	8.7	0.165	7.0
Ethnic similarity * Hispanic aged 50 and over	–	–	0.058	2.0
2. Effects of labour market variables				
Income per capita * Less than high school graduation	2.276	37.0	0.986	18.4
Income per capita * High school graduate	2.074	29.9	2.058	29.0
Income per capita * Some college education	1.613	24.4	1.736	24.0
Income per capita * College graduate	1.703	27.5	1.963	35.5
Total employment growth	0.008	5.7	–	–
Service employment growth * High school graduate	–	–	0.024	7.6
Service employment growth * Some college education	–	–	0.050	21.0
Service employment growth * College graduate	–	–	0.033	17.1
Service employment growth * Hispanic with less than high school graduation	0.035	19.8	0.057	29.0
Service employment growth * Hispanic with high school graduation	–	–	0.052	13.6
Construction employment growth * Hispanic male with less than some college educ.	0.006	11.8	0.015	11.9
Manufacturing employment growth	0.003	3.3	0.004	4.7
Unemployment rate	–0.083	–15.9	–	–
3. Effects of retirement of low-skilled labor force due to ageing				
Retirement of low-skilled workers * White	0.058	4.7	–	–
Retirement of low-skilled workers * Black	0.696	31.7	0.126	11.8
Retirement of low-skilled workers * Asian	0.045	3.8	–	–
Retirement of low-skilled workers * Hispanic	0.209	23.3	0.019	5.2
4. Effect of climate				
Coldness * Aged 20–29	–0.024	–5.5	–	–
Coldness * Aged 30–39	–0.027	–5.4	–0.022	–4.9
Coldness * Aged 40–49	–0.025	–3.8	–0.042	–6.7
Coldness * Aged 50–59	–0.048	–5.4	–0.053	–5.6
5. Effect of college cpportunity				
College opportunity * Those aged 20–24 with at least some college education	0.075	5.1	0.059	2.0
College opportunity * Those aged 25–29 with at least some college education	0.049	3.9	–	–
6. Effect of ecumene size				
Ln(population size)	1.198	143.4	1.062	161.8
Rho-square	0.3386		0.2363	

Total number of 1985–1990 foreign-born (White, Black, Asian and Hispanic) immigrants, aged 20–59 = 2,757,781.
Total number of 1995–2000 foreign-born (White, Black, Asian and Hispanic) immigrants, aged 20–59 = 4,047,391.

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In contrast, the estimated coefficients show that Asian immigrants became somewhat more subject to the attraction of co-ethnic communities from the late 1980s to the late 1990s. This was true irrespective of the level of education and age. For example, the coefficient of ethnic similarity for the Asian immigrants who had less than some college education and were less than 40 years old increased from 0.453 in 1985–1990 to 0.512 in 1995–2000.

With respect to labour market variables, the estimated coefficients show that the new immigrants at every level of educational attainment were subject to the pull of high income levels in both the late 1980s and the late 1990s. Except for the lowest level of educational attainment, the strength of the pull by income levels remained essentially unchanged between the two periods. For the new immigrants at the lowest level of education, the estimated coefficient of income per capita decreased sharply from 2.276 in 1985–1990 to 0.986 in 1995–2000, implying that their tendency to choose a destination with relatively high income levels became substantially weaker in the later period.

The most significant aspect of the effects of labour market variables is that the effects of all industry-specific employment growth rates became stronger from the late 1980s to the late 1990s. For the 1985–1990 new immigrants, the estimated coefficients reveal that they were, in general, subject to the attraction of *total* employment growth, that the least-educated Hispanics were subject to the pull of states with relatively high *service* employment growth, and that the least-educated Hispanic males were more prone to being attracted to states with relatively high *construction* employment growth. For the 1995–2000 new immigrants, the estimated coefficients show that they were not subject to the attraction of *total* employment growth but became more responsive to the pulls of industry-specific employment growths: (1) *service* employment growth had a positive effect at every level of education, and its positive effect on the least-educated Hispanics became even stronger than in the previous period; (2) with the coefficient increasing from 0.006 in 1985–1990 to 0.015 in 1995–2000, the drawing power of *construction* employment growth on the least-educated Hispanic males also became stronger; and (3) with the coefficient increasing from 0.003 in 1985–1990 to 0.004 in 1995–2000, the drawing power of *manufacturing* employment growth on the new immigrants, although substantially weaker than that of *service* employment growth, also became somewhat stronger in the later period.

The estimated coefficient of unemployment rate shows that it had a negative effect on the new immigrants arriving in the late 1980s, but no statistically significant effect on the new immigrants arriving in the late 1990s. This finding mainly reflects the fact that by the mid-1990s, unemployment rates had become a relatively poor proxy for representing the interstate variation in employment opportunities. In 1995, the three states with the lowest unemployment rates were Nebraska (2.4%), South Dakota (2.8%) and North Dakota (3.1%), all of which have been agricultural states with relatively weak job-creation capacities. The very low unemployment rates of these states were essentially a lagged effect of the large cumulative net loss of young adult migrants in previous periods. In other words, via age-selective net out-migration, the very low unemployment rates of these states became a perverse consequence of persistently weak local economies.

With respect to the idea that the retirement of low-skilled labour due to ageing could have positive effects on the destination choices made by the new immigrants, the estimated coefficients show that for the 1985–1990 new immigrants the effects were stronger for Blacks and Hispanics than for Whites and Asians, and that for the 1995–2000 new immigrants the effects became much weaker and, for Whites and Asians, no longer significant.

Looking at the effects of climate on the destination choices made by the new immigrants, the estimated coefficients indicate that in 1985–1990 the new immigrants (especially those in the 50–59 age group) tended to avoid destinations with relatively cold winters, and that in 1995–2000 cold winters had no effect on those in the 20–29 age group but a progressively stronger negative effect on those of older and older ages. The estimated coefficients also show that in 1985–1990 the new immigrants in the 25–29 and especially 20–24 age groups were subject to the attraction of states with better opportunities for college education, and that in 1995–2000 this attraction became weaker for those in the 20–24 age group and non-significant for those in the 25–29 age group. Finally, the

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positive coefficients of the log of population size for the new immigrants of both periods indicate that, *ceteris paribus*, the new immigrants were prone to selecting more populous states.

The rather large values of rho-square (0.3386 for the late 1980s and 0.2363 for the late 1990s) suggest that our chosen explanatory factors have explained the destination choice patterns of the new immigrants quite well. A subtle point that needs to be made is that the finding that the rho-square value is higher for the late 1980s than for the late 1990s need not imply that the model has a weaker predictive power for the later period. Actually, this difference was a consequence of the fact that the observed destination choice pattern is much more dispersed (and hence deviates less from the completely even distribution implied by the null hypothesis that $b'[i] = 0$) in the later period. The point is further substantiated by the finding that the dissimilarity index between the predicted and observed destination choice patterns turns out to be 5.97% for 1985–1990 and 4.17% for 1995–2000. In other words, the model's ability to account for the interstate differences in their shares of new immigrants is actually somewhat better for the late 1990s.

Relative Importance of Explanatory Factors

Because the powers of several explanatory factors overlap substantially, we will rely on the values of the marginal contribution in rho-square generated by the fixed-coefficient method as the basis for assessing the relative importance of the explanatory factors, although the values generated by the maximising method are also provided for reference (Table 5).

With the marginal contribution in Rho-square being by far the greatest in both periods (0.1737 in 1985–1990 and 0.1275 in 1995–2000), the size of ecumene was the most important explanatory factor in a statistical sense. Although this finding is not interesting from a substantive point of view, it is worth noting from a methodological point of view that its omission from the statistical model could result in nonsensical estimated coefficients for some substantively meaningful explanatory factors that happened to overlap with it in terms of their explanatory power. For example, in the late 1980s, manufacturing employment growth rate had a strong negative correlation with population size, so that several states with a large population (e.g. New York,

Table 5. Relative importance of explanatory factors in the destination choice model of the new foreign-born immigrants (aged 20–59 at census) who entered the US in (a) 1985–1990 and (b) 1995–2000.

	Marginal contribution in rho-square			
	(a) Model for 1985–1990		(b) Model for 1995–2000	
Explanatory factor	By maximizing method	By fixed-coeff. method	By maximizing method	By fixed-coeff. method
1. Ethnic similarity	0.0147	0.0357	0.0083	0.0174
2. Labour market factors	0.0158	0.0195	0.0108	0.0125
Income per capita	0.0042	0.0123	0.0064	0.0117
All employment growth rates	0.0022	0.0032	0.0067	0.0116
Service employment growth rate	0.0009	0.0012	0.0045	0.0087
Construction employment growth rate	0.0003	0.0004	0.0004	0.0005
Manufacturing employment growth rate	0.0000	0.0001	0.0001	0.0001
Unemployment rate	0.0006	0.0013	0.0000	0.0000
3. Retirement of low-skilled labour force due to ageing	0.0034	0.0048	0.0005	0.0006
4. Climate	0.0001	0.0004	0.0002	0.0003
5. College opportunity	0.0001	0.0001	0.0000	0.0000
6. Size of ecumene	0.0679	0.1737	0.0872	0.1275
Rho-square	0.3386	0.3386	0.2363	0.2363

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New Jersey and Illinois) experienced a serious decline in manufacturing employment. Consequently, the omission of population size from the model compels the estimation method to yield a negative coefficient for manufacturing employment growth. In other words, it is impossible to carry out a proper assessment of the role of manufacturing employment growth without controlling for the substantively uninteresting effect of population size.

Among the substantively interesting factors, ethnic similarity turns out to have the greatest explanatory power in both periods. This finding indicates that chain migration (Massey, 1985) continued to be an important part of the destination choice process for new immigrants, and that most of the traditional immigration gateways continued to be the major receiving states. Ethnographic studies such as those of Hernandez-Leon and Zuniga (2000) and Johnson-Webb (2003) have provided ample evidence for the heavy reliance of employers on the ethnic networks of their immigrant workers to recruit additional workers, as well as the very strong preference of low-skilled immigrant workers to work with their co-ethnics.

Next in importance are labour market factors. It is important to note that in the late 1980s the explanatory power of income per capita was much greater than that of employment growth rates, whereas in the late 1990s the explanatory power of employment growth rates were strengthened substantially so that it became about the same as that of income per capita. It is also important to note that among the three industry-specific employment growth rates, service employment growth rate displayed the greatest increase in explanatory power from the late 1980s to the late 1990s. This finding reflects the fact that low-skilled service jobs that were offered to the new immigrants increased in many states in the late 1990s. It also reflects the fact that as a consequence of the introduction of employer sanctions on hiring undocumented immigrants in the 1986 Immigration Control and Reform Act, more employers in other industries (e.g. manufacturing, construction and retail) hired undocumented immigrants indirectly via subcontractors which were included officially in the service industry (Durand *et al.*, 2000).

It is not surprising that, being less suitable as a proxy for representing interstate variation in employment opportunity, unemployment rate turns out to be much weaker than employment growth rates in explanatory power. Consistent with our interpretation of the estimated coefficients, the retirement of low-skilled labour force due to ageing was moderately important in the late 1980s but became much less important than employment growth rates in the late 1990s. Finally, the explanatory powers of climate and college opportunities were rather small in both periods.

The Model's Ability to Replicate the Major Features of the Change from 1985–1990 to 1995–2000

New Immigrants of All Ethnicities and Educational Levels

It is encouraging that the estimated coefficients for the two periods enable our model to replicate closely the major features of the change in the observed destination choice patterns of the new immigrants from the late 1980s to the late 1990s (Table 6).

With respect to the states that were the top seven destinations in the late 1980s, the decrease in their joint share was observed to be 11.6% and predicted by the model to be 11.2%. The decrease in California's share was observed to be 12.4% and also predicted to be 12.4%. The model correctly predicts that the shares for New York, New Jersey and Massachusetts decreased, whereas the shares for Florida, Texas and Illinois increased.

For the remaining states that experienced an increase in their share of new immigrants, the model correctly predicts that Georgia, North Carolina and Arizona were the top three gainers. Among these 34 gaining states, only three states are predicted incorrectly as losing states. The observed increase in the joint share of the new immigrants for these 34 states is 12.6%, which is predicted by the model as 11.5%.

Among the remaining ten states that experienced a decrease in their share of new immigrants, our model incorrectly predicts five of them as gainers. But these incorrectly predicted states are the ones with a very small foreign-born population. The observed decrease in the joint share of new immigrants for these ten states is

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Table 6. Observed and predicted changes in the destination choice patterns of the new foreign-born White, Black, Asian and Hispanic immigrants (aged 20–59 at census): from 1985–1900 to 1995–2000.

	Observed pattern (%)			Predicted pattern (%)		
Destination	1985–1990	1995–2000	Change	1985–1990	1995–2000	Change
A. Top 7 destinations in 1985–1990						
California	32.91	20.51	–12.40	32.81	20.45	–12.36
New York	14.15	10.21	–3.94	12.16	9.47	–2.69
Florida	7.45	8.78	1.33	7.28	8.36	1.08
Texas	6.45	9.85	3.40	6.95	10.14	3.19
New Jersey	4.82	4.67	–0.15	6.13	4.73	–1.40
Illinois	4.45	5.13	0.67	3.63	4.88	1.25
Massachusetts	3.41	2.86	–0.55	2.69	2.38	–0.31
Subtotal	*73.63*	*62.00*	*–11.63*	*71.63*	*60.41*	*–11.22*
B. Other destinations: gainers (ranked by change in observed destination choice proportion)						
Georgia	1.30	3.23	1.93	1.14	3.00	1.86
North Carolina	0.84	2.64	1.80	1.03	2.61	1.59
Arizona	1.32	2.45	1.13	1.42	2.66	1.24
Colorado	0.77	1.72	0.95	1.08	1.82	0.74
Michigan	1.37	2.10	0.72	1.74	2.34	0.60
Washington	1.59	2.15	0.56	1.33	1.72	0.39
Tennessee	0.40	0.90	0.50	0.48	0.95	0.46
Nevada	0.55	1.04	0.49	0.41	1.20	0.79
Indiana	0.52	0.99	0.46	0.71	0.94	0.23
Minnesota	0.62	1.08	0.45	0.77	1.16	0.40
Utah	0.35	0.75	0.40	0.19	0.40	0.21
South Carolina	0.30	0.67	0.38	0.36	0.67	0.32
Oregon	0.78	1.09	0.31	0.41	0.81	0.40
Missouri	0.50	0.73	0.24	0.81	0.75	–0.06
Kentucky	0.26	0.48	0.21	0.24	0.42	0.18
Oklahoma	0.42	0.63	0.21	0.37	0.58	0.21
Nebraska	0.16	0.36	0.21	0.20	0.24	0.04
Wisconsin	0.57	0.77	0.20	0.68	0.91	0.23
Kansas	0.45	0.64	0.19	0.48	0.52	0.04
Ohio	1.18	1.36	0.18	1.71	1.98	0.26
Arkansas	0.14	0.33	0.18	0.16	0.26	0.11
Iowa	0.33	0.51	0.18	0.26	0.38	0.12
Virginia	2.28	2.44	0.16	2.08	2.74	0.65
Alabama	0.32	0.44	0.13	0.34	0.57	0.24
Pennsylvania	1.82	1.95	0.13	2.62	2.39	–0.23
New Mexico	0.31	0.39	0.08	0.37	0.33	–0.03
Delaware	0.13	0.20	0.07	0.14	0.25	0.12
Idaho	0.16	0.22	0.05	0.07	0.20	0.12
Mississippi	0.13	0.18	0.05	0.13	0.25	0.11
South Dakota	0.04	0.07	0.02	0.04	0.06	0.02
Vermont	0.06	0.08	0.02	0.04	0.06	0.02
New Hampshire	0.17	0.18	0.01	0.20	0.24	0.04
West Virginia	0.07	0.08	0.01	0.06	0.12	0.07
Wyoming	0.04	0.05	0.01	0.04	0.06	0.02
Subtotal	*20.26*	*32.88*	*12.62*	*22.10*	*33.59*	*11.49*
C. Other destinations: losers (ranked by change in observed destination choice proportion)						
Montana	0.05	0.05	0.00	0.04	0.07	0.02
North Dakota	0.06	0.05	–0.02	0.04	0.05	0.01
Maine	0.11	0.10	–0.02	0.10	0.11	0.02
Louisiana	0.40	0.36	–0.04	0.35	0.58	0.23
Alaska	0.14	0.10	–0.05	0.18	0.14	–0.05
Washington, DC	0.52	0.40	–0.12	0.32	0.31	–0.02
Connecticut	1.48	1.35	–0.13	1.94	1.73	–0.20
Rhode Island	0.45	0.31	–0.14	0.16	0.18	0.02
Maryland	2.06	1.84	–0.22	2.33	2.24	–0.09
Hawaii	0.83	0.57	–0.26	0.80	0.60	–0.20
Subtotal	*6.11*	*5.12*	*–0.99*	*6.27*	*6.00*	*–0.27*
Dissimilarity Index	–	–	18.02	–	–	17.63

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1.0%, which is predicted by the model as 0.3%. The dissimilarity index showing the change in destination choice pattern across all 51 destinations from the 1ate 1980s to the late 1990s is observed to be 18.0. It is almost the same as the change predicted by the model (17.6%).

Hispanic Immigrants with, at Most, High School Education

The destination choice pattern of low-skilled Hispanic immigrants is of particular interest, not only because of their greatest increase in dispersal from the late 1980s to the late 1990s, but also because they were a large part of the new immigrant population. How well is their destination choice pattern predicted by our model (Table 7)?

With respect to the states that were the top seven destinations in the late 1980s, the decrease in their joint share was observed to be 21.7% and predicted by the model to be 19.3%. The decrease in California's share was observed to be 22.7% and predicted to be 22.8%. The model correctly predicts that the shares for New York and New Jersey decreased, whereas the shares for Texas and Illinois increased. The small observed decrease in Florida's share is incorrectly predicted as an increase, whereas the decrease in Massachusetts' share is incorrectly predicted as no change.

For the remaining states that experienced an increase in their share of new immigrants, the model correctly predicts that North Carolina, Georgia, Arizona and Colorado were the top four gainers. Among these 35 gaining states, only one is predicted incorrectly as a losing state. The observed increase in the joint share of the new immigrants for these 35 states is 22.2%, which is predicted by the model rather closely as 19.4%.

Among the remaining nine states that experienced a decrease in their share of new immigrants, our model incorrectly predicts five of them as gainers. Most of these incorrectly predicted states are the ones with a very small foreign-born population. The observed decrease in the joint share of new immigrants for these nine states is 0.57%, which is predicted by the model as 0.14%.

The dissimilarity index showing the change in destination choice pattern**s** across all 51 destinations from the 1ate 1980s to the late 1990s is observed to be 28.8% and predicted to be 29.2%.

CONTEXTUALISATION

After demonstrating that our model has closely accounted for the major features of the change in the destination choice patterns of new immigrants from 1985–1990 to 1995–2000, we now attempt to identify a few features of the broader economic and political context in order to enrich the substantive meanings of our descriptive and multivariate findings.

An important contextual feature is the wholesale displacement of Keynesianism by neoliberalism[9] in the political economy of not only the US but also the global capitalist system, since the ascendance of Margaret Thatcher as the British Prime Minister in 1979 and of Ronald Reagan as the American President in 1980 (Harvey, 2007). The increasing entrenchment of neoliberalism has shifted power from employees towards employers, resulting in the loss of middle-income, relatively secure and unionised jobs. The following findings of Wright and Dwyer (2003) about the changes in full-time jobs in the US during the 1980s and 1990s are illuminating.[10] During the 1980–1982 recession, net job losses were mostly concentrated in the second, third and fourth income quintiles, while the fifth (highest income) quintile showed a moderate growth in jobs. During the 1983–1990 economic expansion, the first and especially fifth quintiles showed greater growth than the three intermediate quintiles, but the difference among the five quintiles was not large. During the 1990–1992 recession, all five quintiles experienced net losses of jobs, with the losses being somewhat greater in the second and third quintiles. During the prolonged 1992–2000 economic expansion, job growth assumed a very sharp V-shaped pattern, with the growth being particularly great at the highest quintile and particularly low in the third quintile. These findings indicate that the progressive entrenchment of neoliberalism was reflected by a much more polarised change in job opportunities in the late 1990s than in the late 1980s. More interestingly, most of the jobs in the top quintile were taken by non-Hispanic Whites, whereas most of the jobs in the bottom quintile were filled by Hispanics and to a lesser extent by Blacks. Although Wright and Dwyer omitted Asians from their study, the comparison of the 1990 and 2000 census data by Bean *et al*. (2004) revealed that in 1990–2000, foreign-born Asians

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Table 7. Observed and predicted changes in the destination choice patterns of the new foreign-born Hispanic immigrants (aged 20–59 at census) with, at most, high school education: from 1985–1990 to 1995–2000.

	Observed pattern (%)			Predicted pattern (%)		
Destination	1985–1990	1995–2000	Change	1985–1990	1995–2000	Change
A. Top 7 destinations in 1985–1990						
California	45.82	23.16	–22.66	44.40	21.57	–22.82
New York	10.64	6.81	–3.84	11.17	7.56	–3.60
Texas	9.35	14.88	5.54	9.19	15.11	5.91
Florida	8.72	8.47	–0.25	9.00	11.08	2.08
New Jersey	4.23	3.70	–0.53	5.97	3.51	–2.46
Illinois	4.14	5.21	1.07	2.64	4.29	1.64
Massachusetts	2.31	1.30	–1.01	1.61	1.61	0.00
Subtotal	*85.21*	*63.54*	*–21.67*	*83.98*	*64.73*	*–19.25*
B. Other destinations: gainers (ranked by change in observed destination choice proportion)						
North Carolina	0.37	3.99	3.62	0.31	2.85	2.54
Georgia	0.84	4.16	3.32	0.42	3.20	2.79
Arizona	1.92	3.95	2.02	2.32	4.44	2.12
Colorado	0.53	2.40	1.86	1.11	2.32	1.21
Indiana	0.11	1.04	0.93	0.31	0.73	0.42
Tennessee	0.06	0.97	0.92	0.11	0.68	0.57
Nevada	0.79	1.61	0.82	0.53	1.58	1.05
Utah	0.18	0.95	0.77	0.15	0.50	0.34
South Carolina	0.11	0.87	0.77	0.08	0.61	0.53
Michigan	0.23	0.99	0.77	0.83	1.73	0.90
Oregon	0.68	1.33	0.66	0.26	0.78	0.52
Oklahoma	0.19	0.77	0.59	0.14	0.59	0.45
Minnesota	0.10	0.68	0.58	0.22	0.82	0.60
Kansas	0.25	0.83	0.58	0.24	0.49	0.25
Wisconsin	0.23	0.77	0.54	0.25	0.70	0.45
Washington	0.90	1.34	0.44	0.84	1.32	0.48
Arkansas	0.07	0.48	0.41	0.03	0.22	0.19
Alabama	0.04	0.41	0.37	0.06	0.41	0.35
Nebraska	0.07	0.42	0.35	0.09	0.20	0.11
Iowa	0.07	0.41	0.34	0.06	0.28	0.22
Kentucky	0.06	0.39	0.33	0.04	0.29	0.25
Missouri	0.10	0.38	0.29	0.20	0.46	0.26
Ohio	0.24	0.48	0.24	0.55	1.23	0.68
New Mexico	0.40	0.60	0.20	0.68	0.49	–0.19
Mississippi	0.02	0.20	0.18	0.02	0.18	0.17
Virginia	1.58	1.76	0.18	1.11	2.17	1.07
Delaware	0.08	0.16	0.08	0.08	0.23	0.15
Wyoming	0.02	0.04	0.02	0.02	0.05	0.03
New Hampshire	0.05	0.06	0.02	0.08	0.16	0.07
South Dakota	0.00	0.02	0.01	0.01	0.04	0.03
Idaho	0.25	0.26	0.01	0.05	0.24	0.18
West Virginia	0.01	0.01	0.00	0.01	0.07	0.06
Montana	0.01	0.01	0.00	0.01	0.06	0.05
Pennsylvania	0.94	0.94	0.00	1.08	1.52	0.43
Maine	0.01	0.01	0.00	0.02	0.07	0.05
Subtotal	*11.48*	*33.71*	*22.24*	*12.33*	*31.72*	*19.39*
C. Other destinations: losers (ranked by change in observed destination choice proportion)						
Vermont	0.00	0.00	0.00	0.01	0.03	0.02
Alaska	0.04	0.03	–0.01	0.08	0.08	–0.01
North Dakota	0.01	0.00	–0.01	0.01	0.03	0.02
Louisiana	0.18	0.17	–0.01	0.09	0.42	0.33
Hawaii	0.06	0.04	–0.02	0.36	0.13	–0.24
Connecticut	1.11	1.04	–0.07	1.69	1.14	–0.55
Rhode Island	0.47	0.36	–0.12	0.10	0.15	0.06
Maryland	1.03	0.87	–0.16	1.17	1.42	0.25
Washington, DC	0.42	0.25	–0.17	0.18	0.15	–0.03
Subtotal	*3.32*	*2.75*	*–0.57*	*3.69*	*3.56*	*–0.14*
Dissimilarity Index	–	–	28.84	–	–	29.90

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took many more jobs in the top quintile than in the bottom quintile, and that most of the Hispanics who filled the jobs in the bottom quintile were foreign-born. Since a high proportion of foreign-born Hispanics were Mexican immigrants with little formal education, this last finding is consistent with Michael Piore's (1979) insightful theory of dual labour markets. We assume that the growth of low-wage jobs mainly occurred in the service, construction and manufacturing sectors.

The entrenchment of neoliberalism also stimulated and legitimised the largely predatory expansions of large corporations into low-wage countries like Mexico and China (Harvey, 2007). Such expansions have helped to create many skilled jobs in the headquarters of the large corporations and in many specialised business service firms (Sassen, 1988, 1991). Most of these corporations and firms are located in the large metropolitan areas of high-income states, where many low-skilled jobs have also been created to provide services to the daily lives of the increasing number of well-educated workers who fill the skilled jobs. Furthermore, it is likely that the progressive entrenchment of neoliberalism has helped to enhance the pro-business attitudes of many local governments, especially those in the South, and the entrepreneurial spirit and optimism of small firms and proprietors in many parts of the country. Thus, the economic expansion was spatially much more extensive in the late 1990s than in the late 1980s. It is not surprising that our computation shows that the interstate variation in *total* employment growth rate is much smaller in 1994–1999 than in 1984–1989: the standard deviation is 7.82% for 1994–1999 and 9.31% for 1984–89.[11] The spatial expansion of *construction* employment growth from the late 1980s to the late 1990s was particular impressive: the standard deviation decreased from 8.62% in 1984–1989 to only 3.66% in 1994–1999. The spatial expansion of *manufacturing* employment growth from the late 1980s to the late 1990s was substantial: the standard deviation decreased from 5.08% in 1984–1989 to 3.36% in 1994–1999. With respect to *service* employment growth, the spatial variation remained about the same: the standard deviation decreased slightly from 5.01% in 1984–1989 to 4.99% in 1994–1999.

What is useful for understanding the observed changes in the destination choices of the newly arrived immigrants between the late 1980s and the late 1990s is the fact that the available job opportunities became more hierarchically polarised and spatially expanded. Since the well-paying (and high-skilled) jobs largely remained concentrated in the high-income-cum-immigrant-gateway states, it is likely that the spatial expansion of job opportunities in the late 1990s was much weaker at the upper extreme than at the lower extreme of the job hierarchy. The Asian new immigrants, being better educated and probably less subject to discrimination than other minority groups, had a better chance of getting the high-skilled jobs and hence had a destination choice pattern that was similar to that of the White new immigrants in showing relatively weak spatial expansion from the late 1980s to the late 1990s. In contrast, Hispanic and Black new immigrants, being less educated and probably more subject to discrimination, were more likely to be offered low-skilled jobs that became widely dispersed in the late 1990s, so that their destination choice pattern also became much more dispersed in the late 1990s. It is not surprising that the least-educated Hispanics showed the greatest increase in spatial dispersal.

The progressive entrenchment of neoliberalism has also forced the supply of labour to be more 'flexible'. This is especially true among undocumented immigrants who have practically no bargaining power against employers. Our multivariate finding that the destination choices of the new immigrants became more responsive to the interstate variation in employment growth rates is consistent with the idea that the supply of immigrant labour indeed became more 'flexible' in the late 1990s.

Another important contextual feature is the change in government policies on immigration since the 1986 Immigration Reform and Control Act (IRCA). In addition to strengthening border control, IRCA introduced largely toothless sanctions on employers who knowingly hired undocumented immigrant workers and offered undocumented immigrants opportunities to become landed immigrants. An important consequence of IRCA is the legalisation of about 3 million previously undocumented immigrants (Massey *et al.*, 2002: 90; Martin and Midgley, 2003: 19). No longer afraid of being tracked down and deported by INS agents, many of these legalised immigrants, mostly Mexicans with little formal

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education, gave up the low-paying and back-breaking farm jobs in southern California (where they benefited from 'security in large numbers') to better-paying and/or less strenuous manufacturing and service jobs in other parts of the US, often travelling in groups with co-ethnics. The spatial dispersal of these legalised immigrants implies that, via chain migration, the destination choice patterns of their relatives and friends who came in the 1990s as new immigrants would tend to be more dispersed. Among the undocumented new immigrants, a higher proportion became less willing to return to their home country, because increasingly strengthened border control has made reentry into the US more difficult, expensive and deadly. Instead, they became more prone to getting their spouse and children brought to the US, making the dispersed destination choice pattern more entrenched (Massey *et al.*, 2002: 5).

Finally, the mixed response of the long-term residents of small communities to the sudden increase of *groups* of immigrants with unfamiliar cultural background is also a relevant contextual feature. On the one hand, they realise the importance of the immigrant workers in maintaining the tenuous economic base of their locality. On the other hand, they may react negatively to the sudden increase in the demand for various social services and the emergence of strangers with incomprehensible language and exotic behaviour in their daily life. Whether such negative sentiments may create a backlash and discourage the arrival of more new immigrants is a topic for further research.

The most recent data on the growth of foreign-born population in different states show that most of the states where the foreign-born population growth rates were very high in 2000–2004 were those states where the foreign-born population were growing very rapidly in 1995–2000. The ten states with the highest growth rates of the foreign-born population in 2000–2004 turned out to be Tennessee (43%), South Carolina (41%), Delaware (38%), Arkansas (37%), Kentucky (36%), Nevada (36%), Georgia (31%), Minnesota (30%), Idaho (30%) and North Carolina (28%) (Kochhar, 2006). This finding suggests that the destination choice patterns of the immigrants entering the US in the mild recession of the early 2000s probably continued to be more dispersed than in the late 1980s.

If the above-mentioned contextual features are indeed connected to the spatial dispersal of the destination choice pattern for newly arrived immigrants in an ethnically selective way, and if the most recent data indeed suggest that the dispersed destination pattern persisted through the recession of the early 2000s, the dispersal that occurred in the late 1990s may indeed have been the beginning of a new trend. However, it is worth keeping in mind that California, New York, Texas and Florida will continue to be the most preferred destinations in the foreseeable future. Our finding that ethnic similarity remained more important than labour-market factors in both periods indicates that the status of these four states is guaranteed by their large and vibrant co-ethnic communities of the main sources of immigrants – Latin America and Asia.

CONCLUSION

We have found that the destination choice pattern of the newly-arrived immigrants became less concentrated and more dispersed from the late 1980s to the late 1990s, and that these changes were *pervasive* in the sense that they were true for all combinations of five broad ethnic groups and four levels of educational attainment. We have further found that these changes were (1) much greater for Hispanic and Black immigrants than for White and Asian immigrants, (2) greater at lower levels of education, and (3) the greatest for the least-educated Hispanic immigrants.

Our multivariate analysis has revealed that the newly arrived immigrants of all ethnic groups were strongly subject to the attraction of co-ethnic communities in both periods, that the attraction of co-ethnic communities tended to be stronger for those who had less education and were older, and more importantly, that for Hispanic and Black immigrants the attraction of co-ethnic communities became much less intense in the late 1990s than in the late 1980s.

Concerning the roles of labour-market factors, the multivariate analysis shows that the newly-arrived immigrants were subject to the strong pull of high income levels in both periods, that the pull of employment growth became stronger and more industry-specific from the late 1980s to the late 1990s, and more importantly, that the pull of *service* employment growth, especially for the

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least-educated Hispanic immigrants, became much stronger in the later period.

The finding that ethnic similarity continued to be a very powerful explanatory factor suggests that it is very likely that the major traditional immigration gateways like California, New York, Texas and Florida will remain the major magnets in the foreseeable future. It is useful to keep in mind that the strengthened border control, such as the 1993 Operation Blockade at El Paso (Massey *et al.*, 2002: 106), did not have a lasting negative effect on Texas's share of low-skilled Hispanic new immigrants, which actually increased markedly from 9.4% in 1985–1990 to 14.9% in 1995–2000 (Table 7). The large and vibrant immigrant communities, together with the existence of numerous low-skilled jobs, essentially guarantee the status of Texas as a major gateway state, even if its southern border is completely sealed off.

Finally, based on (1) the progressive entrenchment of neo-liberalism, (2) the spatial dispersal of numerous IRCA-legalised immigrants from southern California, (3) the perverse consequence of the enhancements of border control since the late 1980s, and (4) the fact that most of the states with rapid growth of foreign-born population in the recession of the early 2000s were the same as those that had a similar experience in the late 1990s, we may infer that the ethnically selective dispersal of immigrants in the late 1990s was probably the beginning of a new trend.

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NOTES

(1) According to Passel and Zimmermann (2001), the share of the foreign-born population in the US by the top six states increased monotonically from 54% in 1890 to 63% in 1940, then remained at the same level until 1960, and then increased monotonically again to a maximum of 73.5% in 1994, before declining to 70% in 1999.

(2) In Passel and Suro (2005), the six states with the largest immigrant populations are CA, NY, TX, FL, IL and NJ, whereas 'New Growth States' are defined as the states other than the six largest immigration states where the foreign-born population grew faster during 1990–2000 than in the fastest-growing large state (TX). The 22 New Growth States are: Southeast – DE, NC, SC, GA, KY, TN, AL, MS, AR, OK; Mid-West – IN, MN, IA, NE, KS; and Mountain/West – ID, CO, AZ, UT, NV, WA, OR.

(3) Let P[1,j] and P[2,j] be the percentage share of the country's new immigrants by state j in 1985–90 and 1995–2000, respectively. The dissimilarity index is defined as the sum of $|P[1,j] - P[2,j]|/2$ across all 51 states.

(4) Hirschman (2004) explained why 'ethnicity' is a perfectly acceptable concept in place of 'race'.

(5) The data sources are the full 'long form' records of the 1990 Census and the PUMS of the 2000 Census.

(6) The growth rates of total employment are computed from the observed sizes of total employment in 1984, 1989, 1994 and 1999. We use the time intervals 1984–1989 and 1994–1999, instead of 1985–1990 and 1995–2000, for the following reasons. Firstly, the population censuses were taken in the early part (1 April) of 1990 and 2000. Secondly, there is in general some time lag between obtaining information and making the migration decision. The data source for total employment, service employment, construction employment and manufacturing employment is the website of the Bureau of Economic Analysis: www.bea.doc.gov/bea/regional/data.htm.

(7) For each year, the unemployment rate was calculated as the average of 12 monthly values. The data source is the Bureau of Labor Statistics [www.bls.gov/sae].

(8) Data source: US National Oceanic and Atmospheric Administration.

(9) For the Hispanic immigrants who had less than some college education and were aged 50 years or older, the corresponding coefficient also decreased sharply from 0.732 (i.e. 0.424 + 0.308) in 1985–1990 to 0.449 (i.e. 0.352 + 0.039 + 0.058) in 1995–2000.

(10) Neoliberalism can be defined as 'a theory of political economic practices proposing that human well-being can be advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, unencumbered markets and free trade' (Harvey, 2007: 22).

(11) The data source of Wright and Dwyer (2003) is the Current Population Survey. In their study, a job is defined as a non-empty cell of a labour-force matrix, with industry and occupation as the two dimensions. The quality of a job is defined as the

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median hourly wage of the full-time workers in the cell. For the 1992–2000 period, the matrix is created by crossing 104 occupational categories with 23 industry categories.

(12) For reference, the mean of *total* employment growth rate was 12.21% in 1994–1999 and 13.30% in 1984–1989. The mean of *construction* employment growth rate was 24.44% in 1994–1999 and 19.69% in 1984–1989, whereas the mean of *manufacturing* employment growth rate was only 1.07% in 1994–1999 and 0.55% in 1984–1989, and the mean of *service* employment growth rate was 19.90% in 1994–1999 and 25.51% in 1984–1989. Overall, both periods were characterised by sharp expansion of construction and service employment and stagnation of manufacturing employment. The construction (housing) boom was greater in 1994–1999, whereas the service boom was greater in 1984–1989. Note that the manufacturing sector included expanding industries like meat processing, and shrinking industries like textiles.

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