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Elderly Immigrants: Their Composition and Living Arrangements

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This paper describes how the composition of elderly immigrants is changing and how elderly immigrants differ from natives in terms of living arrangement and demographic and socioeconomic characteristics. The determinants of living alone are investigated for 11 ethnic origin categories and natives. The analysis utilizes data from two samples of the 1990 U.S. Census: the PUMS-A 5% sample and an independent 3% sample of households containing at least one member 60 or more years of age. Between 1970 and 1990 immigrants from Asia and Latin America moved from forming a minor component of the elderly to being a significant and rapidly growing part of the elderly population which is also expanding rapidly. Elderly immigrants from developing countries have distinctly different living arrangement profiles from natives and from other immigrant elderly. They are significantly more likely to be living with children as well as with others, and distinctly less likely to be living alone or with spouse only. However, there is no single pattern for all immigrants and even within the broad categories of developing and developed origin groups there is considerable heterogeneity of living arrangements. The most important source of differences in the odds of elderly living alone is the degree of integration, indexed by English language fluency, duration of U.S. residence, and citizenship status. Economic resources also significantly influence the odds that elderly from developing countries live alone. Demographic and physical limitation factors, while important in influencing type of living arrangement in general, do not contribute significantly to immigrant group differentials in living arrangements.

The aging of the U.S. population has captured increased scholarly and policy attention in recent years and will undoubtedly capture more in the years ahead as the elderly population grows from one in eight Americans in 1995 to one in five by the year 2030 (Treas 1995; Treas and Torrecilha 1995; U.S. Bureau of the Census 1996). The ethnic composition of the U.S. elderly population is also changing rapidly and this shift and the implications of that change have attracted some research attention (Jackson et al. 1993; Kramer, Stanford, and Torres-Gil 1994; Stanford and Yee 1991). Very little research attention, however, has been given to elderly immigrants, except for an article by Wilmoth, DeJong and Himes (1997), or to the role of immigration as a contributor to the shifting ethnic composition of the elderly population. We seek to address that omission in this paper by looking at how the composition of elderly immigrants is changing. We also examine how elderly immigrants differ from native non-Hispanic whites in their social demographic characteristics, economic resources, health status, and living arrangements. In addition to examining these dimensions for elderly immigrants as a whole, we look at patterns for the ten largest immigrant groups. Finally, we assess the extent to which differences between natives and elderly immigrants in living arrangements stem from the national origins of immigrants, from differences between elderly immigrants and natives in demographic characteristics, economic resources and health status, and/or from the extent of integration of elderly immigrants into U.S. society.

SHIFTING COMPOSITION OF U.S. ELDERLY POPULATION

According to the U.S. Administration on Aging (1996), the two most rapidly growing segments of the elderly population are Hispanics and Asians/Pacific Islanders. In the 1995 to 2010 period, for instance, Asians and other races¹ are expected to grow by 55.4 percent, Hispanics by 52.7 percent, Blacks by 21 percent, and whites by 9.9 percent (U.S. Administration on Aging 1996). The fact that these differential growth rates will be heavily influenced by immigration becomes clear from projections of the growth of the native and foreign-born components of the U.S. population prepared by Pitkin and Simmons (1996); their projections show

that from 1995 to 2010, the elderly of foreign-born origin will increase by 68.5 percent, compared to a 16.7 percent increase for the native-born population. Given these differential growth rates of native-born and foreign-born elderly, it is hardly surprising that the ethnic composition of the elderly population will change rapidly in the years ahead. For instance, Hispanics are expected to increase their share of the elderly population from 4.5 percent in 1995 to 17.5 percent by 2050; Asians, Pacific Islanders and other races will increase from 2.3 percent in 1995 to 10.9 percent in 2050; Black Americans will increase slightly, from 8.1 percent in 1995 to 10.9 percent in 2050; and non-Hispanic whites will decrease proportionately (U.S. Administration on Aging 1996).

An examination of changes in the national origins of foreign-born elderly from 1970 to 1990, drawing on census data, illustrates further the shifting composition of elderly immigrants. Table 1 identifies the top ten countries of origin for foreign-born elderly aged 60 and over in 1970 and 1990 and gives the percentage change in size of those populations in that period. Foreign-born elderly who come from a country other than a top ten one are aggregated into an "Other Foreign Born" category (last row of Table 1). Table 1 shows that while 69.6 percent of elderly immigrants originated in a top ten country in 1970, that percentage dropped to 61.9 percent in 1990. This drop is consistent with increasing diversification in the origins of U.S. immigrants, a trend that has been well documented (Bouvier 1992; Reimers 1985).

In addition, the countries in the top ten listing changed during the period. Whereas Mexico was the only developing country on the list in 1970, by 1990 it was the second largest source of elderly immigrants and three other developing countries—Cuba, China and the Philippines—were also among the top ten senders. In contrast, European countries in the top ten dropped from eight in 1970 to five in 1990. More importantly, the percentage change in the population size of elderly immigrants from different countries in the 1970–90 period, shown in the last column of Table 1, indicates that elderly immigrants from the five European countries, i.e. Italy, Germany, United Kingdom, Poland and USSR, experienced an absolute decline in size from 1970 to 1990 while those from the four developing countries greatly increased in size—Chinese, Filipino, Cuban, and Mexican elderly increased

Table 1
Population size, distribution and change in ten largest foreign born groups, 1970 and 1990

Origin	1970		1990		% change 1970-90
	Population size	% of all foreign born	Population size	% of all foreign born	
Italy	564,676	14.6	303,333	8.5	11.5
USSR	354,141	9.2	301,290	8.5	90.7
Germany	329,462	8.5	280,351	7.9	-50.4
Poland	325,371	8.4	263,687	7.4	-20.0
UK	296,086	7.7	221,506	6.2	342.9
Canada	272,052	7.0	216,843	6.1	-26.8
Mexico	157,979	4.1	182,289	5.1	-44.0
Austria	148,799	3.9	153,009	4.3	-56.8
Ireland	137,548	3.6	146,483	4.1	441.1
Hungary	101,546	2.6	133,865	3.8	435.5 ^a
Other foreign born	1,175,643	30.4	1,352,534	38.1	15.0
Total foreign born	3,863,303	100.0	3,555,190	100.0	-8.0

Source: U.S. Bureau of the Census, 1973, *Census of Population, 1970, Subject Reports, Final Report PC(2)-1A, National Origin and Language*, Table 10, pages 66-71; U.S. Bureau of the Census, 1993, *1990 Census of Population, The Foreign Born Population in the United States*, Table 1, pages 1-64.

^a In 1970, Filipinos were not identified as an elderly origin group. Based on other information on persons of Filipino ancestry in 1970 (U.S. Bureau of the Census, 1973), we estimated that there were 25,000 elderly born in the Philippines in 1970 and use that figure to calculate percentage change from 1970 to 1990.

by 441.1 percent, 435.5 percent, 342.9 percent, and 90.7 percent, respectively, from 1970 to 1990. In contrast, Canadians were the only group of predominantly non-Hispanic white origins that experienced an increase in size, albeit only a modest one (11.5%).

Dynamics from two immigration waves are shaping the shifting ethnic composition of elderly immigrants. The first wave occurred during the first two decades of this century when the United States was receiving annual inflows of about 700,000 immigrants, largely from European countries. The second immigration wave started in the late 1960s, reached annual levels of 800–900,000 by the early 1990s, and continues today. In contrast to the European origins of most first wave immigrants, the bulk of today's immigrants come from Asia or Latin America. Indeed, in 1990, only 14.6 percent of new immigrants were of European origin (U.S. Immigration and Naturalization Service 1991). Given these trends and the fact that most Europeans from the first wave have already reached their elderly years, it is clear that the numbers of elderly immigrants of European origin will continue to decline rapidly in the years ahead while those from Asia and Latin America will increase (Pitkin and Simmons 1996).² In addition, growth of the foreign-born elderly population is being sped up by the fact that growing numbers of new immigrants admitted to the United States are already elderly or at older ages. Greenwood, Hussain and McDowell (1997) calculated, for instance, that only 8.1 percent of newly admitted immigrants in 1972 were aged 50 and older but that 15.5 percent were of that age in 1991.

LIVING ARRANGEMENTS ARE IMPORTANT

Mindel (1979) and others (Wolf 1990; Wolf and Soldo 1988) show that independent living arrangements are increasing among the elderly and co-residence with kin decreasing. This trend toward independent living, defined as living alone or with spouse only, is usually interpreted as reflecting individual preferences (Soldo, Wolf, and Agree 1990). A number of factors are known to be important correlates of independent living, including age, sex, ethnicity, and economic resources. In addition, functional limitations and availability of kin (Burr and Mutchler 1992 and 1993; Waite and Hughes 1997; Zsembik 1993) shape living arrangements. It is often claimed that elderly who live alone are

in a more vulnerable situation than those who live with a spouse and/or own children (Himes 1992; Waite 1997). Mui and Burnette (1994) found that while elderly who live alone have better physical and functional health than elderly living with others, they also experienced more depression, loneliness, and social isolation than the latter.

Given the increasing numbers of elderly immigrants, a key question is whether they will follow the trend of native-born elderly toward increased independent living. Although several studies of living arrangements among minority elderly show that Black Americans, Hispanics, and Asians are significantly more likely than non-Hispanic whites to live in extended households (Burr and Mutchler 1992, 1993; Choi 1991; Kamo and Zhou 1994; Lubben and Becerra 1987; Mutchler and Frisbie 1987; Zsembik 1993), most of these studies do not differentiate between the native-born and foreign-born components of the minority groups studied. Thus, although immigrants are a large and growing component of elderly Asian and Hispanic populations, we do not know the extent to which their living arrangements differ from those of minority native-born or from native-born non-Hispanic whites. A study by Kamo and Zhou (1994) suggests, however, that immigration status is an important factor that accounts for differences between native whites and Asians in living arrangements.

Wilmoth, DeJong and Himes (1997) did examine the living arrangements of elderly immigrants of European, Latin American and Asian origin and compared how they differed from those of their native-born counterparts of same ancestry (i.e. non-Hispanic whites, Hispanics, and Asians). For all three minority groups, they found that elderly immigrants are significantly more likely than their native-born counterparts to live in extended families. Wilmoth et al.'s study (1997) also suggests that elderly immigrants' degree of integration influences outcomes since they found that those who spoke English poorly or were 60 years of age or older when they migrated to the United States were significantly more likely to reside in extended families than other elderly immigrants.³ They did not, however, examine other integration indicators or assess how the living arrangements of minority immigrants compare to those of non-Hispanic whites. A study by Boyd (1991) of elderly immigrant women in Canada also shows

that immigrants are more likely than natives to live in extended families in that context.

In this study, we extend these earlier analyses by examining first how elderly immigrants differ from native non-Hispanic whites in their characteristics and living arrangements. We then focus on the patterns for the ten largest immigrant groups, in addition to all other foreign born who are treated as an 11th group. Previous studies of elderly minorities have focused on Hispanic and/or Asian minorities. In this study, however, we look at discrete national origin groups because we assume that there is considerable heterogeneity within the elderly immigrant population and that groups defined as of similar ethnicity based on language (Hispanics) or region of origin (Asians) may differ considerably from each other in socioeconomic characteristics and living arrangements. Just as earlier studies allowed us to appreciate differences in integration processes between Europeans of British, German, Irish, Italian, Polish and other heritages (Abramson 1973; Jiobu 1990; Lieberman 1963), we expect that comparative studies of contemporary immigrants will reveal important differences between Mexicans, Cubans, Dominicans, Salvadorans, Colombians and other groups usually aggregated together as Hispanics or among others (Chinese, Japanese, Filipinos, Koreans, etc.) who are aggregated as Asians. At the very least, it is important to determine the extent to which there are significant differences across recent immigrant groups before treating them as homogeneous populations.⁴

CHARACTERISTICS AND LIVING ARRANGEMENTS OF THE ELDERLY POPULATION

Since we are interested in analyzing how the living arrangements of immigrants in specific origin groups differ from each other and from natives, we need a database that has a large number of cases. The only databases that satisfy this condition are the Public Use Microdata Samples (PUMS) from the 1990 U.S. Census. In this study, we merge data from two 1990 Public Use Microdata Samples—PUMS-5% and PUMS-O. The PUMS-5% is a 5 percent sample of the total population counted in 1990 and the PUMS-O is an independent 3% sample of households in 1990

that had at least one member aged 60 or over. Since the PUMS-5% and PUMS-O files are independent samples and have comparable data on individuals, households, and geographic areas, they can be merged to form an 8% sample of elderly persons in the 1990 U.S. population.⁵ To assure a sufficient number of elderly immigrants from different origins in the database, our analysis sample includes all foreign-born persons aged 60 and over (N=278,174) in the merged PUMS-8% file. In addition, we drew a 0.0075 sample of natives from the PUMS-8% (N=24,229) and use weights for population estimates.⁶ We assume that foreign-born persons identified in the census are permanent residents of the United States and use the terms foreign born and immigrants interchangeably in the paper.⁷

Individuals are our unit of analysis. We focus on specific nativity groups in our descriptive analysis and use dummy variables in our multivariate analysis to classify immigrants by country of birth. Table 2 provides demographic, socioeconomic, immigration and integration statistics for all native-born and foreign-born elderly in 1990 and for the ten largest origin groups and an 11th category composed of all other foreign born. For summary purposes, we classify the top ten source countries according to conventional categories of "developed" and "developing."⁸ While a perusal of Rows 1 and 2, Table 2, suggests that foreign-born and native-born elderly are relatively similar in their age, sex, and education characteristics, it becomes clear when we examine statistics for the different national origin groups that there is considerable diversity among elderly immigrants.

On average, elderly immigrants from China, Cuba, Mexico, and the Philippines tend to be younger than elderly immigrants from the six "developed" countries. Although over 50 percent of elderly immigrants in all origin groups are female, elderly immigrants from China and the Philippines are least likely to be female, 53.3 and 53.9 percent, respectively. In contrast, over 66 percent of German and British elderly are female. The socioeconomic profiles of elderly immigrant groups also differ considerably. While Mexican elderly have only 4.7 years of schooling, on average, British, Canadian and German elderly have over 9 years. Moreover, the "developed/developing" origins of elderly

Table 2
 Demographic, socioeconomic, immigration and integration characteristics of non-Hispanic white native-born and foreign-born elderly by national origins, 1990

	Mean age (years)	% female	Education (mean years of school)	% with no Social Security	Mean personal income (\$)	% with functional limitation	% arrived before 1950	% citizen	% who speak English well or very well
Native born	70.8	58.4	9.0	28.8	16,067.11	19.5	—	100.0	99.2
Foreign born	72.3	60.1	8.0	40.3	13,739.38	24.7	45.8	68.5	74.1
"Developing" origin groups	70.2	55.1	6.7	55.0	9,810.96	22.4	23.0	46.7	44.8
China	69.7	53.3	7.5	62.5	10,905.09	18.4	18.6	47.3	33.6
Cuba	70.1	56.6	7.7	46.7	11,187.42	22.8	6.1	48.4	34.9
Mexico	70.6	55.4	4.7	47.2	7,903.09	24.5	40.0	39.9	43.7
Philippines	70.2	53.9	8.7	67.0	10,571.80	21.6	18.1	58.3	76.0
"Developed" origin groups	73.9	61.9	8.5	27.2	15,918.22	24.9	64.1	83.0	89.8
Canada	72.9	64.3	9.2	24.8	16,209.22	18.5	71.9	78.2	98.5
England	72.4	68.3	9.7	29.7	16,648.22	17.6	62.1	74.7	99.8
Germany	72.7	66.2	9.3	29.9	18,069.26	25.0	60.0	89.3	97.4
Italy	75.2	57.2	6.4	25.2	13,233.65	28.1	69.1	86.5	79.1
Poland	73.9	55.4	7.7	25.9	17,177.03	27.2	57.4	85.8	84.6
USSR	76.3	60.1	8.6	29.2	14,690.67	33.2	58.2	80.7	78.4
Other foreign born	72.0	61.3	8.2	45.6	13,840.29	25.8	40.6	66.6	75.3

Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

immigrants are not closely associated with the educational levels of the different groups. Table 1 shows, for instance, that elderly immigrants from Italy, a developed country, have the second lowest level of education (6.4 years), while those from Mexico have the lowest level of education (4.7 years). In contrast, elderly immigrants from the Philippines, a developing country sender, are relatively well educated. The national origins of elderly immigrants are related to average income levels since Table 2 shows that elderly immigrants from the "developing" country groups have lower average income and are less likely to receive Social Security than those from "developed" countries. Indeed, Social Security, a principal income source for the elderly, is not received at all by 55 percent of elderly immigrants from China, Cuba, Mexico and the Philippines compared to 27.2 percent of those from "developed" countries. Filipino elderly are least likely to receive Social Security (67.0%).

The percentage of elderly immigrants who have a functional limitation, defined as either a physical mobility limitation or a personal care limitation, tends to be higher for elderly immigrants, on average, than it is for native-born elderly—24.7 versus 19.5 percent, respectively. More than 27 percent of Italian, Polish and Russian elderly had a functional limitation in 1990 but other groups, namely Chinese, Canadian, and British elderly, were less likely than native-born to have a functional limitation. The last three columns of Table 2 show the percentages of elderly immigrants in each group who migrated to the United States before 1950, who are citizens, and who speak English only or very well. As expected, the four groups from developing regions have relatively low percentages who migrated to the United States before 1950, are less likely to be citizens, and have lower percentages who speak English only or very well. But there are important differences across the groups. While 40 percent of Mexican elderly arrived before 1950, only 6.1 percent of Cubans were in the United States by that year. Among the groups from "developed" areas, on the other hand, more than 57 percent immigrated before 1950, over 74 percent are citizens, and over 78 percent speak English very well.

The living arrangements of the same eleven groups of elderly immigrants can be compared to those of natives in Table 3.

Table 3

Living arrangements of elderly non-Hispanic white native-born and foreign-born groups from largest origin countries, 1990^a

	<i>Spouse</i>				
	<i>Alone</i>	<i>only</i>	<i>Children^b</i>	<i>Others^c</i>	<i>Institutionalized</i>
Native born	25.7	45.1	16.7	8.2	4.2
Foreign born	21.8	33.7	30.3	9.9	4.3
"Developing" origin groups	12.8	23.8	46.7	15.0	1.6
China	11.2	26.0	51.6	9.4	1.7
Cuba	16.5	31.4	32.3	18.3	1.5
Mexico	14.2	20.4	49.1	14.4	1.9
Philippines	5.5	16.6	60.1	16.8	1.0
"Developing" origin groups	27.9	42.9	18.4	6.3	4.5
Canada	28.5	47.2	14.0	6.1	4.3
England	27.6	47.0	15.5	5.9	4.1
Germany	29.1	46.4	14.5	5.6	4.4
Italy	24.5	35.7	28.9	6.8	4.0
Poland	26.8	43.7	18.8	6.5	4.2
USSR	31.3	37.9	17.6	7.3	6.0
Other foreign born	21.0	30.1	32.6	10.4	5.8

Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

^a All numbers are percentages and rows sum to 100 (some rows may not sum to 100 due to rounding errors).

^b Elderly who live with at least one child are included in this category; 57.8% of these families also include a spouse or an unmarried partner.

^c Elderly who live with other related or unrelated persons are included in this category; 28.9% of these households also include a spouse or an unmarried partner.

We classified the total elderly population by five types of living arrangements—the percentages living alone, living with spouse only, living with children, living with others, and living in group quarters or institutions. Categories one and two, i.e. living alone or with spouse only, are self explanatory, since no person, other

than those noted, is included in those families. Elderly living with children, however, may have a spouse present and others may also be present. We assume that elderly living with children have a potential care-giver present and, therefore, allow that condition to override the importance of a spouse also being present. A similar situation holds for elderly living with "Others." These "Others" may be a relative or a non-relative of the elderly person and no further condition is specified with regard to the age profile of "Others" in our analysis. A spouse may also be included in these families but we assume that the important condition from the standpoint of care and support for the elderly person is the fact that at least one other person is also present. We know that 57.8 percent of elderly living with children have a spouse present and that 28.9 percent of elderly living with "Others" do.

Table 3 confirms that foreign-born elderly are less likely than native-born elderly to live independently (i.e. alone or with spouse only) and more likely to live in extended families (i.e. with children or with others). Those patterns vary sharply, however, for different origin groups. For instance, while only 5.5 percent of elderly Filipinos live alone, 16.5 percent of elderly Cubans do, and over 27 percent of elderly Canadians, British, Germans and Russians live alone. Italians are the least likely of the "developed" country groups to live alone (24.5%). The percentages who live with only a spouse range from 16.6 percent of Filipino elderly to over 40 percent of Polish, Canadian, British and German elderly. Relatively small percentages of Mexicans and Chinese, on the other hand, live with spouse only (20.4 and 26 percent, respectively).

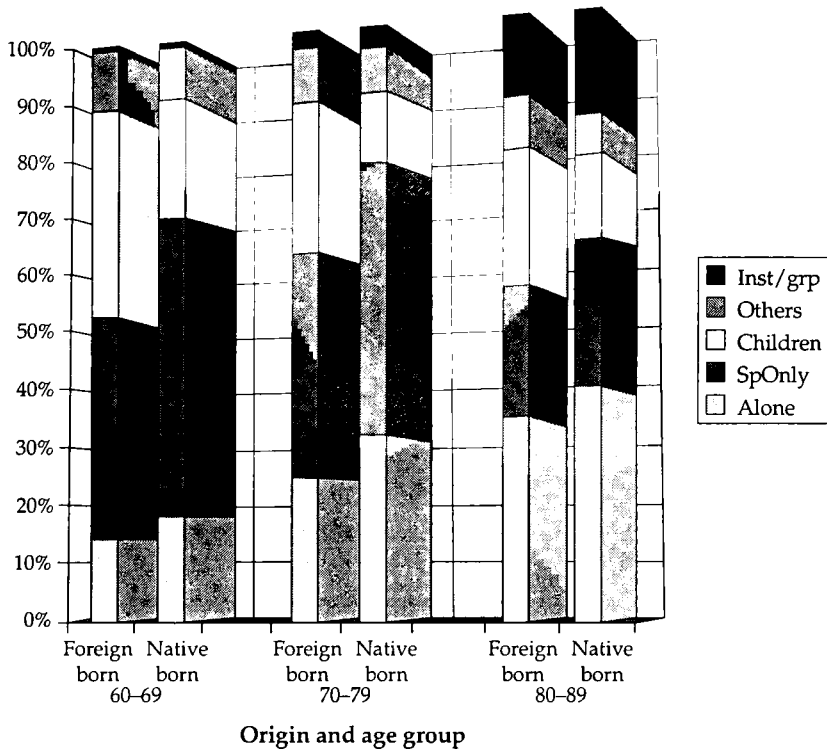
Although foreign-born elderly as a whole are almost twice as likely as native-born elderly to live with children, 30.3 and 16.7 percent, respectively, those rates also vary considerably by national origin. Elderly immigrants from the Philippines are most likely to live with children—60.1 percent do so—but only about 14 percent of the elderly from Canada and Germany live with a child. All of the "developing" country groups are more likely than "developed" ones to live with children but there is some diversity within these groupings. For instance, Italians, a "developed" group, are almost as likely to live with children as Cubans, a "developing" country group, with rates of 28.9 and 32.3 percent, respectively. While only 9.9 percent of all elderly immigrants

live with "Other persons," that number rises to 18.3 percent for Cubans and drops to less than eight percent for the "developed" groups. Finally, the incidence of group or institutionalized living among foreign-born elderly from "developing" areas is less than 2 percent but rises to 4 percent or more for the "developed" groups. Elderly immigrants from the USSR are more likely than those from other countries to be institutionalized (6.0%).

Age and gender are two key dimensions that are known to be closely associated with living arrangements. For three age groups (60–69, 70–79, and 80 and over), Figure 1 shows the percentage in each type of living arrangement for native-born and foreign-born elderly. Although foreign-born elderly are less likely than native-born elderly to live alone at each age level, it is clear that both groups respond similarly to the aging process. For instance, for both natives and immigrants, the percentages in their 80s who live alone are more than double what they are for elderly in their 60s. In contrast, the percentages living with spouse only or with children decline with age for both natives and immigrants and the percentages living in institutions increase with age in both groups. Figure 2 shows how living arrangements differ for men and women by nativity status. Regardless of nativity, women are over twice as likely as men to live alone and much less likely to live with spouse only. Whether the elderly live with children, however, depends largely upon their nativity status. Foreign-born men and women have comparable percentages who live with children and both are more likely to be in that living arrangement than native-born elderly. However, women are more likely than men to live in institutional or group quarters and those rates do not vary by nativity status.

To explore whether period of immigration makes a difference for elderly living arrangements, we prepared a line graph that shows the percentage of elderly immigrants living alone by age, sex, and immigration period (Figure 3). Immigrants are disaggregated by sex into three immigration cohorts—immigrants who came to the United States before 1950, between 1950 and 1969, and between 1970–1990. For comparative purposes, the living arrangements of native-born elderly are also displayed (bold lines). Figure 3 suggests that immigration period is very closely associated with whether elderly immigrants live alone, especially among women. We find, for instance, that elderly immigrant

Figure 1
Living arrangements of elderly by origin and age group



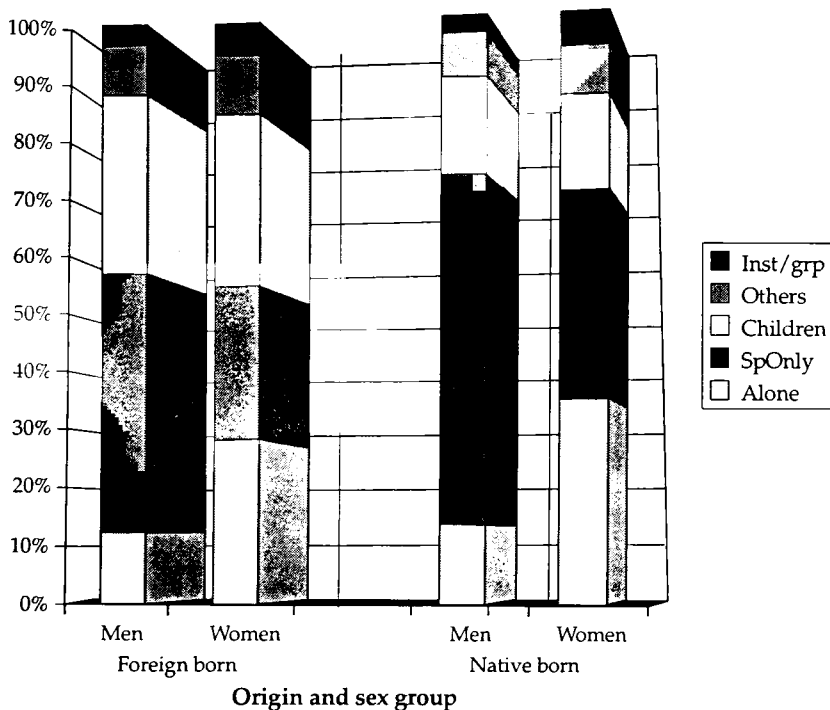
Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

Note: SpOnly means "living with spouse only;" Inst/Grp means "being institutionalized or living in a group quarter."

women who arrived in the United States before 1950 are as likely to live alone as native-born women at each age level. While the percentages living alone increase for those two groups of women in their 60s and 70s, after age 84, they decline. For immigrant men who came to the USA before 1950 and native men, in contrast, the rates of living alone steadily increase with age, even among men in their 80s. Elderly immigrant men who arrived more recently,

Figure 2

Living arrangements of elderly by origin and sex group



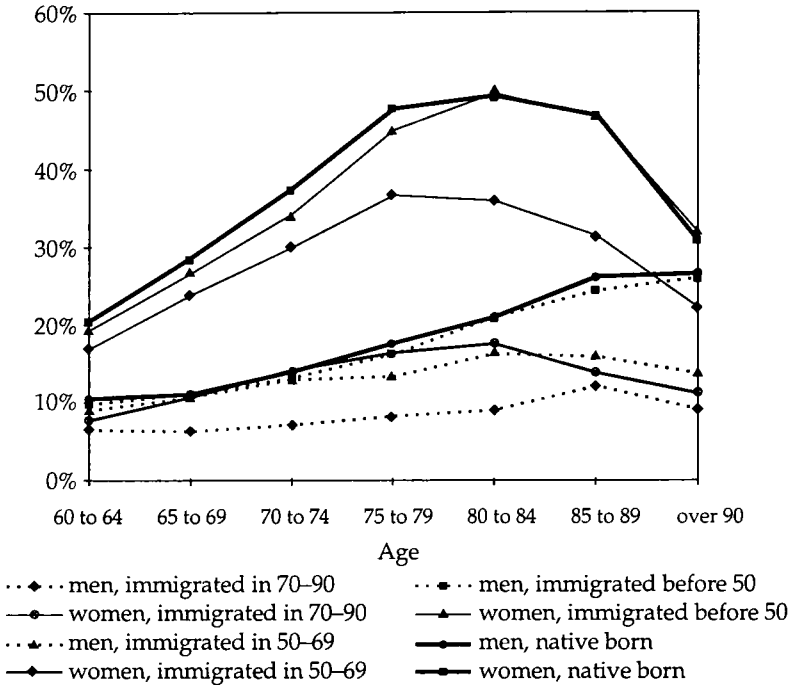
Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

Note: SpOnly means "living with spouse only;" Inst/Grp means "being institutionalized or living in a group quarter."

however, tend to be less likely to live alone after age 85. Least likely to live alone are immigrant men who arrived after 1950 and immigrant women who arrived in the 1970–90 period. In general, Figure 3 supports the argument that integration is an important factor influencing living arrangements since it shows that the longer elderly immigrants reside in the United States, the more their living arrangements correspond to those of natives.

Figure 3

Percentage of elderly living alone by age and immigration period



Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

SOURCES OF DIFFERENCES BETWEEN ELDERLY IMMIGRANTS AND NATIVES IN INDEPENDENT LIVING

Thus far our analysis establishes that elderly immigrants from different origins diverge considerably from natives in their demographic and socioeconomic profiles and in their living arrangements. We have also established that differentials between elderly immigrants and natives in living arrangements are closely related to their age, sex, and immigration period. We next address the issue of whether differentials between elderly immigrants and natives in independent living stem mainly from national origins,

differences in individual characteristics (demographic, economic resources, and health status) or the extent of integration into U.S. society. To evaluate the importance of these different dimensions, we use logistic regression since that technique permits us to control for multiple factors. We focus on a single living arrangement—living alone—since elderly in that arrangement are considered to be in a more vulnerable situation than elderly in other arrangements.

Measurement of Covariates and Model Specification

The outcome variable is whether the elderly person aged 60 or over lived alone in 1990. Elderly who are married and have a spouse present or who are living in institutions or group quarters are excluded from the multivariate analysis in order to constrain the sample to elderly who are making choices between living alone versus living with children or others in extended arrangements.⁹ Since previous research indicates that elderly immigrants' demographic and socioeconomic characteristics, functional limitations, and degree of integration shape their living arrangements, we control for these factors in our analysis. We measure age as a categorical indicator since Figure 3 shows that it has a non-linear relationship to living arrangements for women; the categories used are ages 60–69=[referent], 70–79="1", and 80 and over="1". We include sex as a dummy variable (1=female; 0=male). A measure of functional limitation was constructed based on responses to two questions: "Because of a health condition that has lasted 6 or more months, does this persons have any difficulty (1) going outside the home alone, for example, to shop or visit a doctor's office or (2) taking care of his or her own personal needs, such as bathing, dressing or getting around inside the home?" If the response was yes to both of these questions, we gave functional limitation a code of "3"; if the response was yes to one question, we gave it a code of "2"; and if the response was no to both questions, we coded it "1." Because mobility limitation and care limitation are highly correlated, it is preferable to combine them into a single measure.

Economic resources are measured by education and income. Education indirectly assesses earning potential and is measured by an ordinal variable specifying different years of completed

schooling. Two income measures are utilized: a dummy variable set equal to "1" if no Social Security income was received in 1989 and respondent's total 1989 income. Since Social Security is a major source of income support for the elderly, we expect elderly who do not receive that type of income to be more dependent on spouses, children, or others and, therefore, less likely to live alone. In contrast, we expect to find increased odds of living alone as personal income increases. We use the square root of personal income to capture negative values and correct for skewness, and divide the resulting measure by ten to reduce scale differences.

Three measures are used to assess elderly immigrant's degree of integration into U.S. society—English language fluency, length of U.S. residence, and citizenship status. Although ideally we would like to have measures of intentions to remain in the United States and other behavioral aspects of integration, these are not available with census data. We expect to find that as elderly immigrants become more integrated, they will be more likely to live alone, i.e. to adopt the independent living arrangements favored by native non-Hispanic whites. To measure English language fluency, we use two dummy variables. The first is set equal to "1" if the respondent speaks only English at home and the second is set equal to "1" if the respondent speaks English well or very well. The second integration measure—length of U.S. residency—is an ordinal measure that ranges from 10 for persons who arrived before 1950 or were born in the USA to "1" for persons who entered in the 1987–90 period. Elderly immigrants who arrived more recently should be more likely than those who arrived years ago to live with relatives or with others, since they will have fewer ties to and knowledge of U.S. society. Finally we use a dummy variable for citizenship status that is coded "1" if the elderly immigrant is a native or naturalized citizen. This measure provides a crude assessment of commitment to the United States and we expect to find that elderly immigrants who are citizens will be more likely to live alone than non-citizens.¹⁰

Relative Importance of National Origin, Characteristics, and Integration for Living Alone

Since our main interest is to assess whether differences in independent living that occur between natives and elderly immigrants from different origins diminish after controlling for differences

across these groups in individual characteristics, we focus upon that relationship in our discussion of findings. To do this, we specify four sets of models in Table 4 that allow us to observe how the odds of living alone change for each national origin group as we control for differentials between natives and immigrants in characteristics and integration. We examine the same eleven national origin groups as we did in Tables 1–3. All foreign-born elderly are classified into one of the eleven groups. The findings are presented as odds ratios or the exponentiated value of the unstandardized regression coefficient ($\text{Exp}[B]$). Values in the ratio that exceed unity express a positive effect of the covariate on the occurrence of the event of living alone, relative to that which occurs for the referent population; a value less than unity expresses a negative likelihood that the outcome event occurs.

Model 1, Table 4, gives the odds that immigrants live alone relative to natives by their national origin status. These ratios were estimated from a model that included only the 11 dummy variables for national origin and thus represent the actual population odds that each origin group lives alone relative to natives. The national origin groups are ranked by the magnitude and direction of their difference with natives in odds of living alone. That model shows that Filipinos are 93 percent less likely than native non-Hispanic whites to live alone and Chinese, Mexicans, Cubans, Other Foreign Born, Italians and Poles are also significantly less likely than natives to live alone. Elderly immigrants from England, Canada, and Germany, on the other hand, are significantly more likely to live alone than natives. Russians are the only group that is not significantly different from natives.

Model 2 allows us to evaluate whether differences between elderly immigrants and natives in socio-demographic characteristics (age and sex) and functional limitation account for the national origin differences observed in Model 1. Our earlier descriptive analysis indicated that there is considerable diversity across the origin groups in these and other individual-level characteristics and, therefore, it is important to determine whether these differences account for origin differences in living arrangements. By comparing change in the unadjusted and adjusted odds ratios (i.e. Models 1 and 2), we can evaluate whether elderly immigrants would be more or less likely than natives to live alone, if they

Table 4

Logistic regression of the odds that the elderly live alone versus with others based on their national origins, socio-demographic characteristics and functional limitations, economic resources, and integration into U.S. society, for elderly who are non-institutionalized and have no spouse present, 1990^a

	Nativity Origin (Model 1)	+ Socio-demographic characteristics & health status (Model 2)	+ Socio-economic resources (Model 3)	+ Integration (Model 4)
Philippines	0.07	0.07	0.12	0.25
China	0.21	0.21	0.36	0.96 ^{ns}
Mexico	0.21	0.22	0.37	0.65
Cuba	0.32	0.32	0.48	1.16
Other foreign born	0.43	0.43	0.55	0.94 ^b
Italy	0.63	0.59	0.66	0.87
USSR	0.99 ^{ns}	.95 ^{ns}	1.01 ^{ns}	1.63
Poland	0.90 ^c	0.89	0.93 ^b	1.33
England	1.11 ^c	1.09 ^b	0.99 ^{ns}	1.33
Canada	1.21	1.14	1.07 ^b	1.33
Germany	1.24	1.25	1.15	1.51
Sex (1=female)		0.96	1.12	1.10
Age 70-79 (=1)		1.60	1.45	1.38
Age 80 or over (=1)		1.68	1.49	1.15
Functional limitation (1-3)		.74	.79	.79

Education (years)	1.04	1.02
No Social Security Income (=1)	.47	.68
Personal Income (sq. root)	1.07	1.05
Speaks only English (=1)		1.54
Speaks English well/very well (=1)		1.40
Length U.S. residency (1-10)		1.19
U. S. citizen (=1)		1.39
Log likelihood (sig=.0000)	-83913.701	-75459.367
-2LL test statistic (sig=.0000)	2330.08	5797.81
		-78358.272
		2183.72

Source: U.S. Bureau of the Census (1990 PUMS, combined sample from 5% and PUMS-O 3%).

^a All coefficients are significant at the .001 level unless otherwise noted.

^b Indicates significance at the .05 level.

^c Indicates significance at the .01 level.

had the same characteristics. Model 2 indicates that controlling for differences among elderly immigrants and natives in socio-demographic characteristics and functional limitations has almost no effect on their living arrangements. Only for Italians and Canadians does the odds ratio change somewhat. For instance, the odds that Canadian elderly live alone drop from 21 percent more likely than natives in Model 1 to 14 percent more likely in Model 2. Although socio-demographic characteristics and functional limitation are highly significant for living arrangements, Model 2 indicates that the relationships between those factors and living alone do not vary significantly by origin status. As expected, the odds of living alone increase with age but are less likely to occur among elderly with a functional limitation—the latter are 26 percent less likely to live on their own than elderly with no limitations. Women are slightly less likely to live alone than men, net of other differences.

In Model 3 we control for economic resources, including education and income. A comparison of odds ratios in Models 2 and 3 shows that for all of the groups, a convergence pattern occurs after controlling for differences in economic resources even though large differences persist. For the foreign-born elderly, limited economic resources are a major reason why they are more likely than natives to live alone. The three measures of economic resources have the expected relationships to living alone. Education and personal income significantly increase the odds of living alone and lack of Social Security income significantly decreases it.

In Model 4, we control for elderly immigrants' integration into U.S. society by assessing the importance of their English language ability, length of U.S. residency, and citizenship status for living arrangements. A comparison of Models 3 and 4 shows substantial change for several national origin groups. Indeed, after controlling for integration, in addition to characteristics controlled for in Models 2–3, we find no significant difference between Chinese and natives in independent living and a considerable reduction in the difference with natives for Filipinos and Mexicans. Other foreign born and Italians remain significantly less likely than natives to live alone but the substantive differences are small. For

six other groups (Cubans, Russians, Poles, British, Canadians, and Germans), Model 4 indicates that if these elderly immigrants had the same integration characteristics as other elderly, they would actually be more likely to live alone than natives. This finding is somewhat surprising because it shows a pattern for national origin groups that has not been picked up by research which tends to study minorities as larger aggregates, such as Hispanics or Asians. In other ways the finding is not surprising because research on the elderly indicates that availability of kin is necessary for co-residence with kin to take place (Wolf and Soldo 1988). All else equal, immigrants should have fewer kin available to them than other elderly because the process of migration usually separates migrants from kin.

All of the measures of other elderly characteristics remain highly significant in Model 4, although the magnitude of some of the relationships change from earlier models. For instance, after controlling for integration, Model 4 indicates that elderly aged 80 or over are actually slightly less likely to live alone than those aged 70–79. This finding is consistent with the curvilinear pattern observed in Figure 3 for older women with longer U.S. residence and native-born women. Although the odds ratios for education and personal income appear modest, it should be kept in mind that they are derived from unstandardized coefficients and summarize change per unit. Both measures of economic resources are composed of several units.

In order to gain a better understanding of the nature of the integration effect, we examined the effects of the characteristic and integration covariates for each of the 11 immigrant groups and natives by estimating separate logit models. These models include all covariates in Model 4, Table 4, except the dummy variables for group origin. The results (not shown) reveal a high degree of consistency across origin groups in the impacts of the integration variables on the odds of living alone. All of the estimated integration coefficients are in the same direction as described above for Model 4 or are statistically insignificant. Period of U.S. residence and citizenship status have the most consistent impact: in ten of eleven groups, elderly immigrants are more likely to live on their own if they are a U.S. citizen and if

they have resided in the United States longer. The exceptions (no relationship) occur on the citizenship measure for Chinese and on length of U.S. residency for Canadians. One could speculate that the pattern for Canadians stems from the fact that this group is probably more similar to native-born elderly than immigrants from other origins and thus has limited internal differentiation on the integration measure. English language fluency also has a consistent impact for most origin groups. If elderly immigrants speak only English, they are significantly more likely to live on their own in eight of eleven groups and if they speak English well or very well, they are likely to do so in six of eleven groups. Since England and Canada are two of the origin groups that have no relationship on that measure, this finding suggests that lack of variation within the origin population itself is the principal reason for the lack of a relationship.

DISCUSSION

Our analysis documents that the composition of U.S. elderly immigrants changed dramatically between 1970 and 1990 and will continue to change in the years ahead. In the past two decades, the number of elderly immigrants from Mexico, Philippines, China, Cuba and other developing countries has been growing rapidly and will continue to do so in the years ahead. On the other hand, the number of elderly European immigrants will decline. The shifting composition of elderly immigrants should have implications for living arrangements. Our analysis of the living arrangements of elderly immigrants from the ten largest origin groups shows that two Asian groups (Filipinos and Chinese) and two Latin American groups (Cubans and Mexicans) differ markedly from European elderly in their living arrangements. The Asian and Latin American immigrants are much more likely than European elderly to live in families with children or others and less likely to live independently. Elderly immigrants, however, are a diverse population and our analysis demonstrates the merits of looking at differences for discrete groups. Cubans, while much less likely than European elderly to live alone, are three times more likely than Filipino elderly to do so. Further

analysis of additional origin groups is clearly needed to identify the extent to which other rapidly growing Asian or Latin American groups differ significantly from the groups examined in our analysis.

Although elderly immigrants from European countries and Canada are most similar to natives in their living arrangements, there is some diversity even among that group. Elderly immigrants from Italy and the former USSR, for instance, are less likely than natives (and other European elderly) to be living with spouses, and Italians are more likely, by over 10 percentage points, to be living with children. Despite these differences, the major divide suggested by our analysis is between more recent elderly immigrants from Latin America and Asia and older elderly immigrants from Europe and Canada. These differences will be more marked in the years ahead as the absolute and relative size of the immigrant elderly from Asia, Latin America, and Africa increases in the next millennium.

Our multivariate exploration of the sources of differences in living arrangements between natives and elderly immigrants from 11 origins sheds some light on the nature of these differences. First, the analysis makes it clear that reduced socio-economic resources and lack of integration significantly constrain independent living among elderly immigrants and are important factors contributing to differences with natives. Socio-demographic characteristics and functional limitations, on the other hand, are not a major source of differences between immigrants and natives in living arrangements.

Nonetheless, we observe an interesting pattern, namely that while the study covariates do, with a few exceptions, reduce the differentials between immigrants and natives, the remaining diversity is almost as marked as that which we observe without statistically equalizing these characteristics. This finding again suggests the importance of studying discrete immigrant groups and identifying how they differ from natives in living arrangements and determinants. Our analysis clearly shows that integration is strongly associated with increased odds of living alone. From a statistical standpoint, this means different things for different groups. For most of the European groups, equalization on

integration tends to produce larger differentials with natives than existed prior to the introduction of statistical controls. Being a citizen, speaking only English or speaking English well, and being a longer term resident of the United States are all associated with increased odds of living alone. Since the effect of English is strong, even after controlling for duration of residence and individual characteristics, this suggests that language ability reflects degree of integration and not just shifts in the selectivity of migrants over time. Nevertheless, longitudinal data are needed to examine the issue of selectivity in a more rigorous manner.

From the point of view of social policy these findings provide an ambiguous message. The ambiguity revolves around how one evaluates the status of living alone for the elderly. If it is a positive choice, based on personal preferences and made because of resources, values and abilities, then social policy should encourage it. One way to encourage it for elderly immigrants would be to foster the social integration of the elderly through language programs and efforts that increase English language activities. The latter, however, should be encouraged from a public policy standpoint for a multitude of reasons that have nothing to do with elderly living arrangements. Labor force participation, income generation, and civic participation on the part of immigrants would all be advanced by increased English language fluency. Nonetheless, to the extent that such integration occurs, our analysis suggests that the results will also be correlated with increased odds of independent living among elderly immigrants.

Though elderly living with own children is not the behavioral mode in the United States, our culture positively values familial social support to the elderly. Only time will tell, however, whether the tendency observed in our analysis for elderly immigrants from the Philippines, China, Mexico and other Asian and Latin American countries to be less likely to live on their own and more likely to live with children will be enduring or transient. Certainly, the living arrangements of more recent elderly immigrants are much more likely than those of natives and the immigrant elderly from European origins to involve children. This mode of providing support to the elderly may be more deeply rooted in the cultures of these newer groups than was the case for most European groups. Social policy efforts aimed at supporting the

elderly within the context of households made up of children and other relatives may provide the greatest level of real assistance. Perhaps combining such efforts with others aimed at facilitating integration could simultaneously enhance the overall social welfare of the elderly while opening up choices to them with regard to living arrangements.

NOTES

1. The other races category includes Asian and Pacific Islanders, American Indians, Eskimos and Aleuts. Asians are the largest component of that category.
2. From 1970 to 1990 the foreign-born elderly population decreased from 3,863,303 to 3,555,190. However, Pitkin and Simmons (1996) estimate that the foreign-born elderly have increased in the 1990s and will reach 4,300,000 by 2000 and 6,000,000 by 2010.
3. Naturalized citizens may petition for their parents to join them as an immediate relative. Included in the immediate relative category are: spouses of citizens, children under 21 years of age of citizens, parents of citizens 21 years of age or older, and orphans adopted by citizens. Immediate relatives are exempt from numerical limitations imposed on U.S. immigration (U.S. INS 1996, pp. 15–17 and A.3–5).
4. Although we are unaware of any study of elderly immigrants from different national origins, there are some studies of diversity among “younger” immigrants which show that national origin is an important variable that determines how integration proceeds (Gurak and Kritz 1978; Kritz and Nogle 1994; Tienda and Angel 1982; Zsembik 1993).
5. The ICPSR, University of Michigan, created an 8 percent merged sample and we downloaded that file through the Internet and use it in our analysis.
6. The differential sampling fractions for natives and immigrants do not affect our findings because we use the person weights provided by the Census Bureau (*pwgt1*) to adjust for geographic differences in sampling and other technical factors. For our descriptive analysis, different sampling fractions for groups do not matter because statistics are calculated separately for each population (i.e. native born means on characteristics are calculated for that population only and Mexican means are calculated for that population). In the case of population estimates (e.g. used in Table 1), we adjust for the difference in the sampling fractions of natives and immigrants by multiplying the census weight for natives by the inverse of our sampling fraction (i.e. $133 \times \text{pwgt1}$) in order to inflate the native-born component to an 8% sample.
7. The U.S. Census does not ascertain legal immigration status. It does gather data on country of birth, year of entry to the USA, and citizenship status. Using these measures, it is possible to differentiate persons who are native-born citizens from those who were born abroad and immigrated to this

- country at some point in time. We also assume that the foreign born who are elderly are less likely to be illegal or temporary residents than younger foreign-born persons.
8. This usage conforms with the United Nations classification of countries.
 9. The sample for the multivariate analysis contains 130,093 cases. Alternative model specifications, such as including elderly with spouse present in the sample and using marital status as a covariate, cannot be done because of the fact that no one who has a spouse present can live alone.
 10. Most of the covariates included in our regression analysis are not highly correlated. The highest correlations occur between length of U.S. residence and citizenship status (.61) and length of U.S. residence and receipt of Social Security income (-.52). Nonetheless, all three covariates have the expected relationships to the outcome measure and, therefore, we use all three in our models. No other variables have a higher intercorrelation than 0.37.

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