Poverty Trends for Southeast Asians in the United States, 1990 to 2000

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ABSTRACT

This paper will focus the dynamics of poverty for the Southeast Asian population. Southeast Asians have been among the fastest growing groups in the past two decades within the U.S. Asian population and they have challenged conventional thinking about Asians as a homogeneous, "model minority" group. Beyond a static snapshot of poverty rates, the double cohort method will be used for a nuanced, longitudinal analysis based on the 1990 and 2000 census. This method allows for the examination of poverty trajectories of immigrant arrival cohorts along with birth cohorts nested within them to gain insights about what happens as immigrants age and their duration in the U.S. increases. Within the Southeast Asian group, there are different ethnic groups as well as distinct waves of migration to the U.S. that warrants separate analysis. Furthermore, this approach allows for the examination of poverty for the 1.5 generation as they come of age.

INTRODUCTION

According to the Office of Refugee Resettlement, the first group of Southeast Asian[1] refugees came in 1975 when approximately 125,000 Vietnamese arrived in the U.S., as many were airlifted out of the besieged country[2]. Until then, there were very few Southeast Asians in the U.S., with approximately 20,000 from Vietnam, Laos, and Cambodia (Haines 1989). The refugees came in a steady flow from the late 1970s throughout most of the 1980s, with increases in the number of Cambodians and Laotians closer to that of the Vietnamese[3]. According to the Census, the Southeast Asian population has grown from a quarter of a million people in 1980 to approximately 1.8 million by the year 2000[4], which is approximately 15.2% of the total U.S. Asian population.

Southeast Asians have been among the fastest growing groups in the past couple of decades within the general Asian population in the U.S. Many early studies of Southeast Asian immigrants showed that they have extremely high rates of poverty (Montero 1979) and this was largely due to the low human capital with which they come into the U.S (Caplan et al 1985; Caplan et al 1989; Haines 1989). This is especially emphasized for the Hmong which is the most extreme of cases. Southeast Asians have been used to point out the diversity within the pan-ethnic Asian group and to contest the model minority myth. This is largely because they initially arrived from their war torn countries as refugees with very low human capital and high poverty (Haines 1989; Portes and Rumbaut 1996). As Asian Americans have been stereotyped as the 'model minority', the high poverty rates of Southeast Asian groups have come to contradict this generalization. And more recently, some have expressed concern that Asian poverty may be long-lasting (Le 1993; Ong 1993). The high poverty rates among immigrants, particularly Southeast Asian immigrants, have been documented but little is known about the dynamics of immigrant poverty and how it changes over time as immigrants' duration in the U.S. grows.

DATA AND METHODS

[1] The general convention adopted here is to define the term "Southeast Asian" to include people from Vietnamese, Laos (including the Hmong), and Cambodia. Geographically, "Southeast Asian" may also include the countries Thailand, Burma, Malaysia, Indonesia, Brunei, Papua New Guinea, and the Philippines, but these countries are not included in this research because they do not share the war and refugee experiences, as do those in this research. The term "Indochinese" is actually a more precise term to use for people from the three countries but will not be used here due to its link to the French colonial rule period (Ngin 2000).

[2] With the fall of Saigon and the eventual collapse of the South Vietnamese government, many were fleeing from the North Vietnamese troops.

[3] For year-to-year numbers of Southeast Asian refugee arrivals, see Office of Refugee Resettlement 1987 and 2000 *Report to the Congress: Refugee Resettlement Program*. Washington, D.C.: U.S. Department of Health and Human Services.

[4] With a change in the Census 2000 race question, respondents were allowed to check off more than one race category. The counts given for race in 2000 will include those who marked that race alone or in combination with one or more races. For a more systematic discussion about data, see Park (2003).

Therefore, the focus of this research will be on the dynamics of poverty for Southeast Asian immigrants taking into consideration the various measures of time to better assess the possible different paths of adaptation. This will be accomplished through the use of the double cohort method using repeated cross-section survey data (namely the 1990 and 2000 decennial censuses) to examine the trajectories of immigrant arrival cohorts and the birth cohorts nested within them (Myers and Lee 1996)[5].

One of the main research questions focuses on how do poverty trends of Southeast Asian immigrants resemble or differ from that of other Asian Americans. Most scholars report a static snapshot of the socioeconomic status of Southeast Asian immigrants and conclude that many of them are inevitably trapped in low social and economic achievement (Ong and Blumenberg 1994). This paper hopes to assess the validity of these claims but with a slightly different approach. The approach examines not only a static picture of socioeconomic status but also the change from 1990 to 2000 to gauge their progress over the decade.

Others have completely either neglected to report status at different points of observation (most likely due to data limitations) or have examined points of observation temporally so close to one another that changes are difficult to detect since they have not had time to emerge. The span of a decade is sufficient to allow enough time for noticeable changes to occur. This is especially important for the recently arriving Southeast Asian immigrants whose socioeconomic status apparently changes quite rapidly and the 2000 data allows, for the first time, the tracking of changes from 1990 to 2000 for the 1980s arrivals (those reported as being in the direst of social and economic circumstances).

The double cohort model specifies cohorts on dual dimensions, both birth cohorts and immigration cohorts, includes the interaction of two cohort statuses, and measures changes over time by the interaction of the cohort status with year of observation. The full model to be tested is explained below specifically for poverty (persons living 100% below the poverty level).

$$(P) = X + Y + BC + MC + (Y * BC) + (Y * MC) + (BC * MC) + (Y * BC * MC)$$

Where:

P = log odds of status below the poverty line
X = a vector of human capital or other covariates
Y = census year, either 1990 or 2000
BC = birth cohort
MC = immigration cohort (period of arrival or native-born)

And the terms enclosed in parentheses are interactions.

This contains all of the temporal variables that exactly describe the raw data. Given a nominal criterion variable, such as the incidence rate of poverty status, the log odds of the

[5] This approach has been well documented and applied to various outcomes for immigrant adaptation (Myers and Lee 1998; Myers and Cranford 1998; Myers and Park 1999).

criterion are estimated as a function of the temporal variables and additional covariates (such as educational attainment or English proficiency).

There can be a discussion of statistical significance for each variable but it is also possible to determine the best-fitting model given each of the model specifications. The best-fitting model is indicated by the Bayesian Information Criterion (BIC) statistic which takes into consideration both the variance explained and the degrees of freedom consumed in the model (Raftery 1986a, 1986b, 1995). The BIC statistic makes use of -2 log likelihood ratio and is calculated by the following:

BIC = – (intercept only – intercept with covariates) + DF*(LN(OBS.))

The model with the most negative BIC is determined to be the best-fitting model.

The paper will first discuss the demographics of Southeast Asians in the U.S. and how quickly the population has grown in the past 3 decades. With that demographic backdrop, general poverty rates from 1990 and 2000 are reported. Thirdly, a graphic display of poverty that takes into account immigrant arrival cohorts and birth cohorts are shown for the referent Asian group and then for Southeast Asians. Lastly, logistic regression is performed to examine the determinants and covariates of poverty.

SOUTHEAST ASIAN DEMOGRAPHICS IN THE UNITED STATES

How many Southeast Asians are now residing in the United States? The population size of Southeast Asians reflects the foreign born as well as the U.S. born and it includes those who came as refugees as well as immigrants. Table 1 shows that the Asian population doubled in size (112.0%) from 1980 to 1990 and then increased again by 72.2% from 1990 to 2000. Among the five largest groups, the Vietnamese again had the highest 1980 to 1990 growth rate while Asian Indians had the highest 1990 to 2000 growth rate. However, the most astounding growth from 1980 to 1990 was among the Southeast Asians. The Southeast Asian population tripled in size and all of the Southeast Asian subgroups had a higher growth rate than that of the total Asian population. This is partially due to the small initial population size in 1980 but the growth is phenomenal nonetheless.

An indication of their growing presence is the inclusion of their groups in the race question for the 1990 Census when in the 1980 Census; only the Vietnamese category was included from the Southeast Asian group. From 1990 to 2000, the Southeast Asian population still grew by almost .81 million persons. The 1990 to 2000 growth rates for the Vietnamese (99.1%) and Hmong (106.4%) were still high but had tapered off for Cambodians (39.4%) and Laotians (32.8%). This pattern of growth matches up with the continual refugee admissions that occurred in the 1990s through the ORR (1997).

Table 1. The Growing Asian Population in the United States, 1980 to 2000

			1980 to 1990		1990 to 2000	
1980	1990	2000[a]	Growth	Percent Growth	Growth	Percent Growth

Total Population	188,371,622	248,709,873	281,421,906	60,338,251	32.0%	32,712,033	13.2%
Asian Total[b]	3,259,519	6,908,638	11,898,828	3,649,119	112.0%	4,990,190	72.2%
Asian Share of Total	1.7%	2.8%	4.2%				
Chinese[c]	806,040	1,645,472	2,865,232	839,432	104.1%	1,219,760	74.1%
Filipino	774,652	1,406,770	2,364,815	632,118	81.6%	958,045	68.1%
Japanese	700,974	847,562	1,148,932	146,588	20.9%	301,370	35.6%
Asian Indian	361,531	815,447	1,899,599	453,916	125.6%	1,084,152	133.0%
Korean	354,593	798,849	1,228,427	444,256	125.3%	429,578	53.8%
Southeast Asian	328,929	1,001,054	1,813,011	672,125	204.3%	811,957	44.8%
Vietnamese	261,729	614,547	1,223,736	352,818	134.8%	609,189	99.1%
Cambodian	16,220	147,411	205,514	131,191	808.8%	58,103	39.4%
Hmong	7,940	90,082	185,892	82,142	1034.5%	95,810	106.4%
Laotian	43,040	149,014	197,869	105,974	246.2%	48,855	32.8%
Thai		91,275	150,283	91,275		59,008	64.6%
Other Asian		302,209	428,529	302,209		126,320	41.8%

Notes:

[a] Marked one race alone or in combination with one or more other races

[b] Does not make distinction for Hispanic ethnicity.

[c] Includes Taiwanese in 2000 to be comparable with 1990 data format

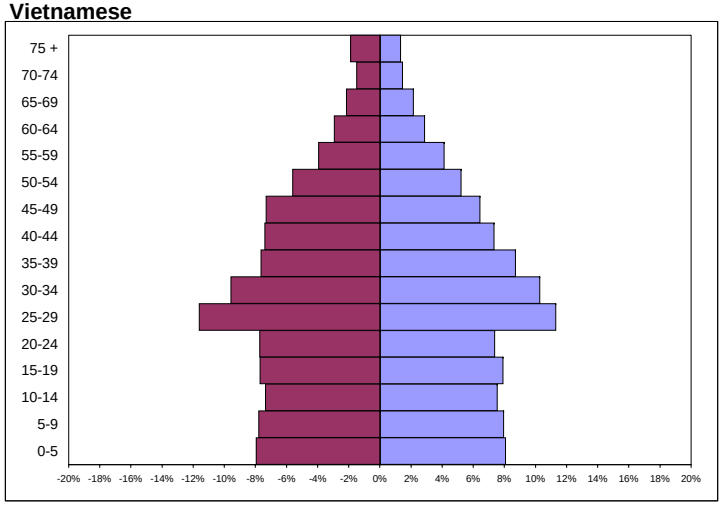
Beside the population size, the age distribution of the Southeast Asian population is extremely informative because from it, we can generally know what proportion of them are still children[6], or if they are just entering the work force, or if they are middle-aged adults with less mobility options in their occupations, or if they are closer to retirement. The age distributions inform our understanding of the size of each age group at certain stages in the life cycle.

Figure 1 shows the age distribution of the U.S. and Southeast Asian population in 2000. For the U.S. population, we see that people are evenly distributed for the most part with the 35 to 44 year olds and the 5 to 14 year olds slightly larger than others (probably the parents and their children). The population distribution for Southeast Asians are much more skewed to the younger ages. The 25 to 29 year olds are the largest group followed by the 5 to 19 year olds. In fact, 37.2% of the Southeast Asian population is under the age of 20 while it is only 28.8% for the U.S. This has significant implications for the education system since many are of school age and as they are begin to enter the labor force. Figure 2 shows the age distribution for each of the Southeast Asian groups. For the Cambodians and the Hmong, the age distribution is even more severely skewed toward the children which helps to more refinely weight the observed poverty trends.

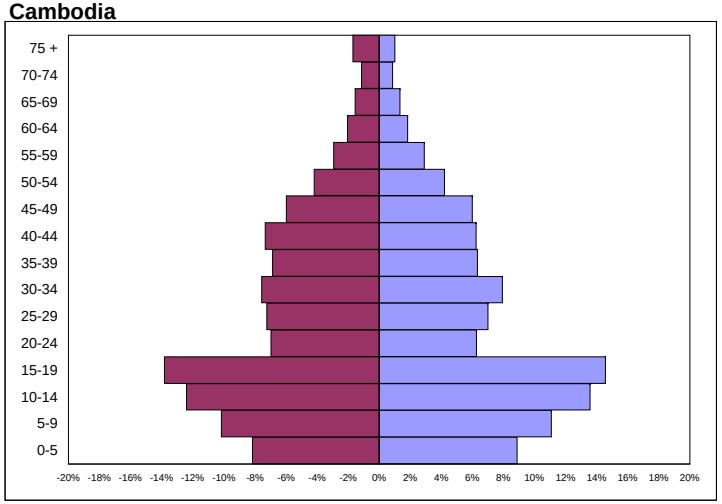
[6] One of the landmark studies on the children of Southeast Asian immigrants, specifically the Vietnamese Americans, was conducted by Zhou and Bankston (1998).

Figure 2: Age Distribution of Southeast Asian Groups, 2000

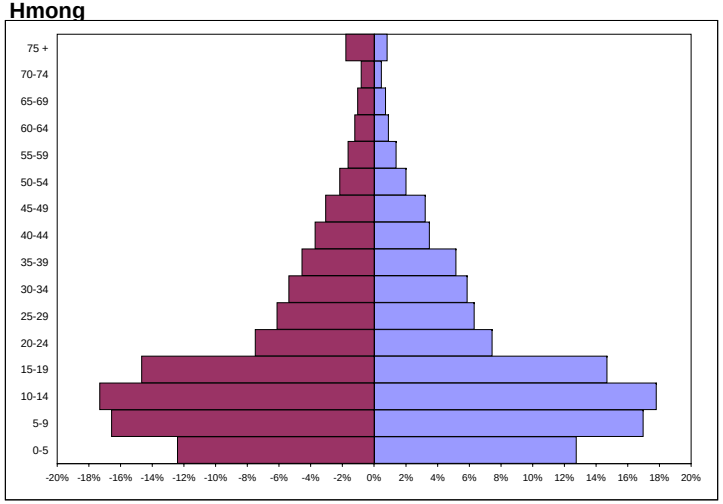
Vietnamese



Cambodia



Hmong



Laotian

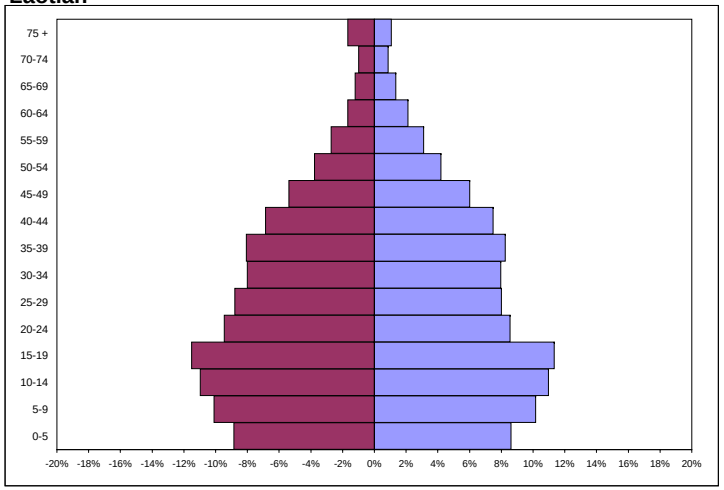
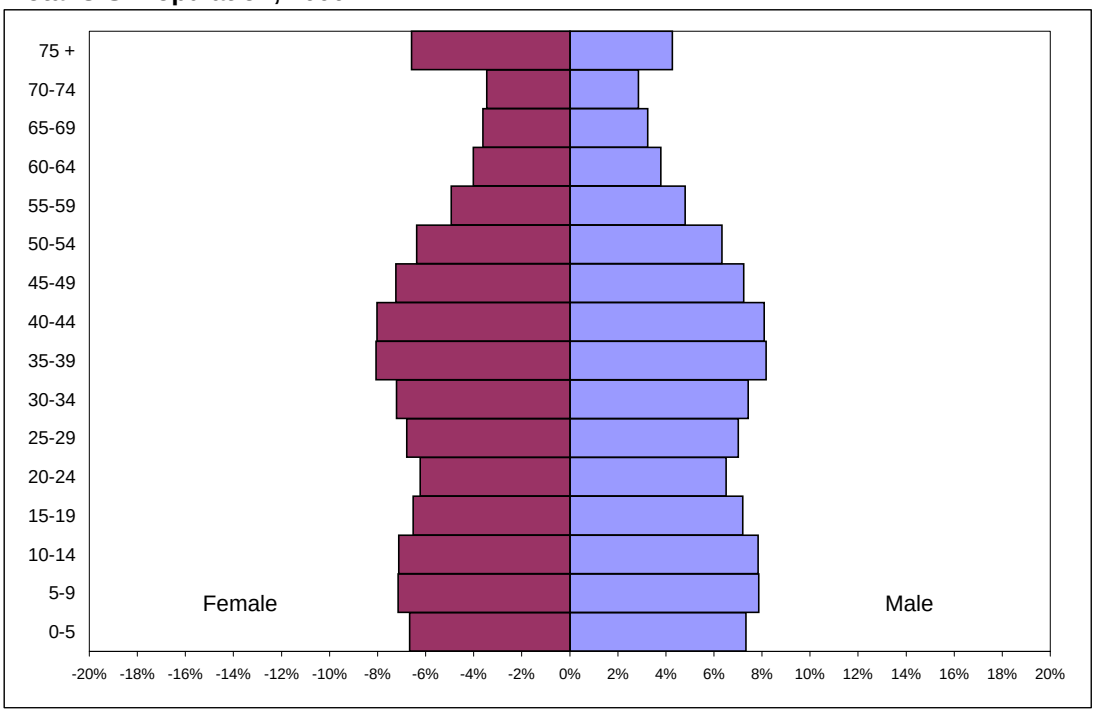
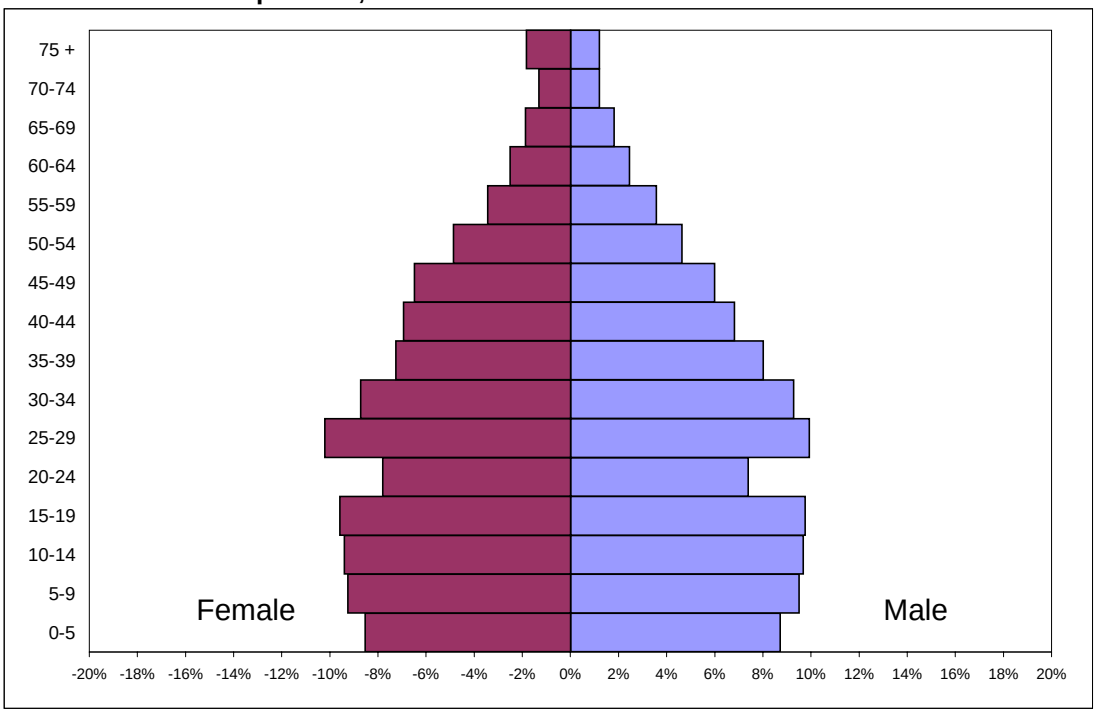


Figure 1: Age Distributions for the Total U.S. and Southeast Asian Population, 2000

Total U.S. Population, 2000



Southeast Asian Population, 2000



[place Figure 2 about here]
[place Figure 3 about here]

POVERTY AT A GLANCE

The national poverty rate is 12.4% for 2000 which is slightly down from 13.1% in 1990. For all immigrants as seen on Table 2, the poverty rate is 2.8 percentage points higher (15.7%) while Asian immigrants have a much closer poverty rate to that of the total population (12.9%). Without the inclusion of Southeast Asian immigrants, Asian immigrants actually have a lower poverty rate than the nation as a whole (12.0%). The overall immigrant poverty rate has decreased by 2.4 percentage points but it did not decrease for Asian immigrants. In fact, there was an actual increase of .8 percentage points. This may be due to the compositional shift within the Asian group as Southeast Asian immigrants become a larger share of Asian. An indication that this may be the case is that Asians without Southeast Asians actually experienced a decrease in their poverty rate. As expected, the youngest and oldest birth cohorts are the ones with the higher poverty rates. The younger birth cohorts experience the most significant decrease in poverty, especially for those going from teens/college age to young adulthood (from 25.0% to 12.3% poverty).

[insert Table 2 about here]

The poverty rate for Southeast Asian immigrants (17.3%) is higher than for other Asian immigrants as a whole but more interesting is the sharp decline of 14.4 percentage points from 1990. In other words, they have decreased their poverty rate by almost half (45.4%). The newest arrivals in 1990 had a very high poverty rate of 38.3% but they experienced an even steeper decrease of 20.8% and more astoundingly, the 1970s arrivals also experienced a significant decline of 7.3 percentage points. In fact, the Southeast Asian 1970s arrivals' poverty rate of 9.6% is lower than the national and Asian immigrant rate. Moreover, the newest arrivals in 2000 are starting at a lower poverty rate (20.5%) than the newcomers in 1990. Many scholars (Ong and Blumenberg 1994, Lee 1994, Le 1993) reported high poverty rates in 1990 for Southeast Asian immigrants and this caused great concern for these new immigrants. However, with the over time perspective, it seems that the poverty rates are in fact decreasing at a very rapid pace. Secondly, these alarmingly high poverty rates may have been more specific to the 1980s arrivals and the newest arrivals, the 1990s arrivls, are not arriving as poor as in previous decades.

For each of the individual Southeast Asian immigrant groups, there is significant variation in poverty rates but the one striking similarity is how rapidly the rates are decreasing from 1990 to 2000. The Vietnamese started with the lowest poverty rate (25.2%) and the Hmong with the highest (an alarming 62.9%). And accordingly, the Vietnamese experienced the smallest but still significant decrease of 10.3 percentage points to 14.9% poverty in 2000 while the Hmong experienced the largest decrease of an astounding 29.9 percentage points to 33.0% poverty in 2000. Cambodians had 40.4% and Laotians had 33.1% poverty in 1990 but also experienced steep decline in poverty to 21.7% for Cambodians and 16.5% for Laotians.

Table 2: Poverty Rates for Immigrants in 1990 and 2000

Age 5 Years or Older and 100% Below the Poverty Line

	1990	2000	Percentage Point Change
Total Immigrant Population	18.1%	15.7%	-2.4%
Asian	12.1%	12.9%	0.8%
Asian without (Southeast Asians)	12.3%	12.0%	-0.3%
Age in 1990			
5 to 14 years old	24.9%	24.6%	-0.3%
15 to 24 years old	25.0%	12.3%	-12.7%
25 to 34 years old	15.1%	9.8%	-5.3%
35 to 44 years old	10.5%	8.6%	-1.9%
45 to 54 years old	9.2%	9.3%	0.1%
55 to 64 years old	10.3%	13.8%	3.5%
65 years or older	14.3%	14.6%	0.3%
Southeast Asians	31.7%	17.3%	-14.4%
1990s Arrivals	----	20.5%	----
1980s Arrivals	38.3%	17.5%	-20.8%
1970s Arrivals	16.9%	9.6%	-7.3%
Vietnamese	25.2%	14.9%	-10.3%
Cambodian	40.4%	21.7%	-18.7%
Hmong	62.9%	33.0%	-29.9%
Laotian	33.1%	16.5%	-16.6%

Source: Census Bureau, Public Use Microdata Samples 5% in 1990 and Sample data in 2000

It is important to note that these Southeast Asian immigrants are in fact getting out of poverty at a very dramatic rate and this furthers the understanding of their progress in the U.S. as their duration lengthens. This is further addressed in the next section as poverty and its dynamics are examined more closely. However, it is also important to acknowledge that their poverty rates are still extremely high, especially for the Hmong with one out of every three persons in poverty. It remains to be seen if their steep downward trajectory in poverty will continue in the decade to come as early indications suggest in the arrival cohort data.

POVERTY CHANGE BY BIRTH COHORT AND ARRIVAL COHORT

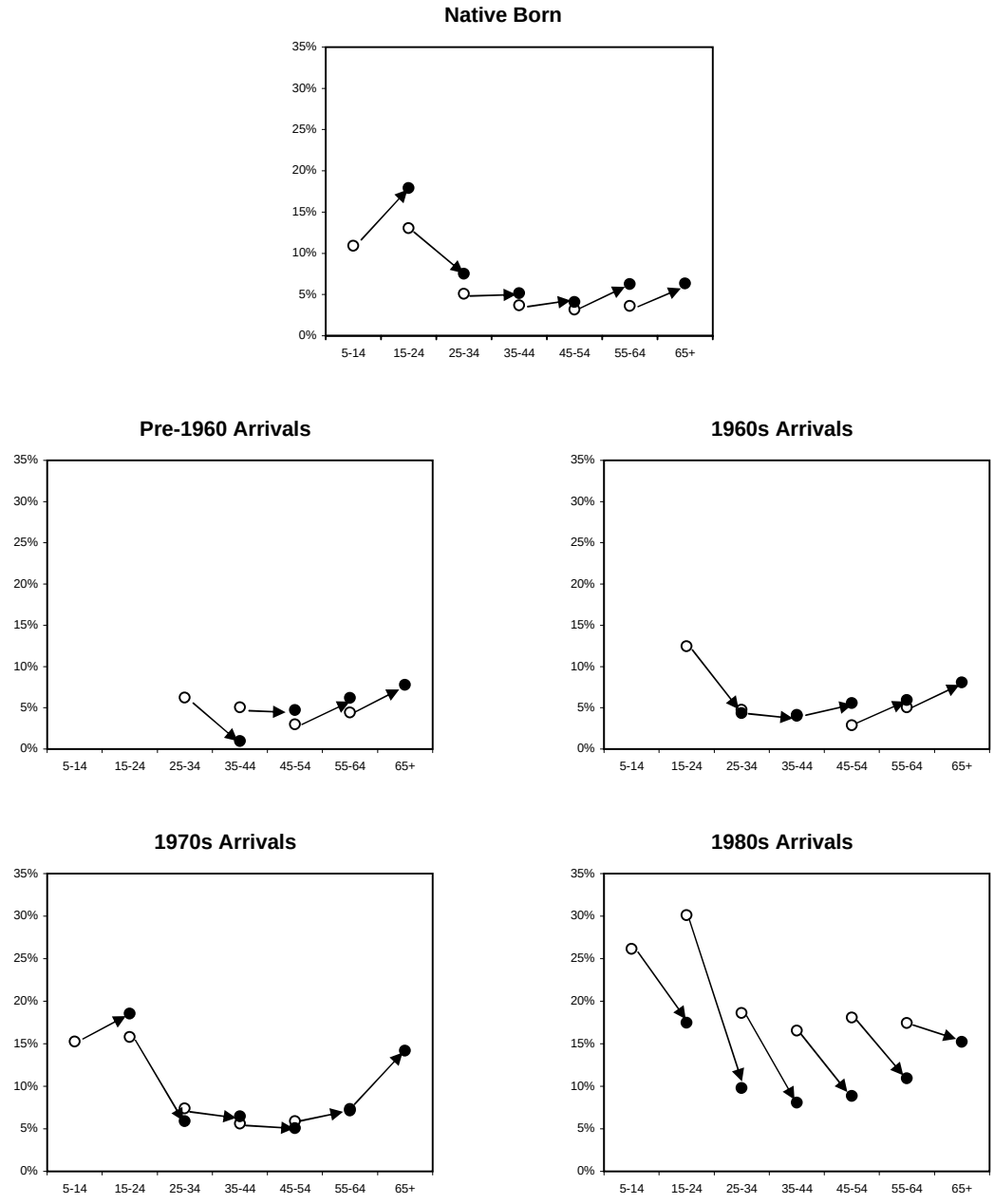
Figure 3 through Figure 6 show poverty rates in 1990 and 2000 for various birth cohorts within immigrant arrival cohorts or for native-born residents. Each graph represents an arrival cohort or the native born population with birth cohorts (as designated by age groups) along the X-axis and the corresponding poverty rate on the Y-axis for each birth cohort. Within each graph, the white dots are poverty rates observed in 1990 and the black dots are poverty rates observed for the cohorts in 2000. Each arrow shows how poverty changed in the decade for that particular birth cohort as they age 10 years and simultaneously, for that particular arrival cohort as they have resided in the U.S. 10 years longer. In other words, the arrow denotes the trajectory of poverty for a particular birth cohort aging and residing in the U.S. 10 additional years.

Figure 3 shows the changes in poverty rates for the entire Asian American population, representing the native born group and each of the decades of arrival in five successive graphs. Among the native-born Asian Americans, the poverty rates for every age group are lower than that of the total population in 1990 (13.1%). The same holds true in 2000 with the exception of the 15 to 24 year olds. This is not the case in 2000 since the 15 to 24 year olds. This is mainly due to life course effects in that those passing through this age group are leaving their parents' homes and forming their own households as they enter into financial independence. These older teenagers and young adults are much more prone to low wages, as they are at the beginning point of their earning potential or many are in still in college with very little income. This is seen for the population more generally, as a very similar pattern is seen among the total population in that age group with their poverty rate of 19.7% which is in fact higher than for native born Asians.

[place Figure 3 about here]

Besides that steep entrance into poverty as children enter into young adulthood, the second arrow in the graph (which denotes the 15 to 24 year olds in 1990 aging into the 25 to 34 year old age group) shows that these young adults will rapidly exit out of poverty as they get older and increase their earning potential as they increase labor force experience. For those birth cohorts passing through the heart of the working years, their poverty rates remain very low (with the poverty rates ranging remarkably low, from 3.2% to 5.1%) and relatively flat (with no more than a half percentage point change). This is mainly due to the fact that they are quickly coming to the peak of their working years and earning

Figure 3: Changes in Asian Poverty Rates from 1990 to 2000



potential. On a side note, this observed consistency from one decade to another also confirms the compatibility and stability of the census data over time.

There is a slight increase in poverty for those 45 to 54 years of age in 1990 aging to 55 to 64 years of age in 2000. They experience an increase of 3.1 percentage points but their poverty rate is still extremely low with 6.3% poverty in 2000. Lastly, those entering into retirement age are still remaining at low levels of poverty. This is contrary to the notion that those in retirement age are in higher poverty due to a lack of income from working, and, for the total population, immigrants who are of retirement age have a poverty rate of 10.6% which is much higher than the 6.3% for native-born Asians who are of retirement age. This discrepancy may largely be explained by the support of their Asian elderly parents by adult children (Kibria 1993). This native born graph is useful as a reference point to gauge the poverty trends for immigrant in the same birth cohorts but with different arrival times into the United States.

For the pre-1960 arrivals, who have lived in the U.S. for at least 30 years in 1990, there are no observations for the younger age groups because it is not possible to be that young at the points of observation in 1990 and 2000 and still have arrived 30 to 40 years ago. For those 25 to 34 years of age in 1990, their poverty rate sharply declines to less that 1.0% poverty by the time they reach 35 to 44 years of age in 2000. These immigrants arrived in the U.S. in early childhood and can be termed the 1.5 generation (Rumbaut 1991). The same constant rate for the middle ages and the upward trend experienced for the two oldest groups are similar to that of native-born Asians since they are the closest among the immigrants to the native-born residents since they have resided in the U.S. for so long. Similar observations can be made for the 1960s arrivals with these immigrants' poverty trends mirroring even closer to that of native borns.

By 1990, the 1970s arrivals have resided in the U.S. for approximately 10 to 20 years and 20 to 30 years by 2000. This means that they have had ample time to economically and socially adjust to the U.S. This is evident in their poverty trends as they also mirror relatively closely to that of native borns. The only stark exception is the sharp increase for those entering retirement age (an increase of 6.9 percentage points for those 55 to 64 in 1990 and 65 and over in 2000). This upward trajectory more closely follows that of the total population.

The 1980s arrivals are the newest immigrants shown in this Figure. In 1990, they have been in the U.S. for less than ten years and by 2000, they have been in the U.S. for approximately 10 to 20 years. There is a consistent and noticeably quick decline in poverty rates across birth cohorts with the steepest decline observed for those 15 to 24 years of age in 1990 and 25 to 34 in 2000 (from 30.1% to 9.8% in 2000, a remarkable 20.3 percentage point decrease). The decline of close to or over 10 percentage points in only one decade is incredibly large given that the national poverty rate of the total population changes much more gradually like a couple of percentage points over a decade (from 13.1% to 12.4%). Unlike the other immigrants who are much more settled, the newest arrivals exhibit a much clearer picture of immigrant adaptation to the U.S. when immigrants first arrive. This attests to the rapid adjustment period for immigrants as

they first arrive with high poverty rates that decline as they enter into the labor force and increase earnings. Immigrants move past the disruption of immigration of their economic productivity to achieving poverty rates closer to that of the total population.

Figure 3 shows the poverty rates for all Asians but the rates and trajectories of poverty may be lower when Southeast Asians are not included in the graphs. Figure 4 has the same format as Figure 3 but for the Asian population without Southeast Asians. The graphs for the native born as well as the pre-1960 and 1960s arrivals are virtually identical as those in Figure 3 because there are almost no Southeast Asians in the group given their immigration patterns. There are some Vietnamese immigrants who entered in the latter part of the 1970s but they do not make a visible impact on the poverty trends for that Asian immigrant arrival cohort. The differences between Figures 3 and 4 are most visible in the 1980s arrivals graph. The poverty rates for the 1990 for the 1980s arrivals are consistently lower for Asians without Southeast Asians with the largest difference being among the youngest age group. From 1990 to 2000, the Asians without Southeast Asians also experience a sharper decline across all of the age groups to lower poverty rates than for the Asian population as a whole. This initial look at Asian poverty serves to better target the analysis of poverty for Southeast immigrants and their subgroups.

[place Figure 4 about here]

Figure 5 shows the poverty trends more specifically for Vietnamese immigrants to better outline the baseline trends of the first Southeast Asian immigrants to arrive to the U.S. The two graphs do not follow the same logic as the two previous Figures but they show the poverty trends for the same 1970s immigrant arrival cohort at three different points of observation; when they first arrived and were observed in 1980, after a decade or so residing in the U.S. and observed in 1990, and in 2000 at which time they would have been here at least 20 years. The first graph on the left shows the poverty trends from 1980 to 1990 and the other graph on the right for trends from 1990 to 2000.

[place Figure 5 about here]

The poverty rates for 1980 were extremely high with rates reaching over 40% for the younger birth cohorts. These are the rates that were flagged by many researchers as being alarming and as a basis to question the legitimacy of assuming homogeneity within the Asian American panethnicity. However, after a decade (as observed in 1990) of residence in the U.S., poverty rates rapidly declined with sharp downward trajectories for all age groups. By 1990, the Vietnamese immigrants who arrived in the 1970s had poverty rates that were comparable to other Asians and to the general U.S. population. This rapid break away from poverty is remarkable given such high rates at the first point of observation.

The poverty rates for the Vietnamese 1970s arrivals continued to decline from 1990 and 2000 (graph on right), although not as steeply, for all of the birth cohorts as they grew 10 years older and resided in the U.S. ten years longer. By 2000, all of the birth cohorts had poverty rates below 10% with the exception of the 15 to 24 year olds. In both the 1980 to 1990 graph and the 1990 to 2000 graph, the passing through from the 15 to 24 years of

Figure 4: Changes in Asian Poverty Rates from 1990 to 2000 (Without Southeast Asians)

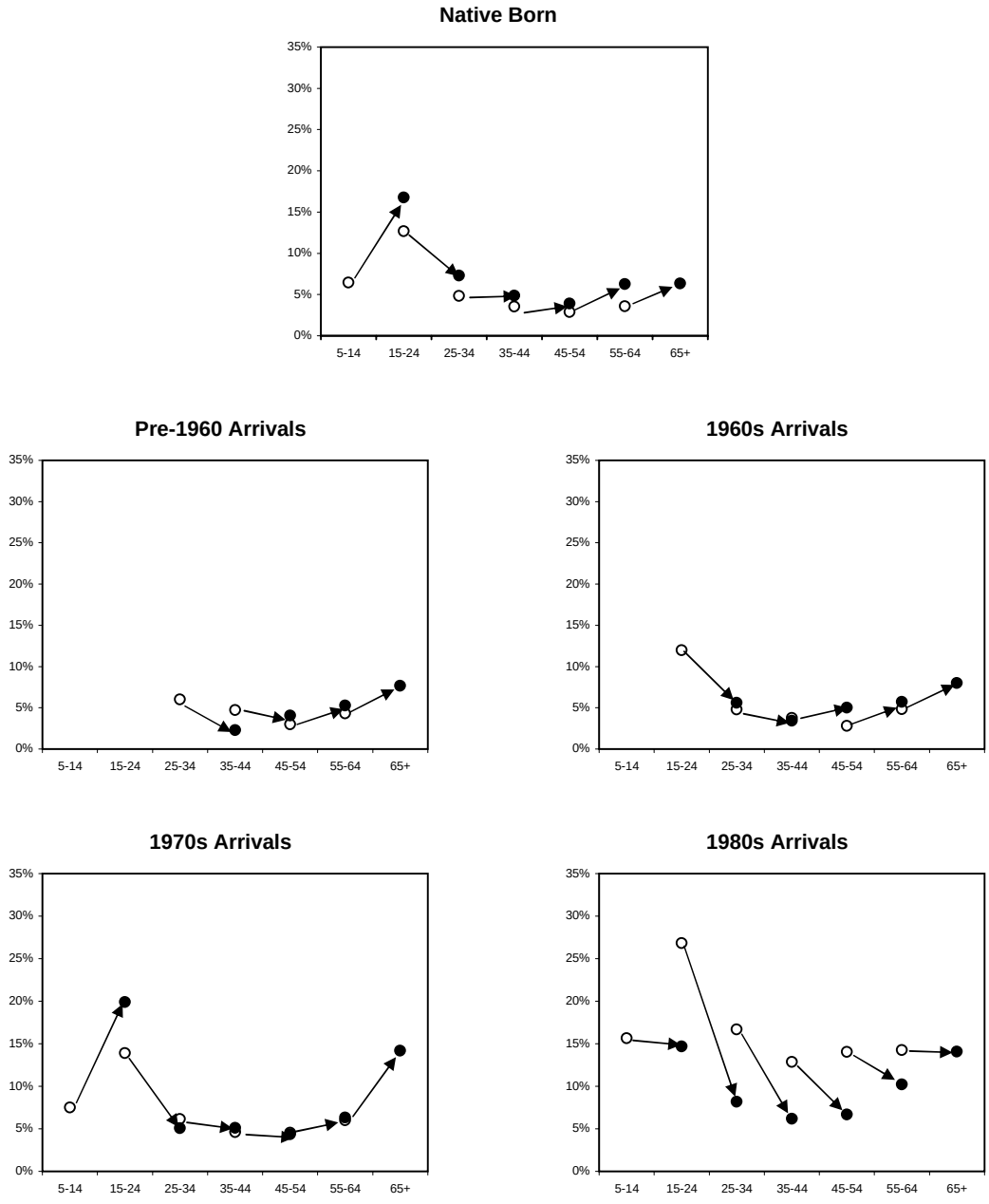
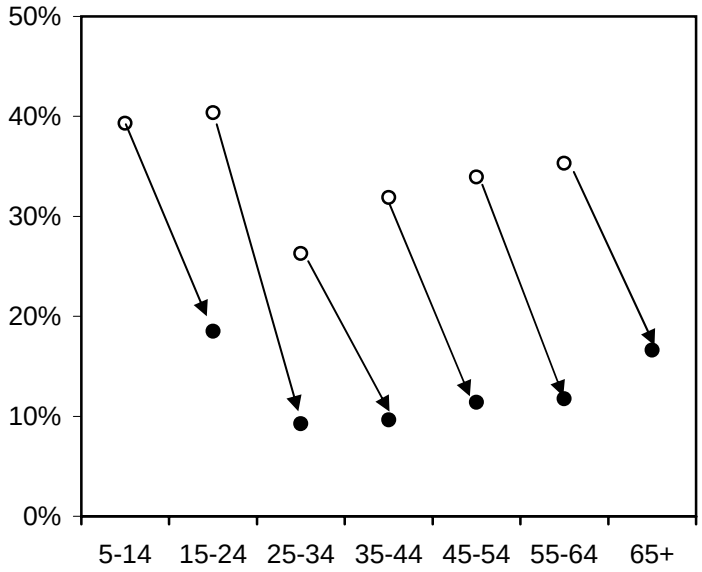
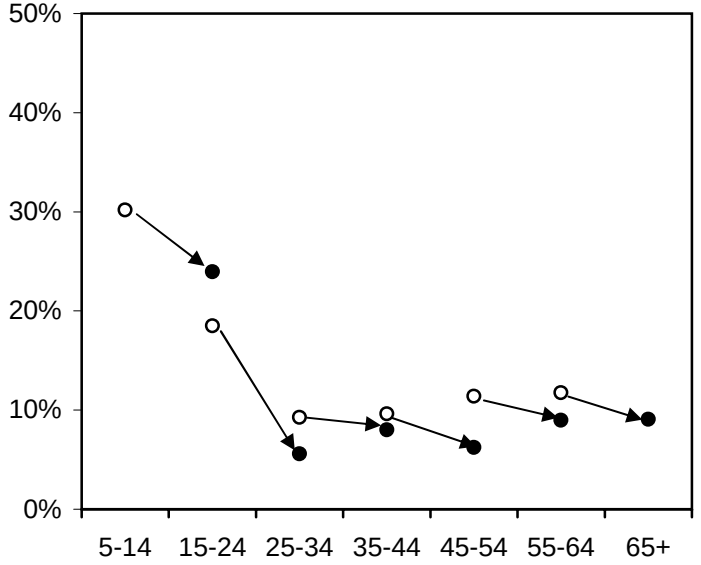


Figure 5: Changes in Poverty Rates For Vietnamese Immigrants Arriving in the 1970s

Observed from 1980 to 1990



Observed from 1990 to 2000



age to the 25 to 34 years of age experienced the sharpest decline in poverty. But more importantly, the effect of arrival cohort and duration has far outweighed any life course effects as seen and discussed for Asian earlier immigrant arrivals and the native born residents.

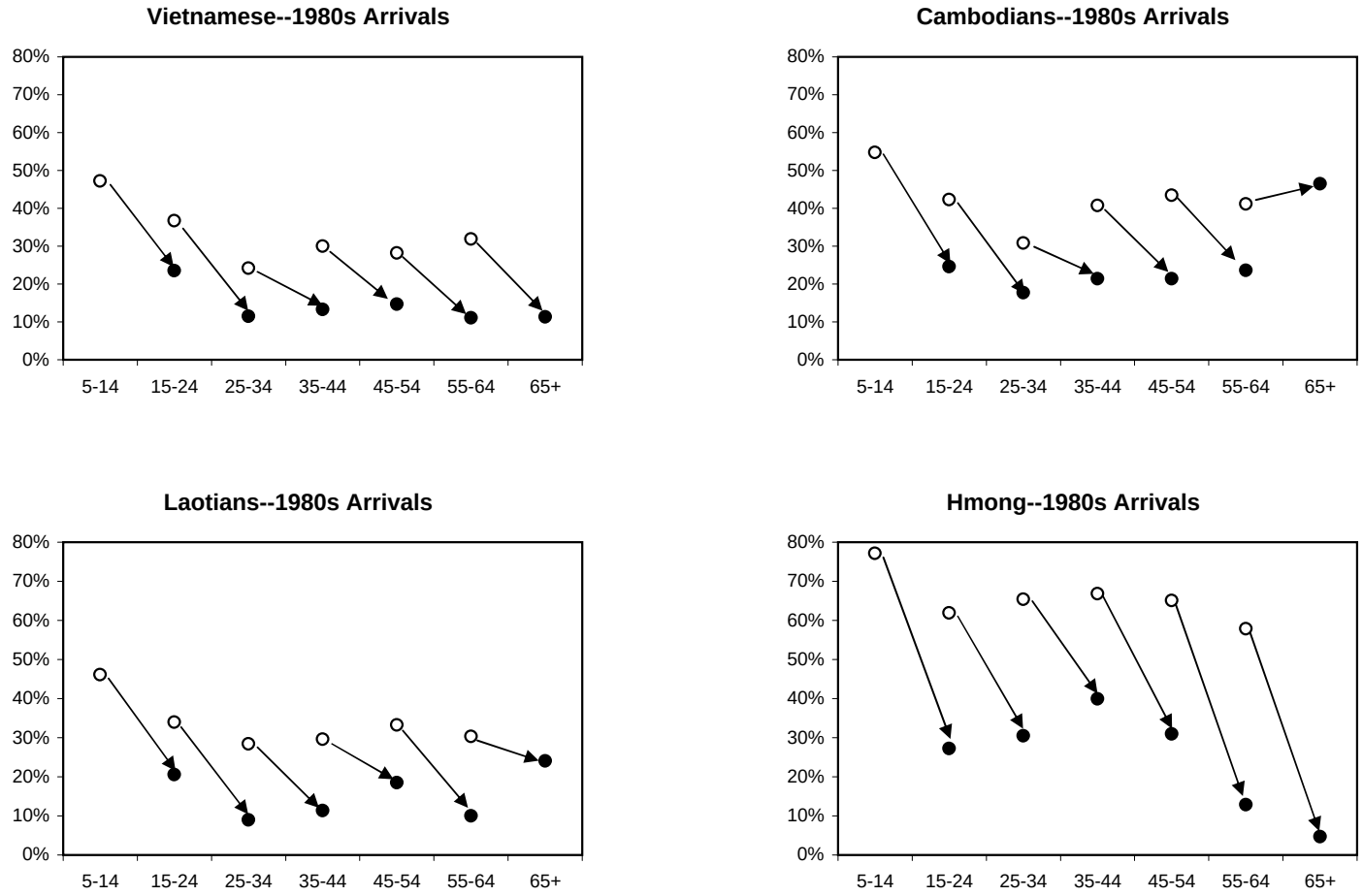
The rapid and sharp decline in poverty rates experienced by the 1970s Vietnamese immigrant arrivals is largely due to the composition of this particular group. Those that left Vietnam in the 1970s were highly educated with professional occupations which means that they had the human capital to more quickly get out of poverty. Many scholars (Le 1993) argued though that the other Southeast Asian immigrants would not be able to follow in the footsteps of the Vietnamese because they do not have the same kind of human capital as does the Vietnamese immigrants who arrived in the 1970s.

Figure 6 tests the hypothesis that other Southeast Asian immigrant subgroups will not do as well as the Vietnamese, especially those who arrived in the 1970s. It is of particular interest and importance to gauge how quickly these Southeast Asian immigrants get out of poverty, because they have fewer resources in terms of human capital and much higher rates of poverty, with some Hmong age groups reaching over 75% poverty. The graphs show the poverty trends for immigrants who arrived in the 1980s since this is the first decade in which the bulk of Southeast Asian, subgroups besides the Vietnamese, came to the U.S. (Park 2003). The poverty trends show each of the subgroups do in fact lower their poverty at similar rates as the 1970s arriving Vietnamese did a decade earlier. For the 1980s arriving Vietnamese, each birth cohort consistently decreased their poverty rate by 10 to over 20 percentage points from 1990 to 2000. The Cambodians and Laotians similarly follow the trends for the Vietnamese but the 2000 Laotian poverty rates more closely resemble that of the Vietnamese because they began at similar rates and experienced similar declines. The Cambodians, however, continue to have higher poverty rates because they consistently had much higher initial rates in 1990.

[place Figure 6 about here]

The most strikingly different group among the four is the Hmong with extremely high poverty rates with almost every birth cohort going over the 60% mark in 1990. Each Hmong birth cohort does experience remarkable decrease in their poverty rates (ranging from 25 percentage points to a gigantic leap of 50 percentage points) regardless of life course effects (gauged by differences in poverty rate declines experienced by different birth cohorts passing through particular age groups). However, it is important to note that in 2000, the poverty rates for the Hmong remain high with half of the birth cohorts still having poverty rates over 30%. It remains to be seen whether or not the Hmong and the other Southeast Asian immigrants will eventually obtain poverty rates closer to that of other Asians or the total population.

Figure 6: Changes in Southeast Asian Poverty Rates for Immigrants Arriving in the 1980s From 1990 to 2000



DOUBLE COHORT METHOD FOR POVERTY STATUS: LOGISTIC REGRESSION RESULTS FROM 1990 AND 2000

Beyond the determinants of poverty status, the key emphasis of this research is to gauge how poverty status changes over time for immigrants, particularly Southeast Asian immigrants. The graphic display of poverty trends in the previous section presents gross relationships between birth cohort, immigrant arrival cohorts, aging, and duration on poverty status, and this is unadjusted for other determinants of poverty. "Also lacking are direct contrasts of immigrants with native-born populations to reflect assimilation; nor are there tests of significance incorporating sample sizes of specific cohorts" (Myers and Lee 1996). Therefore, logistic regression methods are employed to address these and other questions[7].

Models with Temporal Effects (Including Aging and Increased Duration)

Table 3 first shows the description of the sample and the mean values of the covariates. Table 4 displays the coefficients for the temporal effect: birth cohorts, aging (aging 10 years from 1990 to 2000), immigrant arrival cohorts, and duration (residing in the U.S. 10 years longer). Model 1 examines the temporal affects of only birth cohorts and aging. As with the cross-sectional temporal models, the BIC statistic is the least negative of all the temporal models (–1,978). The large negative intercept denotes the very low poverty of the reference cohort and the negative year coefficient indicates that poverty rates are expected to be lower in 2000. According to the coefficients for birth cohorts, the younger cohorts are much more likely to have higher poverty than the 35 to 44 year olds and the older cohorts have lower poverty. The aging effect shown by the Y*BC term shows that for the youngest birth cohort and those aging from 25-34 to 35-44, there is a reduction in poverty over the 10 years between 1990 and 2000. There is no significant change for the older birth cohorts.

[place Table 3 about here]
[place Table 4 about here]

Model 2 only includes variables for immigrant arrival cohort and longer duration of these cohorts. There is a significant increase in the BIC statistic (–2,903) and each variable in the model is statistically significant at the $p < .001$ level. The negative intercept again notes a low level of poverty but the year coefficient is positive which may be an indication that for the reference group (the native born), there is an increase in poverty by 2000. In comparison to the native-born residents, the immigrants who arrived in the 1980s have a much higher level of poverty but this is off-set over time shown by their duration effect of –1.219 denoted by Y*MC. Perhaps of more interest is that the pre-1980 arrivals have lower poverty than even the native born and with longer duration in the U.S., there poverty is expected to continue decreasing. Lastly, the Y*MC coefficients indicate that there is much more change for immigrants recently arrived than for those

[7] Given a nominal criterion variable, such as the incidence rate of being 100% below the poverty line, the log odds of the criterion are estimated as a function of the temporal variables and additional covariates [such as educational attainment, English proficiency, and public assistance] (Myers and Cranford 1998).

Table 3: Description of Sample and Mean Values of Covariates (Calculated for the pooled 1990 and 2000 data)

	% in Category	Covariate Mean Values
In Poverty	10.2	
BIRTH COHORT		
5-14	19.7	
15-24	17.8	
25-34	16.3	
35-44	19.8	
45-54	17.1	
55-64	9.4	
IMMIGRATION COHORT		
Native born	44.6	
1990s Immigrants	4.0	
1980s Immigrants	29.9	
Pre-1980 Immigrants	21.5	
Vietnamese	62.3	
Cambodians	14.4	
Laotians	12.4	
Hmong	11.0	
Marital Status (Married)	46.0	
Sex (Female)	51.1	
High School Completion	34.8	
Bachelors Degree or More	28.8	
Speak English Well	90.4	

Table 4: Logistic Regression Coefficients of Temporal Effects on Asian Poverty Status, 1990 to 2000

	Model 1	Model 2	Model 3
INTERCEPT	-2.292 ***	-2.403 ***	-2.983 ***
YEAR	-0.221 ***	0.395 ***	0.458 ***
BIRTH COHORT (BC, reference = 35-44)			
5-14	0.642 ***		0.770 ***
15-24	0.903 ***		0.871 ***
25-34	0.421 ***		0.230 ***
35-44	----		----
45-54	-0.103		0.023
55-64	-0.089		0.040
AGING EFFECT WITH TIME (Y * BC)			
5-14 to 15-24	-0.064		-0.184 **
15-24 to 25-34	0.030		0.042
25-34 to 35-44	-0.290 ***		-0.090
35-44 to 45-54	----		----
45-54 to 55-64	0.000		-0.041
55-64 to 65-74	0.138		0.142
IMMIGRATION COHORT (MC, reference = native born)			
1980s Immigrants		1.091 ***	1.263 ***
Pre-1980 Immigrants		-0.186 ***	0.152 ***
DURATION EFFECT WITH TIME (Y * MC)			
1980s Immigrants		-1.219 ***	-1.109 ***
Pre-1980 Immigrants		-0.561 ***	-0.477 ***
Model Loglikelihood Chi-Square	2,107	2,962	4,371
Degrees of Freedom	11	5	15
N	125,010	125,010	125,010
BIC Statistic	-1,978	-2,903	-4,195

* p < .05 ** p < .01 *** p < .001

immigrants who have been in the U.S. longer. For those who are more recently arrived, the lengthening of duration from 1990 to 2000 is much more crucial in quickly bringing their poverty level closer to the native born since it is their first ten years in the U.S. than this same time period is for those immigrants who have been here longer. In other words, there is much more change in poverty that is expected for immigrants in their first ten years here than thereafter for more established immigrants.

Model 3 incorporates all of the temporal variables and the BIC statistic indicates that it is undoubtedly the best-fitting model (–4,195). Once both birth cohorts and immigrant arrival cohorts with their respective changes over time controlled, the poverty level is the lowest among the three models for the reference group. The year variable continues to stay positive but slightly more so than in Model 2. Similar patterns emerge for birth cohorts and for aging with the exception that once controlled for immigrant arrival cohorts, all of the birth cohorts have higher poverty than the reference group. There are slight but insignificant changes with aging and all of the birth cohorts continue to have higher poverty than the 35 to 44 year old reference group. The effects of arrival cohorts and lengthening duration are similar to that of Model 2 with the exception that the pre-1980 arrival cohort no longer has a lower poverty than the native born and there is less of a decrease of poverty with duration than in Model 2. With the best-fitting Model 3 for Asian poverty, there can now be a more explicit examination of specific Southeast Asian subgroups.

Variables to Specify Southeast Asians

Table 5 presents only two models to gauge the better way to represent Southeast Asian subgroups. Model 1 includes the best-fitting model from Table 4 and dummy variables to represent each of the Southeast Asian subgroups. The inclusion of these subgroups significantly decreases the BIC from –4,195 to –6,770. The intercept is even more negative in this model but similar patterns are shown for birth cohorts and aging but the coefficient for the pre-1980 immigrant arrival cohort is no longer significantly different from that of the native-born reference group. The coefficients for lengthening duration continue to be negative and statistically significant in similar ways as seen in Model 3 of Table 4. The coefficients for each of the Southeast Asian subgroups are all higher than the reference group (all Asians) and significant. As expected from the graphical displays, the Vietnamese have the lowest poverty among the four subgroups followed by Laotians, Cambodians, and the Hmong with the highest poverty[8].

Model 2 includes all of the variables from Model 1 with the addition of the interaction variables for each subgroup and immigrant status. The intercept continues to become more negative which means that the poverty rate starts even lower for the reference group. On the other hand, the year coefficient was higher once more. Again, we see similar patterns for birth cohorts and aging as well as for arrival cohorts and lengthening duration. As for the best-fitting model, the BIC statistic for Model 1 (–6,770) and Model 2 (–6,771) are almost identical with the inclusion of four additional variables.

[8] The addition of 1.884, coefficient for the Hmong, to the reference group gives the Hmong the highest poverty among the four subgroups.

Table 5: Logistic Regression Coefficients for Southeast Asian Immigrants Poverty Status, 1990 to 2000

	Model 1	Model 2
INTERCEPT	-3.001 ***	-3.027 ***
YEAR	0.431 ***	0.447 ***
BIRTH COHORT (BC, reference = 35-44)		
5-14	0.591 ***	0.581 ***
15-24	0.798 ***	0.803 ***
25-34	0.245 ***	0.242 ***
35-44	----	----
45-54	0.018	0.018
55-64	0.084	0.082
AGING EFFECT WITH TIME (Y * BC)		
5-14 to 15-24	-0.212 **	-0.247 ***
15-24 to 25-34	-0.022	-0.042
25-34 to 35-44	-0.166 **	-0.159 *
35-44 to 45-54	----	----
45-54 to 55-64	-0.021	-0.022
55-64 to 65-74	0.124	0.125
IMMIGRATION COHORT (MC, reference = native born)		
1980s Immigrants	1.061 ***	1.112 ***
Pre-1980 Immigrants	0.005	0.047
DURATION EFFECT WITH TIME (Y * MC)		
1980s Immigrants	-1.108 ***	-1.119 ***
Pre-1980 Immigrants	-0.449 ***	-0.466 ***
Vietnamese	0.765 ***	0.937 ***
Cambodians	1.370 ***	1.680 ***
Laotians	1.011 ***	1.422 ***
Hmong	1.884 ***	1.891 ***
Vietnamese*Immigrants		-0.231 ***
Cambodians*Immigrants		-0.419 ***
Laotians*Immigrants		-0.544 ***
Hmong*Immigrants		-0.001
Model Loglikelihood Chi-Square	6,993	7,041
Degrees of Freedom	19	23
N	125,010	125,010
BIC Statistic	-6,770	-6,771

* p < .05 ** p < .01 *** p < .001

The interesting changes occur with the subgroups and the subgroup immigrant interaction terms. Once the interaction terms are included, all of the subgroup coefficients increase while the interaction terms are all negative (all terms are significant with the exception of the Hmong interaction term). This pattern means that the immigrant Southeast Asians have slightly lower poverty than their native-born counterparts in the same subgroup. This may seem to contradict the notion of immigrant progress over generations since the coefficients seem to indicate that the second generation is worse off than the immigrants. In fact, cross-tabulations of nativity and poverty for each of these subgroups confirm this finding. However, this pattern largely reflects the age composition by nativity in that the native-born Southeast Asians are almost all young children who have extremely high poverty[9] while the immigrant group, in comparison, has a higher proportion of adults.

Best Fitting Model with Covariates

As mentioned, there is almost no difference between Model 1 and Model 2 in terms of their model fit, even though Model 2 uses 4 additional variables. Therefore, Model 1 will be used in the next set of regressions to test covariates. Table 6 displays the regression results for the model specifications of Model 1 from Table 5 with each set of the covariates separately and one model that combines all of them. The patterns seen for birth cohorts and aging as well as for arrival cohorts and duration are similar to that of previous models. And the pre-1980 immigration arrival cohort again is not statistically different from the native-born reference group when these other determinants are included in the model. From the base temporal model with variables for each Southeast Asian group, the addition of marital status and sex changes the BIC statistic from –6,770 to –7,320. As seen in the cross-sectional regression models, married persons (statistically significant coefficient of –0.749) are much less likely to be in poverty and women are more likely to be in poverty than men (coefficient of 0.133).

The addition of educational attainment in Model 2 shows that the BIC statistic is further improved to –7,719. Both of the coefficients for high school completion and bachelors degree or higher being are statistically significant with the bachelors degree or higher dummy variable having a much great impact on lowering poverty (–0.554 compared to only –0.090 for high school completion). The coefficients for the other variables remain relatively constant. Lastly, the coefficients for the four subgroups continue to be in the same order with the Vietnamese having the lowest poverty followed by Laotians, Cambodians, and the Hmong.

Model 3 tests the effect of English proficiency with Model 1 specifications and the BIC statistic (–7,764) is slightly higher than it is for the model that includes educational attainment. Again, there are similar patterns for birth cohorts and aging but the one distinction is that the inclusion of English proficiency has allowed for the coefficient for

[9] Families with young children are at a higher risk of poverty since poverty is calculated with family income and the number of persons in the family. Therefore, a family with children can have the same income as a family without children but is in higher risk of being in poverty due to the additional family members.

Table 6: Logistic Regression Coefficients for Southeast Asian Immigrants Determinants of Poverty Status, 1990 to 2000

	Model 1	Model 2	Model 3	Model 4
INTERCEPT	-2.471 ***	-2.209 ***	-2.334 ***	-2.171 ***
YEAR	0.322 ***	0.304 ***	0.644 ***	0.594 ***
BIRTH COHORT (BC, reference = 35-44)				
5-14	0.032	-0.201 ***	0.074	-0.091
15-24	0.277 ***	0.117 *	0.323 ***	0.196 ***
25-34	0.094 *	0.115 **	0.126 **	0.137 **
35-44	----	----	----	----
45-54	0.020	-0.015	-0.021	-0.041
55-64	0.028	-0.090	-0.060	-0.136 *
AGING EFFECT WITH TIME (Y * BC)				
5-14 to 15-24	-0.143 *	-0.124	-0.149 *	-0.146 *
15-24 to 25-34	0.035	0.060	0.051	0.058
25-34 to 35-44	-0.212 **	-0.196 **	-0.204 **	-0.190 **
35-44 to 45-54	----	----	----	----
45-54 to 55-64	-0.018	-0.005	-0.019	-0.010
55-64 to 65-74	0.171	0.242 **	0.166	0.217 *
IMMIGRATION COHORT (MC, reference = native born)				
1980s Immigrants	1.125 ***	1.124 ***	1.299 ***	1.272 ***
Pre-1980 Immigrants	0.077	0.100 *	0.286 ***	0.271 ***
DURATION EFFECT WITH TIME (Y * MC)				
1980s Immigrants	-1.096 ***	-1.094 ***	-1.320 ***	-1.287 ***
Pre-1980 Immigrants	-0.465 ***	-0.443 ***	-0.653 ***	-0.604 ***
Vietnamese	0.739 ***	0.663 ***	0.712 ***	0.657 ***
Cambodians	1.354 ***	1.249 ***	1.308 ***	1.235 ***
Laotians	1.028 ***	0.920 ***	0.988 ***	0.911 ***
Hmong	1.938 ***	1.849 ***	1.879 ***	1.819 ***
Marital Status (Married)	-0.749 ***	-0.739 ***	-0.756 ***	-0.749 ***
Sex (Female)	0.133 ***	0.124 ***	0.123 ***	0.117 ***
High School Completion		-0.090 ***		-0.026
Bachelors Degree or More (reference = less than high school)		-0.554 ***		-0.463 ***
Speak English Well (reference = Speak English not well			-0.505 ***	-0.431 ***
Model Loglikelihood Chi-Square	7,566	7,988	8,022	8,306
Degrees of Freedom	21	23	22	24
N	122,153	122,153	122,153	122,153
BIC Statistic	-7,320	-7,719	-7,764	-8,025

* p < .05 ** p < .01 *** p < .001

the pre-1980 arrival cohort to become statistically significant. This can be interpreted to mean that when English proficiency is included in the explanation of poverty, belonging to the earlier arrival cohort is significantly different from the native-born reference group. The coefficient for English proficiency is –0.505 and is statistically significant at the $p < .001$ level. This means that speaking English well significantly reduces poverty compared to those who do not speak English well or not at all.

Lastly, Model 4 contains all of the covariates and the BIC statistic is increased to –8,025. Much of the temporal effects remain constant but there are a few highlights of this model's results to point out. First of all, the coefficient for the pre-1980 arrival cohort remains statistically significant similar to that of Model 3. This may largely be due to the relationship between English proficiency and arrival cohort. Secondly, the coefficient for high school completion is reduced and no longer statistically significant. Lastly, the explanatory power of a bachelor's degree or higher and English proficiency continues to be strong as they almost equally decrease the poverty rate. The last two observations can have great implications for the immigration literature as well as public policy arenas concerning poverty.

DISCUSSION

Before the logistic regression analysis using the double cohort method, the graphic displays by both birth cohorts and arrival cohorts passing through time were used to help better visualize the different cohorts and how poverty rates change for these cohorts over time. The poverty rates for Asians were shown first to serve as benchmarks for the Southeast Asian immigrants. From the Southeast Asian immigrant graphs, poverty is clearly declining at an extremely rapid pace in their first ten years in the U.S. The Vietnamese graphs in Figure 5 also shows that not only is poverty rapidly decreasing the first decade of U.S. residence but that poverty continues to decline in the second decade as well. (However, the decline is not as rapid.) These rapid declines may be extremely impressive but they must be understood in the context that poverty rates are still very high because they started at such high rates.

In the first set of double cohort models with only temporal variables, it became evident that immigrant arrival cohort and lengthening duration had stronger explanatory power than did birth cohort and aging variables. The BIC statistic served to determine the best-fitting model and they were not always the most complete model. The younger birth cohorts have a significant effect on poverty, but over time, the aging of these birth cohorts is not significantly different from the reference 35-44 aged birth cohort (this is with the exception of those 25 to 34 in 1990 aging to 35 to 44 by 2000). However, the model that includes both of these cohort dimensions is the best-fitting model. More broadly, these models show in a quantitative way that both age and arrival cohorts are important in explaining poverty, and as they pass through time, they also help to explain how poverty changes.

The second set of models more specifically engages the different Southeast Asian subgroups. One of the key discoveries from these models is that, with the inclusion of

dummy variables to explicitly isolate the effects of being in certain Southeast Asian groups, the pre-1980 arrivals are no longer significantly different from that of the native-born reference group. The lengthening duration for this arrival cohort continues to be significant but the immigrants in this cohort are not all that different in their poverty rate from native-born residents. This may be an indication that there is a convergence effect whereby long settled Asian immigrants begin to have a very similar socioeconomic status to that of native-born Asians. Furthermore, this is only seen once the Southeast Asian immigrants are specified. This is an indication that Southeast Asians are in fact different from other Asian groups and Asians as a whole. This has huge implications for the combining of various ethnic groups under one pan-ethnicity.

Lastly, a set of models were run to test the different determinants of poverty with the inclusion of covariates as was done in the cross-sectional models. Marital status continues to have the largest effect with educational attainment (specifically, bachelors degree) and English proficiency following behind. The effect of having a high school degree is significant but minimal once English skills are accounted for. This is an important finding because it would seem that a high school degree would be enough to cross over the poverty line and that a bachelor's degree would be for higher income brackets. However, the regression results show that a bachelor degree is much more of a definitive determinant in lowering poverty. This again has considerable implications for policy makers who are looking for ways to get people out of poverty.

The more in-depth analysis of one socioeconomic indicator utilizing the double cohort method reveals many rich details about the dynamics of poverty and its determinants, immigrant progress, and the trends more specifically for Southeast Asians. The double cohort method allows for a more accurate measurement of progress over time along various temporal dimensions as true cohorts are traced from one time of observation to the next. With the temporal dynamics accounted for, the distinction of Southeast Asians from Asians as a whole was more clearly evident. Furthermore, as mentioned above, certain findings have important implications for the literature as well as for policy makers.

CONCLUSION

The adaptation processes of immigrants are perhaps the most fruitful and dynamic application of demographic approaches in that time is central and is therefore dissected and simultaneously understood on its multiple dimensions. Many researchers have shown that historical time period; birth cohort, aging, and point of observation are all important temporal factors when gauging the advancement of the labor force or population. Immigrant status adds several other temporal dimensions such as time at arrival, duration, and age at arrival which further complicates the assessment of true progress. The methodological approaches applied in this research attempted to accurately take each of these temporal factors into consideration.

Making each of the temporal factors explicitly separate from one another revealed that in fact there are patterns and significant differences to be observed. Each temporal

dimension proved to be essential and telling of the temporal dynamics of immigrant progress. However, the most notable advancement in methodology is the tracking of birth cohorts and arrival cohorts simultaneously over time with a misrepresentation of either. Instead of using an age cross-section as a proxy for aging and immigrant time of arrival as a proxy for duration, the same cohorts are traced over time to mark their true progress, as they are aging and lengthening their duration. This approach has diminished the errors in interpretation due to changing composition in the population or the pitfalls of the cross-sectional fallacy (Park 2003).

In addition, observing the progress of immigrant adults more specifically by time of arrival at multiple points of observation also revealed the status of the newest immigrants and how they compare to the newest immigrants of the previous decade. This comparison for all of the socioeconomic indicators refuted the fact that the quality of immigrants continuously declines and that the newest arrivals are necessarily of a poorer quality as Borjas asserted (1985, 1995). Often times, the newest Southeast Asian immigrants in 2000 began with better socioeconomic standing than their predecessors did in 1990. This finding points to the importance of not generalizing or ascribing the trends seen for a specific race or ethnic group to the entire immigrant population.

More broadly, Portes and Rumbaut (1996) have asserted that the relatives who come as part of the family reunification policy tend to have lower socioeconomic status than their preceding family members. The evidence from this research shows that this is not necessarily the case for all ethnic groups. The Southeast Asian immigrants who came in the 1980s were leaving their home countries at a very volatile and hostile time so many came with little resources. Many of those who followed as family reunification immigrants in the 1990s came when there was more stability and socioeconomic development in their home country so they had more resources and access to human capital. Again, this points to the importance of not generalizing the patterns observed for a specific race or ethnic group to the entire immigrant population or the immigrant adaptation process.

Secondly, as Southeast Asian immigrants are considered Asian Americans, they must confront the same issues and stereotypes that other Asian immigrants and native-born residents face. The two main generalizations for Asian Americans that will be addressed here are (1) the model minority stereotype that touts Asian Americans as the immigrants or race group that has been successful in “pulling themselves up by their boot straps” and (2) the homogeneity of the race group that the differences among the ethnic groups are ignored and are seen as being all alike. Southeast Asian immigrants are subjected to the same kinds of generalizations as other Asian groups and yet their socioeconomic status and differences from previous waves of Asian immigrants directly challenge the validity to these assumptions.

The findings from this research show that indeed, there is progress on many socioeconomic fronts on both the individual and household level for Southeast Asian immigrants. However, their advancement must be qualified by their exceptionally low socioeconomic status to begin with which means that even with vast improvements, they

are still left in a situation many would consider dire. It is the trajectories and experiences of their predecessors that may warrant a positive forecast for their future.

Moreover, the findings and discussion of the double cohort method results show that for the most part Southeast Asian immigrants have lower socioeconomic status than the general Asian immigrant population but that there is a slow convergence. This convergence is seen for other immigrants who arrived before 1980 and serves as a proxy for Southeast Asian immigrants who are more recently arrived. This is further substantiated by the double cohort graphs that show the Vietnamese eventually attaining the low poverty rates of native-born Asians. However, again, it must be stressed that the Vietnamese who came in the 1970s were from an elite class with high levels of human capital. It remains to be seen if other Southeast Asian immigrants who come with little resources, low levels of education, and very modest English proficiency.

The theoretical contributions from research are important in advancing the knowledge base of society but this kind of study also has important implications for policy makers as immigration policy continues to be debated in policy arenas. Policy makers frequently place a short time limit in which immigrants are to become self-sufficient and upward mobile. In fact, the short time constraint is placed on the entire poor population. This is evidenced in the SIPP approach where a person is considered long-term poor if he or she is considered in poverty every month for more than two full years.

In the case of refugees, they are given immediate public assistance in their first 30 days and more limited assistance for their first 36 months (Le 1993). After the third year of assistance, refugees are not necessarily encouraged to transition to general public assistance but nonetheless, it is available to them. This may have been a huge assistance to refugees arriving in the 1980s and Table 28 shows that their public assistance use declined dramatically from 31.6% in 1990 to 12.3% 2000 (that is a decrease in use by over 19 percentage points).

Table 7: Public Assistance Use[a] by Immigrants in 1990 and 2000

	1990	2000	Percentage Point Change
Total Immigrant Population	5.3%	5.1%	-0.2%
Asian	5.5%	4.5%	-1.0%
Southeast Asians	23.7%	11.9%	-11.8%
1990s Arrivals	----	15.7%	----
1980s Arrivals	31.6%	12.3%	-19.3%
1970s Arrivals	11.0%	6.1%	-4.9%
Vietnamese	16.0%	9.9%	-6.1%
Cambodian	39.5%	19.1%	-20.4%

Hmong	54.3%	19.5%	-34.8%
Laotian	28.0%	12.5%	-15.5%

[a]Source of Income from Public Assistance.

In 2000, source of income from Public Assistance and Supplemental Security Income.

Source: Census Bureau, Public Use Microdata Samples 5% in 1990 and Sample data in 2000

There are several interesting observations to be made from this table. First, each of the Southeast Asian subgroups start with extremely high rates of public assistance use in 1990 but their use rapidly declines by 2000. This is particularly poignant for the Hmong (54.3% to 19.5%) and Cambodians (39.5% to 19.1%). Second, Southeast Asian immigrants arriving in the 1990s are first observed in the 2000 data and their public assistance use starts much lower at 15.7% than did the newcomers in 1990. Overall, as their poverty significantly declined, it is not surprising that their public assistance would decline as well. In fact, there is a marked decrease in public assistance for the total immigrant population. However, the declines shown in Table 28 are not easily attributable to welfare reform or an actual decline in getting out of poverty and it remains to be seen how the 1990s arrivals will fare in the coming decade with such drastic changes in the public assistance structure.

More broadly, the most recent change in the welfare system expects "self-sufficiency" in a matter of a few short years. This short-sighted approach to upward mobility or progress limits in understanding processes that may precede more gradually which warrants a longer ranging time frame. Additionally, for policy makers to ensure the long-term success of their population, it is important to have a more long-ranging perspective. Ultimately, policy makers have to grapple with and face the choice of enabling millions of people to deal with both the consequences of poverty and the causes of the problem or hoping the problem will go away with the taking away of society's "safety net" and they will somehow simply figure out a way to "pull themselves up by their boostraps".

In the research findings presented here, the benchmark for progress was reported by 10 year increments. This is mostly due to the nature of data collection methods by the Census Bureau and there may be fluctuations within the decade that are not captured but nonetheless, permanent and enduring progress is better captured by extending the expected times for progress to occur. This is most poignantly evidenced in the two decades needed by the Vietnamese arriving in the 1970s. Without this kind of long-term outlook, research results may be misleading in assuming fluctuations in the data as real change or that there is no change at all because the change is so gradual. Either way, this does a huge injustice to the people making slow but certain progress and to the policy makers who are attempting to develop policies that work.

Secondly, the regression results confirm many previous research findings that in deed, educational attainment and English proficiency help to alleviate immigrant poverty. The effect of having a high school degree is significant but minimal. This is an important finding because it would seem that a high school degree would be enough to cross over

the poverty line and that a bachelor's degree would be for higher income brackets. However, the regression results show that a bachelor degree is much more of a definitive determinant in lowering poverty. English proficiency continues to one of the most significant ways in which to get out of poverty because it may open access to a wider range of occupations and higher earnings because immigrants are then able to communicate more effective to employers, coworkers, and other people who are work-related.

Thirdly and perhaps most importantly, the remarkable socioeconomic progress shown for Southeast Asian immigrants strongly substantiates the ideology that immigrants do improve their socioeconomic status in the U.S. over time. That, in fact, they are not necessarily contributing to the perpetual poor and a "drain" of public resources. These findings go directly against the main argument of anti-immigrant lobbyists who claim that immigrants have a negative impact on the U.S. and it is importing the poor who will deplete public resources without showing any signs of achievement or upward mobility. Evidence shows that the immigrants who have historically been seen as one of the worst off groups, the Southeast Asian immigrants, are making solid progress and are continually improving their situation. This is not to overstatement their achievement but certainly this kind of research directly refutes negative claims about immigrants and their socioeconomic stagnation.

SUGGESTIONS FOR FUTURE RESEARCH

This study has shown that the Southeast Asian immigrants are making socioeconomic progress on many fronts and that this progress is likely to continue into the future. It is important to continually track their progress in the coming years, especially for those groups like the Hmong who still have very low socioeconomic status regardless of their rapid improvement. Moreover, the socioeconomic status of Southeast Asian immigrants still arriving in the U.S. should be measured and the approach used in this research can help to gauge or project their progress. Much weight has been given to the decreases in poverty by Southeast Asian immigrants in this research but this progress must be furthered examined to test whether or not they are in fact moving completely away from the poverty line. As previously discussed, the poverty line has been criticized for not adequately capturing those who are the working poor. It would further the discussion on Southeast Asian immigrants' poverty if future research tested to see whether or not they are moving completely away from the poverty line. The 2000 data show that for each of the Southeast Asian immigrant subgroups, this is not necessarily the case with every group showing a larger proportion in between 100% and 200% of the poverty line) as shown in Table 29. Future research can assess if Southeast Asians are truly distancing themselves from poverty and making significant advances in socioeconomic upward mobility.

Table 29: Poverty Rates for Southeast Asian Immigrants
Below 100% and Between 100% and 200%, 2000

	100%	100% to

	Below Poverty	200% Below
Southeast Asians	17.3%	22.5%
Vietnamese	14.9%	23.3%
Cambodian	21.7%	23.9%
Hmong	33.0%	43.5%
Laotian	16.5%	19.8%

Source: Census Bureau, Public Use Microdata Samples 1% data in 2000

To make the explicit connection between the results found for the first generation in this study to studies on the second generation, future research can entail two different approaches. Given a particular geography of interest like a metropolitan area with a large immigrant population, an analysis similar to this can be conducted to first gauge how the first generation adults are fairing. The findings from that analysis can lay the context in which to conduct survey research on the second generation to determine their expectations for and actual upward mobility as it is related to their parents' generation. This would give a comprehensive picture of long term immigrant adaptation and the adjustment to the U.S. from generation to generation. I would assert that the combination of approaches to both the first generation and the second generation is the most effective way to gain this complete picture.

The double cohort method and the assessment of socioeconomic status with multiple indicators offer a comprehensive and useful toolset in determining the progress of immigrants. Many of the processes and mechanisms of immigrant adaptation and socioeconomic progress have been gleaned from qualitative work (Park 2003). The methodologies employed here have furthered the knowledge base about these concepts as it sought to quantify some of the observations made by qualitative researchers. And conversely, from this present research, there are many questions that arise which bring the need for qualitative research to answer. This brings the research full circle and it seems that a feedback process between quantitative and qualitative research brings about the most comprehensive, rich understanding of what is happening in society. This is not to suggest that all researchers should become employ mixed methods but rather, I assert that the lines of communication between qualitative and quantitative researchers should be opened.

Also, the method used in the present research can also be applied to other ethnic groups to get a complete picture of the total immigrant population and not just that of Asian immigrants. For instance, future research that replicates the present methods for Salvadorans and Guatemalans could test the dynamics found in the present research. A comparative study of other immigrant groups with similar human capital and home country contexts would strengthen the testing of the racialization theory presented in this research. Or a research on Russians, Armenians, or Cubans could test to see whether the findings from this research are mostly due to their refugee status. Potential findings may point to different mediators of socioeconomic progress for different groups and they may

be advancing in some areas that the subjects of this research did not. Comparative studies help to engage the entire population as well as fine tune and test theories.

As the progress of immigrant adults are better understood through the methodologies employed in this research, it sets a more understood background from which to understand the potential and actualized socioeconomic progress of immigrant children and the second generation. For policy makers, the progress of those who are adults now is the most important but to measure permanent progress, there must be research on both the adults and the children. As more of the 1.5 generation comes of age for the Southeast Asian immigrants, it will be of great interest to see their levels of upward mobility as perhaps the true measurement of success for an immigrant population is in the ultimate success of their children.

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