Journal of Population and Social Studies, Volume 21 Number 2 (Supplement) July 2013: S-28–S-48

Cross-border Migration and Poverty: Evidence from the Kanchanaburi Demographic Surveillance System (KDSS), Thailand

Aree Jampaklay[1], Barbara Entwisle[2], and Jacqueline M. Hagan[2]

This study examines immigration, ethnicity, and poverty status in Thailand, with particular reference to the situation in the Kanchanaburi Demographic Surveillance System (KDSS). Kanchanaburi borders Myanmar, about 120 km weat of Bangkok. By comparing the economic prospects of households headed by the foreign-born, native-born minorities, and Thai nationals, we consider the relative effects of cross-border migration and ethnicity on household poverty. Of particular interest is the ways in which these effects are conditioned by residential context, specifically the ethnic makeup of the neighborhood or village. The results show significant adverse effects of immigrant status and non-Thai ethnicity on household poverty. Immigrant households (headed by the foreign-born) are particularly underprivileged, compared to the non-Thai/native-born and the Thais. Effects are heightened for households that arrived recently and for households located in minority villages.

Keywords: *cross-border migration, ethnicity, poverty, assimilation, neighborhood context, KDSS*

[1] Institute for Population and Social Research, Mahidol University, Thailand. Email: aree.ude@mahidol.ac.th

[2] Carolina Population Center and Sociology Department, University of North Carolina at Chapel Hill, North Carolina, USA

The Kanchanaburi Demographic Surveillance System (KDSS) dataset upon which this paper is based is supported by the Wellcome Trust, UK.

Introduction

By far the wealthiest country in the Mekong region, Thailand attracts substantial inflows of migrants from neighboring countries (Pearson, 2004). Disparities in economic development and unevenness in the demographic transition as well as political instability and weak social support structures have led many people from Myanmar, Lao PDR and Cambodia to seek employment in Thailand (Ananta & Arifin, 2004; Hugo, 2004; Huguet & Punpuing, 2005; Tsai & Tsay, 2004). In many ways, these flows from other countries in Southeast Asia to Thailand resemble those from Mexico and other parts of Latin and South America to the United States, and flows from the Middle East and Africa to the European Union. Indeed, Thailand's GDP per capita exceeds GDP per capita in its neighboring countries by about the same multiple as GDP per capita in the US exceeds GDP per capita in Mexico (Bryant & Rukumnuaykit, 2007, p. 5).

Interestingly, in contrast to the US and the EU, Thailand is a country of origin as well as destination for cross-border migration. It is only recently that the flow of migrants into the country has balanced the outflow. Now the inflow exceeds the outflow. Although some migrants from neighboring countries arrived in Thailand long ago, numbers were small before the 1980s (Chantavanich, 1999; Iredale et al., 2003). Indeed, a major influx coincided with the rapid expansion of the Thai economy in the late 1980s and 1990s, when growth rates of almost 10 percent in GDP per capita per year were not unusual. The economic crisis of 1997 reversed these trends temporarily, but by 2001, previous levels of immigration were reached and the upward trend reestablished (Chantavanich, 1999).

Immigrants now constitute roughly four percent of Thailand's working age population (Bryant & Rukumnuaykit, 2007). In 2004, this included 1.3 million of them, among which 80 percent were from Myanmar, 10 percent from Cambodia, and another 10 percent from Laos (Fallavier et al., 2005; Huguet & Punpuing, 2005). These numbers refer to officially registered migrants. Thailand adopted an immigration policy for unskilled foreign workers in 1992, but the policy has been inconsistent and inconsistently enforced from year to year (Chantavanich, 2007, p. 2). The registration system enables migrants to legally work especially in sectors perceived to have a greater demand for workers such as agriculture, domestic work, construction, manufacturing, and fishing. However, substantial numbers of cross-border migrants choose not to register (Stern &Chantavanich, 2003) because the fees are burdensome and registration does not improve their situation (Asis, 2004, p. 221). In addition,

in some places, the registration system has been poorly publicized (Bryant & Rukumnuaykit, 2007, p. 7). The exact number of unauthorized migrants to Thailand is unknown. According to some estimates, it may be nearly equal to the number legally registered (Asis, 2004, p. 208), but according to others, considerably less (World Bank, 2006, p. 30). Unauthorized migrants are particularly vulnerable to exploitation and abuse (Amnesty International, 2005; Hanthamrongwit, 2007; Huguet & Punpuing, 2005; Punpuing et al., 2006; Pearson et al., 2006).

What are the economic costs and benefits of these cross-border migration streams? As is often the case, the picture is mixed. One study found that immigration had a negative effect on the wages of native born Thai workers, a concern voiced by the large majority (83%) of Thais (Bryant & Rukumnuaykit, 2007). Other research suggests that there may be losers and gainers among different groups of Thai workers. As is the case in many countries that receive large numbers of immigrants, the gainers are skilled workers who are complementary to immigrant labor, while the losers are the poor and unskilled native workers who must compete with immigrants and whose wages decline (World Bank, 2006). But what about the immigrants themselves? Despite the numbers and trends, little is known about the economic prospects of cross-border migrants in Thailand beyond case studies of specific industrial locations (e.g. Archavanitkul, 2004; Chamratrithirong, et al., 2005; Punpuing et al., 2006; Pearson et al., 2006). These case studies, which focus on migrant-segregated settings, on certain work sectors, and certain age groups (e.g., female immigrants working as domestics), are valuable, but need to be complemented by a broader view of both the immigrant and native-born populations. As Chantavanich (2007, p. 10) has observed: "With no awareness, Thailand has become an immigrant country with no comprehensive social planning to handle the numerous immigrants and their famil[ies]. It will require awareness, commitment and competency from the Thais to live harmoniously with the new strangers".

Objective

Our study uses data from the Kanchanaburi Demographic Surveillance System (KDSS) in 2004 to describe the economic situation of households headed by immigrants, ethnic minorities, and native-born Thais in a border province, Kanchanaburi. Kanchanaburi is approximately 100 kilometers west of Bangkok, the national capital, bordering Myanmar to the west and the north. Most immigrants are economic migrants from Myanmar, although the political situation in Myanmar has also contributed to the influx of Burmese migrants (Asis, 2004). The province is

an area of wide ecological variation ranging from densely settled lowlands to highlands that consist of both primary forest and areas cultivated by immigrants and Thai-born minority groups. Of particular interest is whether the connection between immigrant status and poverty depends also on community context. Clarifying how cross-border migrants generally fare in comparison to the local Thai community will facilitate the development of an efficient and humane system both in protecting labor migrants and in preparing Thais to live in harmony with migrants.

Theoretical Backdrop

To develop an understanding of the economic prospects of immigrants and ethnic groups in Thailand, this study weaves together two theoretical strands, one focused specifically on assimilation and the other more broadly on neighborhood effects. According to classical assimilation theory, whether measured in terms of length of stay or generation, the most recent immigrants will be at greatest risk of poverty. However, more recent formulations recognize that immigrant experience may vary depending on context. Drawing on theories about neighborhood effects, we hypothesize that the consequences of ethnicity and immigrant status for economic status may depend on the ethnic balance of the local communities in which they live. This section of this paper describes these ideas more fully.

Since at least the mid 1960s, assimilation theory has been the dominant theory used to explain how immigrants and their children become part of American society (Gordon, 1964; Alba & Nee, 1997). Indeed, the entire notion of assimilation is very much an American trope and early research on the topic almost entirely focused on the American experience. In its original formulation assimilation was viewed as a process through which immigrants acquire the customs and attitudes of other groups and through this shared experience become incorporated into a common cultural life (Gordon, 1964). Rejected by the social science community in the mid 1970s for its ideological and ethnocentric leanings, the theory resurfaced twenty years later in Alba & Nee's "new theory of assimilation" (1997; 2003), which recognizes that immigrants are influenced by host institutions and the social capital and networks of immigrants groups. In its new version, assimilation is defined as "the attenuation of distinctions based on ethnic origin" (Alba & Nee, 2003, p. 38). While classical assimilation theories consider assimilation to be part of the straight-line process of upward mobility for immigrants and their children, more recent conceptualizations do not view the incorporation process as inevitable, universal, or fixed.

To explain the diverse fortunes of immigrants and their children, Portes and Zhou (1993) propose the theory of segmented assimilation. According to segmented assimilation, three distinct adaptation patterns characterize immigrants and their children: 1) upward mobility and integration into middle class culture; 2) downward mobility and incorporation into the underclass; and 3) upward economic integration but the deliberate preservation of the immigrant community's culture and values. Both individual and contextual factors explain these divergent paths. Individual attributes may include human capital stock (education) and a host of other factors associated with exposure to the host society, including language ability, length of residence, and age upon arrival. There appears to be much more variability with regard to the contextual factors that influence assimilation, reflecting in the differences that characterize local communities, but at the very least research based in the US has documented the important influence of the quality of local schools, employment opportunities and place of residence in the assimilation process (Portes & Zhou, 1993:, Zhou, 1997; Hirschman, 2001).

Indeed, researchers have long suspected that where one lives makes a difference to one's well-being in addition to who one is (Mayer & Jencks, 1989; Sampson et al., 2002; Kawachi & Berkman, 2003; Entwisle, 2007). In this literature, neighborhoods have been variously conceptualized as local ecologies consisting of natural and built environments, catchment areas for various social and health services, markets of various sorts, and social contexts consisting of people with varying attributes, behaving in a variety of ways, and connected to one another (or not) in varying ways (Entwisle, 2007). They involve residents in social interactions that may provide social support, convey norms and expectations about behavior, and present examples of desired behavior and role models to emulate as well as exposing them to a set of associated opportunities and constraints. While neighborhood effects may be activated by physical contiguity, they depend on interaction patterns and social ecology (Sampson et al., 2002). Empirical evidence supporting the existence of neighborhood effects on economic, demographic, social, psychological, and health outcomes has been widely documented (Entwisle, 2007; Kawachi & Berkman, 2003; Sampson et al., 2002; Tienda, 1991).

From the standpoint of assimilation and economic incorporation, social ties that link international migrants to potential jobs or sources of information about jobs are likely to be particularly important. Migrants may access such ties in a number of ways, but one starting point is within their community of residence. Neighborhoods embedded in larger networks of information exchange, reaching well beyond the

boundaries of the neighborhood per se, are places that potentially offer migrants more opportunities for economic advancement (Korinek et al., 2005). One clue as to whether a neighborhood fits this description is its composition. Based on extensive interviews with international migrants, Asis (2004, p.220) reports that there is little interaction between them and local people. Residential contexts composed mainly of Thai nationals are more likely to facilitate the flow of information from the outside, including information about job opportunities, thereby facilitating the economic incorporation of migrants who live there. Opportunities and the flow of information are likely to be more constrained in residential contexts where ethnics and immigrants predominate, unless a fully functioning enclave has developed.

Neighborhood contexts thus may condition the pace and possibly even the direction of assimilation processes. In this study, we explore the application of these ideas to an ethnically diverse setting in Thailand, specifically Kanchanaburi Demographic Surveillance System (KDSS), assessing them as they apply to the economic prospects of cross-border migrant families, relative to the non-Thais who were born in Thailand and to Thai nationals. The characteristic of residential context that we are specifically interested in is ethnic composition. Most research on the incorporation of immigrants focuses on the United States or countries in the European Union. This study offers an important additional case for consideration in an increasingly interlinked global economy.

Approach

Study setting and data source

Our study focuses on Kanchanaburi, the largest of ten provinces lining the 1,800 kilometer border separating Myanmar and Thailand. The population of Kanchanaburi is ethnically heterogeneous, consisting of Thais, Burmese ethnics who have been living in the country, many of them for generations, and recent migrants, primarily from Myanmar. Kanchanaburi is a first point of arrival for many immigrants from Burma, authorized and unauthorized. Five of its 13 administrative districts border Myanmar: Sankhlaburi, Thongpapoom, Saiyok, Danmakamtia, and Meoung. The border is porous, with hundreds of points of entry that are very difficult to monitor (Ananta & Arafin, 2004, p. 18). According to a World Bank report (2006, p.27), fewer than 10 percent of migrants from Myanmar hold any legal documents when entering Thailand.

We use data from the Kanchanaburi Demographic Surveillance System (KDSS) in 2004 to address the questions of whether minority households are more likely to be poor, whether households headed by recent migrants are more likely to be poor, and whether the strength of these associations depends on the ethnic makeup of local communities. Starting in 2000, the KDSS has collected data from all households and household members living in 100 villages and urban communities throughout the 13 districts of Kanchanaburi. The survey includes documented and undocumented migrants from Myanmar, and because all residents in the selected villages and urban communities were interviewed, it provides excellent coverage of both groups. Specific questions about documentation status were not asked, however. The data for this study comes from the 2004 round of data collection, with some information also coming from the first round in 2000.

Measurements

Poverty, the key outcome of interest, is measured at the household level based on reported household assets (other than land). In the economic literature, poverty is often measured in terms of income or expenditures (Foreit & Schreiner, 2011). However, the KDSS does not collect reliable data on income or expenditures. As an alternative to income- or expenditures-based measures of poverty, we use a methodology developed by Filmer & Pritchet (2001) to measure living standards in rural settings and applied successfully in other research based in Thailand (e.g. Edmeades, 2008). We constructed an index based on a Principal Component Analysis (PCA) of eighteen household items: color TV, VCR/VCD, satellite dish, stereo, cell phone, land phone, computer, air conditioning, sewing machine, washing machine, microwave, refrigerator, bicycle, motorcycle, *itan* (multipurpose agricultural motor vehicle), car, pickup, and truck. Households are considered poor if they are in the bottom 40 percent (two bottom quintiles), middle if in the middle 40 percent (third and fourth quintiles), and rich if in the top 20 percent (fifth quintile) (Rutstein & Johnson, 2004). We use the index to identify the poorest 40 percent of households in the overall sample.

It should be noted that the assets-based wealth indices are sometimes criticized for their focus on spending behavior rather than true economic status (Thongthai, 2007). That said, the asset-based wealth index serves as good a proxy of household economic status as expenditures in a variety of studies (e.g. Filmer & Pritchet, 2001; Sahn & Stifel, 2003; Wagstaff & Watanabe, 2003).

Immigrant status is measured in terms of ethnicity and place of birth. The KDSS asks whether household heads are Thai or not; and if not, whether they were born in Thailand, or not. People of Burmese descent are the dominant minority group in Kanchanaburi Province by far[3], and some have been living there for decades, in some cases, for generations. Accordingly, we distinguish household heads who are ethnically Thai, of some other ethnicity but born in Thailand, or foreign-born[4]. Of 11,895 households included in the KDSS, approximately one in eight of the household heads reported being of non-Thai ethnicity, and among those around two-thirds are foreign-born.

Among the foreign-born, it would be ideal to know length of stay. Unfortunately, the dataset does not include direct information on this, but some indirect information is available on whether households were included in the first round of the survey (in 2000) or incorporated at some point afterwards. Since all households in the village or neighborhood are included in each round of the survey, it is straightforward to identify new ones. Those interviewed in 2000, the first round of the survey, have lived in the community for at least five years. Based on this logic, households not included in the first round must have arrived after 2000. This proxy for length of stay captures internal as well as cross-border migrants. We include an interaction between immigrant status of the household head and duration of stay in the village to test whether the effects of being an immigrant household vary with length of stay. Due to their greater cultural and linguistic distinctiveness, immigrants who entered the country recently may be more economically vulnerable than those in Thailand for a longer period.

Neighborhood of residence as well as immigrant status and ethnicity may affect poverty status, and in fact, based on segmented assimilation theory, we expect them to interact. However, it is not always so easy to bound neighborhoods (Entwisle, 2007), and in fact, depending on the outcome, different definitions may be relevant. Indeed, although a neighborhood embraces both social and spatial dimensions,

---

[3] Less than five percent of the work permits issued in 2004 in Kanchanaburi were to migrants from Lao PDR or Cambodia (World Bank 2006, p.35).

[4] An alternative way to identify immigrant status is to use the language spoken in the household, which is included in the household questionnaire. However, a drawback from using this information to identify immigration status is that some households headed by people of non-Thai ethnicity may use Thai language in daily speaking or vice versa. A significant proportion of households headed by non-Thais speak Thai, 39% for the Thai-born and 9% for the foreign-born. So, using ethnicity and country of birth better reflects migration status than using language spoken in the household.

frequently neighborhoods are operationalized in terms of census geography or administrative units. In urban areas, neighborhoods are typically defined in terms of census tracts, zip code areas, or other small units. In rural areas, they are often defined in terms of villages. The KDSS follows this precedent.

The KDSS is a stratified systematic sample of census blocks and villages. The urban sample consists of 14 census blocks, and also six villages with a significant proportion of the labor force employed in industries. The rural sample is divided into four strata depending on location and type of crops grown: rice-growing villages in lowland areas; cassava or sugar cane growing villages in lowland areas; upland villages; and mixed economy villages that do not fall into one of the above categories. As is true in many places in Thailand, many villages in Kanchanaburi are generally clusters of households surrounded by agricultural lands in which residents interact frequently, if not daily. Villages are administrative units which may change substantially over fairly short periods of time if the population of households is increasing, or potentially for other political reasons (Entwisle et al., 2008). Twenty villages were selected from each stratum, or census blocks in the case of the urban/semi-urban stratum.

In this particular setting, the local context we are interested in is whether the household is located in a non-Thai village or neighborhood. A "non-Thai" village is defined as one in which over half of the villagers are non-Thai. To capture the effects of village context, the main independent variable, migrant status of the household head, is then modified to take into account of whether the household is in a village where over half of the residents are non-Thais, henceforth called non-Thai village. According to data from the KDSS, most Thai households in Kanchanaburi DSS live in predominantly Thai villages and neighborhoods (97%). Thai-born minority households are equally likely to live in Thai and non-Thai places (53%). Foreign-born minority households are likely to live in non-Thai villages and neighborhoods (40%). As documented for villages in Northeast Thailand, the degree of homogeneity and social cohesion may vary (Entwisle et al., 2007), depending on many factors, including ethnicity.

Variables used as controls in the multivariate analyses include other characteristics of household head, i.e., age, sex, occupation, education of the household head, and household size, all of which may affect poverty status. Village characteristics in addition to ethnic composition may also be related to poverty, and it is important to also take them into account. The analysis thus controls for population size, percent

of households with telephone (cell phone or landline), percent (15+) in agriculture, percent (15+) unemployed, percent (15+) who have never been to school, and type of place (urban and rural, further distinguishing the latter according to location and type of agriculture). These variables are meant to reflect development level of the study villages.

Findings: Relative Poverty - Patterns and Determinants

Table 1 shows that, as anticipated, household economic status depends on immigrant status, ethnicity, and residential context. The proportion of households categorized as poor is higher for the foreign-born than for those born in Thailand, and among the latter, higher for non-Thais than Thais. Virtually all of the households with a foreign-born head are poor (96%). Among those born in Thailand, households with minority heads are twice as likely to be poor than those with Thai heads (72% and 33%). Whether foreign-born or not, minority households are much more likely to be poor (87% versus 33%). Poverty is also much more common in villages where minority households predominate (81% compared to 34%). These large differences and the possibility that they interact are the focus of our analysis.

Table 1: Characteristics of households and villages: KDSS 2004

Household characteristics		Household economic status		Total	N
		Poor	Not poor		
Immigration-related variables					
Immigrant status and ethnicity of household head					
Ethnicity	Place of Birth				
Thai	--	33.3	66.7	100.0	10,483
Non-Thai	Thailand	71.6	28.4	100.0	531
Non-Thai	Somewhere else	95.6	4.4	100.0	881
Residential context					
Village is ≥ 50% Non-Thai		80.7	19.3	100.0	1,515
Village is > 50% Thai		33.6	66.4	100.0	10,380
Length of stay					
Reside in village 5+ years		34.3	65.7	100.0	4,466
Reside in village < 5 years		48.5	51.5	100.0	7,429

Table 1 (Continued)

Household characteristics		Household economic status		Total	N
		Poor	Not poor		
Household Characteristics					
Characteristics of household head:					
Sex					
	Female	40.6	59.4	100.0	3,997
	Male	39.1	60.9	100.0	7,898
Age					
	< 35 years old	49.4	50.6	100.0	2,180
	35-59	34.3	65.7	100.0	7,019
	60+	45.4	54.6	100.0	2,696
Occupation					
	Agricultural	49.5	50.5	100.0	6,038
	Non-agricultural	29.4	70.6	100.0	5,857
Education					
	None	73.3	26.7	100.0	2,038
	Primary education	37.9	62.3	100.0	7,331
	Secondary education+	17.5	82.5	100.0	2,526
Household size					
< 5 persons		42.8	57.3	100.0	7,778
5-8 persons		33.9	66.1	100.0	3,735
9+ persons		31.7	68.3	100.0	382
Village Characteristics					
Type of place of residence (stratum)					
	Urban/semi-urban	17.0	83.0	100.0	2,366
	Rice-growing villages	36.1	63.9	100.0	1,992
	Cassava or sugar cane growing villages	38.8	61.2	100.0	1,894
	Mixed economy villages	28.2	71.8	100.0	2,502
	Upland villages	68.5	31.6	100.0	3,141
Population size		793	695	733.7	11,895
Percent aged 15+ in agriculture		37.1	30.2	33.0	11,895
Percent men 15+ unemployed		1.8	1.9	1.8	11,895
Percent household with a telephone		6.00	15.4	11.7	11,895
Percent aged 15+ with no schooling		23.0	11.9	16.3	11,895
Total		39.6	60.4	100.0	11,895

It is possible that other household characteristics explain the differences in poverty status between households with foreign-born, native-born ethnic, and native-born Thai heads. For instance, Table 1 shows dramatic differences according to the education of the household head, with very high levels of poverty among those with no education at all. Foreign-born and ethnic household heads are particularly likely to fall in this group. Table 1 also shows that half of the agricultural households are poor according to our measure, compared to less than a third of non-agricultural households. Foreign-born household heads are more likely to work in agriculture than Thai-born ones, in part because immigrants in Thailand are permitted, encouraged and even recruited, to work in agriculture. Finally, households in the village for less than five years are more likely to fall below the poverty line. Most of these are headed by Thai nationals, so differences by length of stay mostly reflect the experience of internal migrants rather than cross-border ones. By interacting length of stay by the immigrant status of the household head in the analysis below, we will be able to isolate the effect of recency specifically among the cross-border migrants. Almost two-thirds of the foreign-born household heads arrived after the beginning of fieldwork in 2000 (World Bank, 2006, p. 39).

Characteristics of villages in addition to ethnic composition may explain the observed differences in household poverty. As shown in Table 1, differences in poverty status are related to type of place of residence, with notably high levels in the uplands, where minority households are particularly likely to live. Poor households are also likely to be found in less developed villages, e.g. those characterized by a larger proportion never attending school, a larger proportion engaged in agriculture, and where only a small proportion of households have telephone.

Does the ethnicity and place of birth of the household head affect poverty status even controlling for these other characteristics? Table 2 presents results from a series of logit analyses focusing on the effects of ethnicity and place of birth of the household head on poverty (Model 1), successively adding other potentially relevant characteristics of the household, household head, and village (Model 2), whether the village is a minority village (Model 3), and whether the household has lived in the village for at least five years (Model 4).

Table 2: Logit model of household poverty: Effects of household and village characteristics (KDSS 2004)

Independent variables		Model 1		Model 2		Model 3		Model 4	
		Odds ratios	Robust S.E.	Odds ratio	Robust S.E.	Odds ratio	Robust S.E.	Odds ratio	Robust S.E.
Immigration-Related Variables									
Immigrant status and ethnicity of household head									
Ethnicity	Place of birth								
Thai	--	--	--	--	--	--	--	--	--
Non-Thai	Thailand	5.0	0.5***	1.8	0.2***	1.6	0.2***	1.6	0.2***
Non-Thai	Somewhere else	43.3	7.1***	13.2	2.4***	12.2	2.2***	11.2	2.0***
Residence in a non-Thai village						2.1	0.2***	2.1	0.2***
Length of stay 5+ years								0.6	0.0***
Household Characteristics									
Characteristics of household head									
Gender (female)				1.2	0.1***	1.2	0.1***	1.2	0.1***
Age									
<35 years old				--	--	--	--	--	--
35-59				0.5	0.0***	0.50	0.0***	0.6	0.0***
60+				0.9	0.1	0.91	0.1	1.0	0.1***
Occupation (agriculture)				1.5	0.1***	1.53	0.1***	1.6	0.1***
Education									
None				--	--	--	--	--	--
Primary				0.4	0.0***	0.4	0.0***	0.4	0.0***
Secondary or higher				0.2	0.0***	0.2	0.0***	0.2	0.0***
Household size									
<5 persons				--	--	--	--	--	--
5-8 persons				0.5	0.0***	0.5	0.0***	0.5	0.0***
9+ persons				0.3	0.0***	0.3	0.0***	0.0	0.0***
Village characteristics									
Type of place of residence (stratum)									
Urban/semi-urban				--	--	--	--	--	--
Rice-growing villages				1.1	0.1	1.1	0.1	1.2	0.1
Cassava or sugar growing villages				1.0	0.1	1.1	0.1	1.1	0.1
Mixed economy villages				0.8	0.1*	0.8	0.1*	0.8	0.1*
Upland villages				2.1	0.2***	1.8	0.2***	1.9	0.2***
Population size				1.0	0.0*	1.0	0.0*	1.0	0.0
Percent aged 15+ in agriculture				1.0	0.0***	1.0	0.0***	1.0	0.0***
Percent men 15+ unemployed				1.0	0.0	1.0	0.0	1.0	0.0
Percent household with a telephone				1.0	0.0**	1.0	0.0***	1.0	0.0**
Percent aged 15+ with no schooling				1.0	0.0***	1.0	0.0	1.0	0.0
-Log-likelihood		7146.3		6069.3		6042.9		5998.5	
N (households)		11,895							

**** Significant at the 0.001 level, ** Significant at the 0.01 level, * Significant at the 0.05 level*

In the absence of any controls, households whose heads were born outside of Thailand are 43 times as likely as those headed by Thai nationals to fall below the poverty line; Thai-born minority households are five times as likely to fall below the line. As other variables are added, the odds ratios narrow, implying that other household characteristics do partly explain the negative impacts of being a non-Thai. Being poor is associated with households whose heads are female, younger than 35, in agricultural sector, or with no education. Smaller households and those located in less developed villages and in rural areas, especially the uplands, are also more likely to be poor. Even controlling for other household and village characteristics relevant to poverty status, however, households with foreign-born heads are still 11 times as likely to be poor than those with Thai heads. Ethnic differences among those born in Thailand are much narrower, although still statistically significant. Being native-born reduces although it does not eliminate the unfavorable effects of non-Thai status.

As shown in Model 3 of Table 2, residence in a minority village is likely more than doubles to have the odds of falling below the poverty line, all else equal. Of particular interest to our study is whether village context conditions the deleterious effects of having a foreign-born or non-Thai head. To answer this, we interact ethnic composition with the ethnicity and place of birth of the household head in predicting the household poverty status. Table 3 presents the results.

As noted, households headed by non-Thais born in Thailand are more likely to fall below the poverty line than those headed by Thais. As Table 3 shows, this is mainly true for those living in predominantly non-Thai villages. Native-born ethnics living in non-Thai villages are 4.3 times as likely to be in poverty as Thais, whereas there is no difference between those living in predominantly Thai villages and Thais. Likewise, households with foreign born heads are more likely to be in poverty than Thais, but the strength of this effect depends importantly on residential context. Those living in predominantly Thai villages are 9.4 times as likely to fall below the poverty line as Thais, but those living in predominantly non-Thai villages are 31 times as likely to fall below the poverty line.

Table 3: Logit Model of household poverty: Conditional effects of village composition

Independent variables			Odds ratio	Robust S.E.
Immigration-related Variables				
Interaction of ethnicity, place of birth, and village composition				
Ethnicity	Place of birth	Village composition		
Thai	--	Thai	--	--
Thai	--	Non-Thai	1.9	0.2***
Non-Thai	Thailand	Thai	1.3	0.2
Non-Thai	Thailand	Non-Thai	4.3	0.8***
Non-Thai	Somewhere else	Thai	9.4	2.1***
Non-Thai	Somewhere else	Non-Thai	31.1	9.7***
Length of stay at least 5+ years			0.6	0.0***
Household Characteristics				
Characteristics of household head:				
Gender (female)			1.2	0.1***
Age				
<35 years old			--	--
35-59			0.6	0.0***
61+			1.0	0.1
Occupation (agriculture)			1.5	0.1***
Education				
None			--	--
Primary			0.4	0.0***
Secondary or higher			0.2	0.0***
Household size				
5 persons			--	--
5-8 persons			0.5	0.0***
9+ persons			0.3	0.0***
Village characteristics				
Type of place of residence (stratum)				
Urban/semi-urban			--	--
Rice-growing villages			1.2	0.1
Cassava or sugar growing villages			1.1	0.1

Table 3 (Continue)

Independent variables	Odds ratio	Robust S.E.
Mixed economy villages	0.8	0.1
Upland villages	2.0	0.2***
Population size	1.0	0.0
Percent aged 15+ in agriculture	1.0	0.0***
Percent men 15+ unemployed	1.0	0.0
Percent household with a telephone	1.0	0.0**
Percent aged 15+ with no schooling	1.0	0.0
Log-likelihood	5995.0	
N	11,895	

Finally, we consider whether the negative effects of having a foreign-born head depend on how long the household has been in the village. As shown in Tables 2 (Model 4) and 3, recent arrival almost doubles the odds of being in the bottom 40 percent who are poor. As Shown in Table 4, these effects are particularly pronounced for the foreign-born. Migrants arriving in the village recently are three times more likely to be in poverty than those arriving five or more years ago.

Table 4: Logit model of household poverty: Effects of length of stay for the foreign-born

Independent variables			Odds ratio	Robust S.E.
Immigration-related Variables				
Immigrant status, ethnicity, duration of residence				
Ethnicity	Place of birth	Duration		
Thai		--	0.2	0.0***
Non-Thai	Thailand	--	0.2	0.1***
Non-Thai	Somewhere else	< 5 yrs	2.9	1.0**
Non-Thai	Somewhere else	≥ 5 yrs	--	--
	Live in non-Thai village		2.1	0.2***
Log-likelihood			6038.2	
N			11,895	

Note: The model controls for all other variables included in Model 4 of Table 2.

Discussion and Implications

International migration has become an increasingly important factor in the demography of Southeast Asia (Hugo, 2004), with major implications for both sending and receiving societies and also for the migrants themselves. This study has examined immigration, ethnicity, and poverty status in Thailand, with particular reference to the situation in the Kanchanaburi DSS. The large majority of cross-border migrants in Kanchanaburi, authorized and unauthorized, come from the country of Myanmar, which borders Kanchanaburi Province. Further, among native-born ethnics living in the study setting, the large majority are of Burmese ancestry. In essence, then, by comparing the economic prospects of households headed by the foreign-born, native-born minorities, and Thai nationals, this study considers the relative effects of cross-border migration and ethnicity on household poverty. Of particular interest is the ways in which these effects are conditioned by residential context, specifically the ethnic makeup of the neighborhood or village. The results show significant adverse effects of immigrant status and non-Thai ethnicity on household poverty. Immigrant households (i.e., those headed by the foreign-born) are particularly underprivileged, compared to the non-Thai/native-born and to the Thais. Effects are heightened for households that arrived recently and for households located in minority villages.

The findings support aspects of classical and contemporary perspectives of assimilation theory and provide evidence supporting neighborhood effects. Length of residence and exposure to Thai society helps facilitate the assimilation of non-Thais. Additionally, living in a community in which Thais are the majority also facilitates economic incorporation. It is likely that villages where Thais are the majority are more economically developed than border villages where ethnics are concentrated. This is partly because border villages are more remote from the center of the province where most of services, employment and economic activities are located. It is also possible that Thai villages have more natural resources than non-Thai villages. Although we controlled for village characteristics related to economic development, it is possible that predominantly Thai villages provide better employment opportunities for migrants. It is also possible that through social comparison and probably learning mechanisms, those migrants living in Thai villages work harder to "catch up". By contrast, migrant households in non-Thai villages probably rely on their co-ethnics as a source of social capital and social comfort. They may feel less pressure to strive for a better living conditions because most people around are like them. Living in such a context, thus, may discourage the non-Thais to develop ties with non-co-ethnics which could help their economic fortunes.

These interpretations are only suggestive, however. Our study cannot speak to issues of causality or selectivity. Residential decisions are endogenous, potentially the product of assimilation as well as a facilitator of it. It may be that households that are faring well settle in neighborhoods and villages where Thai nationals predominate. It may be that only more affluent non-Thai households move to and live in such villages, while those in poorer conditions remain where the majority is non-Thai. A non-Thai household (migrant or native-born) that is less integrated (i.e., poor) may choose to live in a village with many other co-ethnic migrant households.

We should not be surprised to find that length of residence in Thailand and exposure to Thai society influences economic incorporation. Nonetheless, we can entertain alternative explanations as to why migrants who stay for a shorter period of time do less well in terms of economic outcomes. One is heterogeneity in the migration stream. There may be two types of migrants: settlers, who plan to stay for a long time or permanently; and sojourners, who only intend to stay for a short period and then return to their home country. Sojourners, less likely to be in the study area in 2000 at the beginning of the Kanchanaburi DSS, would be remitting to their family in Myanmar and thus have fewer assets in 2004. In contrast, the other group of settlers would retain more of their savings. This would produce the patterns we observe, even if 'settlers' do not assimilate at all. Our quantitative data cannot distinguish theses two types of migrants. Although we have a proxy for length of stay, we do not know intention to stay. Yet, our study provides a useful overview of migrants' living prospects by disentangling some conditions by which negative impacts of migrant status may be mitigated.

Although we cannot ignore possible selectivity in where people choose to live, the study supports the thesis that where people live is consequential for their welfare. Migrants who have stayed longer in Thailand or those non-Thais born in Thailand better adapt and better assimilate to the local Thais, at least in terms of economic outlook. Consistent with the segmented-assimilation theory and perspectives on neighborhood effects, negative effects of migrant status are conditioned by residential context. Both migrants and the native-born appear better off when they intermingle with local people. Residential context makes a difference for the economic prospects of households economic above and beyond individual and household characteristics. Whether the upward mobility of subsequent generations of migrants is really occurring in the context of Thailand, and through which mechanisms residential context has impacts on household economic status requires further research.

References

Archavanitkul, K. (2004). State of knowledge of migrant workers in Thailand & research that should be considered. Document number 1 of the Project for Improving Data on Undocumented Migrants. Supported by Thailand Research Fund.

Alba, R. & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *Internal Migration Review, 31*(4): 826-874.

Amnesty International. (2005). *Thailand: The plight of Burmese migrant workers*, AI Index: ASA, June, 2005.

Ananta, A. & Arifin, E. N.. (2004). Should Southeast Asian borders be opened? Pp. 1-27 in Aris Ananta and Evi Nurvidya Arifin (eds.), *International Migration in Southeast Asia*. Singapore: Institute of Southeast Asian Studies.

Asis, M. M. b. (2004). Borders, globalization and irregular migration in Southeast Asia. Pp. 199-227 in Aris Ananta and Evi Nurvidya Arifin (eds.), *International Migration in Southeast Asia*. Singapore: Institute of Southeast Asian Studies.

Berkman, L. F. & Clark, C. (2003). Neighborhood and networks: The construction of safe places and bridges. In *Neighborhood and Health.* Edited by Kawachi and Berkman. Oxford University Press.

Bryant, J. & Rukumnuaykit, P. (2007). labor migration in the greater Mekong sub-region: does immigration to Thailand reduce the wages of Thai workers. World Bank Working Paper 40889.

Chamratrithirong, A., Boonchalaksi, W., & Yampeka, P. (2005). Prevention of HIV/AIDs among migrant workers in Thailand (PHAMIT): The baseline survey 2004. Institute for Population and Social Research. Mahidol University. April, 2005.

Chantavanich, S. (1999). Thailand's responses to transnational migration during economic growth and economic downturn. *Sojourn* 14: 159-177.

Chantavanich, S. (2007). Factors affecting Thailand immigration policies during 1992-2004. Paper presented at the 2007 Conference on International Migration, Multi-local Livelihoods and Human Security: Perspectives from Europe, Asia and Africa, Institute of Social Studies, The Netherlands.

Edmeades, J. (2008). The legacies of context: Past and present influences on contraceptive choice in Nang Rong, Thailand. *Demography, 46*(2), 283-302.

Entwisle, B. (2007). Putting people into place. *Demography* 44: 687-703.

Entwisle, B., Faust, K., Rindfuss, R. R., & Kaneda, T. 2007. Networks and contexts: Variation in the structure of social ties. *American Journal of Sociology,* 112:1495-1533.

Entwisle, B., Edmeades, J., Malanson, G., Podhisita, C., Prasartkul P., Rindfuss, R. R., & Walsh, S. J. (2008). Village settlement, deforestation, and the expansion of agriculture in a frontier region: Nang Rong, Thailand. Wendy Jepson and Andrea Millington (eds.), *Changing Countrysides: Dynamics of land modification in the tropics*. Springer.

Fallavier, P. Y., Revenga, A., & de Paz Nieves, C. (2005). Greater Mekong Sub-region labor migration program: Impacts and regulation of labor migration in the GMS. A concept paper. East Asia Human Development Sector, World Bank.

Filmer, D. & Pritchet, L. H. (2001). Estimating wealth effects without expenditure data-or tears: An application to educational enrolments in states of India. *Demography. 38*(1). (Feb., 2001), pp. 115-132.

Foreit, K., Fleischman, G. & Schreiner, M. (2011). Comparing alternative measures of poverty: assets-based wealth index vs. Expenditures-based poverty score. MEASURE Evaluation PRH. Working Paper Series. www.cpc.unc.edu/measure/publications/WP.../d.

Gordon, Milton. (1964). Assimilation in American life: the role of race, religion, and nationals of origin. New York: Oxford University Press.

Hanthamrongwit, J. (2007). We are migrant, but alien workers, guys! http://www.prachathai.com/English/news.php?id=25), on Nov. 20, 2007.

Hirschman, Ch. (2001). The educational environment of immigrant youth: a test of the segmented assimilation hypothesis. *Demography, 38*(3): 317-336.

Hugo, G. (2004). International migration in Southeast Asia since World War II." Pp. 28-70 in Aris Ananta and Evi Nurvidya Arifin (eds.), *International Migration in Southeast Asia*. Singapore: Institute of Southeast Asian Studies.

Huguet, J. & Punpuing, S. (2005). *International Migration in Thailand*, International Organization for Migration, Regional Office Bangkok, Thailand, 2005, p.5.

Iredale, R, Hawksely, C., & Castles, S. (Eds). (2003). *Migration in the Asia pacific: population, settlement and citizenship issues.* Northampton, MA: Edward Elgar Publishing, Inc.

Kawachi, I. and & Berkman, L. F. (2003) (editors). *Neighborhoods and health.* Oxford University Press.

Korinek, K., Entwisle, B. & Jampaklay, A. (2005). Through thick and thin: layers of social ties and urban settlement among Thai migrants. *American Sociological Review,* 70:779-800.

Mayer, Susan and Christopher Jencks. (1989). Poverty and the distribution of material hardship. *Journal of Human Resources, 24*(1), (Winter, 1989). 88-114.

Pearson, E. (2004). Vulnerable workplaces: a conceptual framework to understand the destination factors concerning trafficking of children and young women in the mekong. A report for ILO/IPEC Mekong sub-region project to combat trafficking in children and women.

Pearson, E., Punpuing, S. Jampaklay, A. Kittisuksatit, S. & Phrommo, A. (2006). Underpaid, overworked, and overlooked: The realities of young migrants workers in Thailand. Volume 1. International Labor Organization. 2006.

Portes, A. & Zhou, M. (1993). The new second generation: segmented assimilation and its variants. *Annals of the American Academy of Political and Social Sciences,* 530: 74-96

Punpuing, S., Jampaklay, A., Kittisuksatit, S. Phrommo, A., & Pearson, E. (2006). Underpaid, overworked, and overlooked: the realities of young migrants workers in Thailand. Volume 2. International Labor Organization. 2006.

Sampson, R. J., Morenoff, J. D. & Gannon-Rowley, T. (2002). Assessing 'neighborhood effects': social processes and new directions in research. *Annual Review of Sociology* 28:443-478.

Rutstein, S. O. & Johnson, K. (2004). *The DHS wealth index, DHS comparative reports No. 6*, Calverton, MD: ORC Macro.

Sahn D.E., Stifel, D. (2003). Exploring alternative measures of welfare in the absence of expenditure data. *Rev Income Wealth, 49*(4):463-489.

Stern, A. & Chantavanich, S. (2003). Thailand's immigration and emigration: A legal overview." Pp. 247-258 in Robyn R. Iredale, Charles Hawksley, and Stephen Castles (eds.), *Migration in the Asia Pacific: Population, Settlement and Citizenship Issues*. Northampton, MA: Edward Elgar Publishing, Inc.

Tienda, M. (1991). Poor people and poor places? Deciphering neighborhood effects on poverty outcomes. Pp. 244-262 in Joan Huber (ed.), *Macro-Micro Linkages in Sociology*. Newbury Park, Ca: SAGE Publications

Thongthai, V. (2007). Do household asset measure household economic status? A proceeding paper in *Thailand Population Association Conference, 2007.* Pp. 299-310. (in Thai)

Tsai, P.-L. & Tsay C.-L. (2004). Foreign direct investment and international labour migration in economic development: Indonesia, Malaysia, Philippines and Thailand. Pp. 94-136 in Aris Ananta and Evi Nurvidya Arifin (eds.), *International Migration in Southeast Asia*. Singapore: Institute of Southeast Asian Studies.

Wagstaff A. & Watanabe N. (2003). What difference does the choice of SES make in health-inequality measurement? *Health Econ, 12*(10): 885-890.

World Bank. (2006). Labor migration in the greater Mekong sub-region – Synthesis Report: Phase I." Working paper 40773.

Zhou, Min. (1997). Growing up American: The challenge confronting immigrant children and children of immigrants. *Annual Reviews of Sociology.* 1997, 23:63–95.