

## **Return Migration During Armed Conflict**

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### **Abstract**

This article investigates return migration during armed conflict. Contrary to popular assumption that people do not return migrate to a conflict zone, we use detailed survey data from the Chitwan Valley of Nepal to document extensive return migration throughout the conflict period. We then investigate how specific conflict events as well as demographic and social characteristics of respondents and their households influence return migration. Findings suggest that conflict events depress return migration and that there are learning processes, whereby patterns of behavior change from earlier to later instances of a specific kind of event. Results also indicate that demographic and social characteristics influence return migration during armed conflict in the same way that they do during periods of relative peace. This suggests that motivations for migration and return are more complex than a simple escape from violence.

## Introduction

The royal triad of demography—fertility, mortality, and migration—have long been identified as the processes that determine population growth, size, and distribution. As such, all three have long been studied, creating a strong theoretical and empirical literature. Unlike fertility, where births happen and cannot be undone, and mortality, where deaths happen and unfortunately cannot be undone, migration is a multi-step process, where people can migrate, then they can choose to stay in a destination, move to another destination, or return to their original residence. As part of the migration process, each of these steps plays a role in determining population growth, size, and distribution. However, to date there has been scarce quantitative study of return and second migration, leaving a gaping hole in our knowledge of population change and distribution. There are few quantitative empirical results and no apparent theoretical frameworks to explain return migration, to the best of our knowledge. In this regard, with this paper we contribute a theoretical and empirical analysis of return migration to the demographic literature.

Our specific focus is return migration during armed conflict, about which there is even less understanding than return migration in general. Given common language about refugees fleeing conflict due to fears of persecution, it is all too easy to believe that people do not return until a conflict has ended. This simple assumption is probably the reason that there is almost no literature on this subject, yet at the same time, it is wholly untrue. People routinely return migrate to areas undergoing armed conflict (citations). We begin from this fact

Our aim is to investigate which factors affect return migration during armed conflict and begin to develop theoretical understandings of the mechanisms behind these patterns. We examine how conflict related events as well as individual, household, and community characteristics influence return migration during conflict. We draw on existing out-migration theories (citations) as well as the event centered approach for studying responses to armed conflict (citation).

This study uses the case of Chitwan Nepal during the recent Maoist-Government conflict from 1996-2006. We find that conflict related events have negative effects on return migration. Perhaps more interesting, we find that individual, household, and community characteristics influence return migration in a manner consistent with existing migration theory. In other words, even during an armed conflict, standard economic and social considerations appear to be key factors in the return migration decision. Although our empirical results are valid only within the small area of Chitwan Nepal, they support broader theories that could well relate to other geographic areas as well. Further research is certainly warranted on this subject.

## Theoretical Background

[Figure 1 in this section. Shows that many people return migrated during the Nepal conflict.]

\* Note- Full theoretical section to be added. Below is an outline.

- Assumption that no one returns
  - o  $\rightarrow$  0 migration during conflict
- Assumption that conflict is the only thing that affects migration during a conflict period
  - o  $\rightarrow$  other (economic and social) influences on migration will be 0 (ie not statistically significant)
- Except we find return migration (as shown in Figure 1 for Nepal), so there is a need to develop better theory

- We use micro-level event-centered approach (cite Williams et al. 2012 in *Demography* article)-
  - o Conflicts are comprised of a series of events
  - o Different kinds of events mean different things to people, and thus result in different behaviors
  - o Important to look at individual characteristics as these influence behavioral responses
- Responses to conflict events
  - o Decreased return after violent events
  - o Decreased after unstable political events
  - o What about ceasefires?
  - o Theoretical contribution of this study- we expect learning- even for a specific kind of event, people change their responsive behaviors over time. some events are worse than ppl thought, so effects more negative with time, some less bad than thought, so effects less negative with time
- 2<sup>nd</sup> theoretical contribution of this study- Other factors in the return migration decision- Economic and social factors will matter, same as during periods of relative peace- because people still need to make a living and social norms still matter.

### **Setting**

Our empirical analysis is based on survey data from the western Chitwan Valley of south-central Nepal during the armed conflict of 1996-2006. The administrative district of Chitwan borders India and is about 100 miles from Kathmandu. As shown in Figure 2, there is one large city, Narayanghat, and the rest of Chitwan's population, like much of Nepal, lives in small, rural villages. The valley is dominated by agriculture with about 80% of households using farming as their primary livelihood in 1996. From Narayanghat moving south-west, the study area is progressively more rural, poorer, and less involved in market agriculture.

[Figure 2 about here.]

Migration has long been a common livelihood strategy to supplement regular farm incomes in Chitwan and continued to be common and mostly short-term during the armed conflict period (Kollmair et al. 2006; Thieme and Wyss 2005). The short-term nature of much of Nepali migration means there is a significant amount of return- as well as out-migration. Nepal and India share an open border, so international migration to India, in addition to domestic migration, was common (Bohra and Massey). Evidence shows that men have always been more likely to migrate than women and that migration rates are lower among the married and people with children (Massey et al. 2010; Williams 2009).

The armed conflict began in 1996 when the Communist Party of Nepal (Maoist) made a declaration of war with the intention to unseat the monarchy and install a people's republic. The early stages of the conflict were contained primarily in several midwestern districts and involved damage to government installations. From mid-2000, however, the Maoists progressively expanded their campaign across the country, including to Chitwan, and the Nepalese government responded by creating a special armed force to fight the Maoists. In 2006, the government and Maoists signed a comprehensive peace agreement declaring an end to the conflict.

The conflict was staged mainly as a guerrilla war. With no true "frontline," it was largely unknown where fighting would break out, and civilians were often caught up in violence. Reported violent acts by the Maoists and government forces against civilians include torture,

assassinations, bombings, gun fights, abductions, forced conscription, billeting, taxing, and general strikes (Hutt 2004; Pettigrew 2004; South Asia Terrorism Portal 2006). Reports indicate that during gun battles, nearby civilians were used as human shields and forced to clear dead and wounded persons. Bomb blasts, which were smaller events than gun battles, were more frequent, occurring almost every month from mid-2003 until early 2006. Although frequent, bomb blasts generally had little destructive power, as most bombs were small homemade devices, made in pipes, soda bottles, or pressure cookers.

A variety of political events also characterized this conflict, including states of emergency, ceasefires, depositions of the prime minister, and multiple nationwide strikes and protests that severely affected the day-to-day life of the general population and spread considerable unrest and fear nationwide. Specifically, the government called a nationwide State of Emergency and instituted martial law twice. These periods were marked by suspension of rights such as freedom of movement and assembly, political and human rights leaders and journalists were arbitrarily arrested, and communication links within the country and the outside world were severely curtailed (International Federation of Journalists 2005). There were three ceasefires during the entire conflict period. The first several months of each ceasefire were characterized by peace, as agreed by both belligerent parties. However, the last month or two of each ceasefire witnessed progressive breakdowns in peace talks and renewed and often intense fighting leading to the ultimate collapse of ceasefire agreements.

Figure 3 shows a timeline of the conflict and the violent and political events in the Chitwan Valley and surrounding areas. As you can see, there were relatively low levels of violence and political upheaval from 2002. This increases in 2003 through mid-2005, which was the height of the conflict. Evidence suggests that both violent and political events had significant influences on residents' marriage, contraception, and migration behaviors (Williams et al. 2012b).

[Figure 3 about here.]

The Chitwan context provides an ideal case example to investigate return migration during armed conflict for several reasons. First, the generally poor living conditions of the population and moderately intense violence in Nepal make this case study comparable to many of the on-going, moderately intense, intrastate conflicts around the world today. Indeed, intrastate conflicts to which Nepal's compares together comprise about 90% of recent armed conflicts (Mack 2002). Second, this area has high rates of out-migration, similar to many other rural areas around the world. High rates of people leaving create relatively large numbers of migrants that form a sample for our study of return and make statistical analysis appropriate. Third, this area is the location of the Chitwan Valley Family Study (CVFS), a detailed, prospective survey of individual lives and behaviors. This study is unique in that it covers the period of time from three years before the conflict began, through the six years of the violence. The CVFS, combined with detailed records of conflict-related events, offers an unprecedented opportunity to investigate the conduct of conflict and individual behaviors.

## **Data and Measures**

Our data come from several sources—individual survey data from the CVFS, event records from the South Asia Terrorism Portal (SATP) and other news and institutional sources, and ethnographic fieldwork. The CVFS is a large-scale multidisciplinary study designed to investigate the impact of macro-level socioeconomic changes on individual behavior (Axinn, Barber, and Ghimire 1997; Axinn, Pearce, and Ghimire 1999; Barber et al. 1997). It includes

interviews that were collected in the end of 1996 and a prospective demographic event registry that was collected monthly beginning in 1997.

The prospective event registry is the source of our return migration data, providing exceptionally precise records of each of these behaviors. The registry includes 151 neighborhoods that were selected with an equal probability, systematic sample. All individuals between the ages of 15 and 59 and their spouses within these neighborhoods were included in the survey. At 97% of the original sample, the response rates are exceptional.

SATP, our source for records of violent events, is an India-based NGO that compiles records of all violent events in Nepal. Records include the date and place of each bomb blast, major gun battle, and abduction and were corroborated with CVFS staff resident in the area throughout the conflict. Measures of political events are compiled from major English and Nepali news media, and situation reports of non-governmental organizations in Nepal.

## Measures

**Return migration.** Our measure of return migration comes from the CVFS prospective demographic event registry and is time-varying on a monthly basis. To be considered a migrant (and thus exposed to the risk of return migration), a respondent must have been absent from their original 1996 residence for at least one month. At the time of survey, if a household resident was reported as being a migrant, their destination was also recorded as domestic or international<sup>1</sup>. Table 1 presents descriptive statistics for the return migration and all other measures used in this study.

[Table 1 about here.]

**Violent events.** We use two measures of violent conflict-related events: major gun battles and bomb blasts. Gun battles are major events that involved multiple people, multiple fatalities, and were likely to be known about by the general population. With an average of 31 fatalities per major gun battle in Nepal and reports of civilians being used as human shields, these events created high levels of fear in the general population.

SATP provides records of the date and place of each major gun battle in Nepal. The data cover 51 months, from November 2001 through January 2006. Data from the CVFS indicate there were no major gun battles in the study area before November 2001. We create a measure of the number of major gun battles per month in the local area. The local area that can influence Chitwan residents' perceptions of threat is defined as Chitwan and the six neighboring districts (Nawalparasi, Tanahu, Gorkha, Dhading, Makwanpur, and Parsa). These districts are small, more comparable to U.S. counties than states. The combined area of these seven districts is approximately the same as Connecticut, one of the smallest U.S. states.

We also investigate the influence of bomb blasts, which were threatening, but not as dangerous as major gun battles. Bombs in this context were small devices, often made of soda bottles, pipes, or pressure cookers, with relatively little destructive power, injuring or killing an average of three people per blast (South Asia Terrorism Portal 2006). Similar to gun battles, we create a measure of the number of bomb blasts per month in the local area.

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<sup>1</sup> In many cases (see Table 1), destination records are missing. In these cases, the respondent was most likely at an international destination. Throughout the study, CVFS tracked down domestic migrants for interviews. Thus, if a migrant lived in a domestic location, the CVFS staff would most likely know from their tracking efforts and the destination would most likely be recorded as such. By process of elimination, we now have a fairly strong assumption that any migrant with missing destination data was an international migrant.

**Political events.** We use official periods of State of Emergency as a measure of political instability. These are nationwide events of which there were two, the first from November 2001 – August 2002 and the second from February – April 2005. State of Emergency periods were marked martial law, suspension of rights such as freedom of movement and assembly, political and human rights leaders and journalists were arbitrarily arrested, and communication links within the country and the outside world were severely curtailed (International Federation of Journalists 2005). Our measure for States of Emergency is dichotomous, coded ‘1’ in any month where there was an official State of Emergency.

We also use ceasefires as a measure of political instability. There were three ceasefires during the entire conflict period. The first several months of each ceasefire were characterized by peace, as agreed by both belligerent parties. However, the last month or two of each ceasefire witnessed progressive breakdowns in peace talks and renewed and often intense fighting leading to the ultimate collapse of ceasefire agreements. Ceasefires are measured with a dichotomous variable similar to States of Emergency.

**Demographic and social characteristics.** We include in our models measures of a variety of individual and household characteristics that have been shown to significantly affect migration in this and other settings (Bohra and Massey 2009; Donato 1993; Harris and Todaro 1970; Massey 1990; Massey and Espinosa 1997; Massey et al. 2010; Pedraza 1991; Stark and Bloom 1985; Stark and Taylor 1991; VanWey 2005; Williams 2009). Here we are forced to rely on evidence and theory from the migration literature as there is very little research on return migration. We use measures for age, educational attainment, number of children, and marital status that are time-varying by the month. Indicators for gender, high caste, and distance to an urban area are not time-varying. Measures of household assets were measured in 2001 and include the natural log of the amount of land owned, and a weighted index of housing quality (number of stories and material used in the floor, wall, and roof) and luxury assets (tractors, motorcycles, and flushable toilets).

**Time.** For the study of armed conflict, which as we have discussed is a series of events over time, the measurement of time is complex and extremely important. From 2001, the intensity of the conflict increased through 2005, with later years experiencing more political and violent events. Progressive changes in the economy also characterize this period in addition to temporal variances in weather. Thus including no control for time risks conflating behavioral responses to the specific events we are examining with all other aspects of the conflict and any other temporally varying changes throughout the time period.

We use a fixed effects approach to control for time. We include in all models a series of dichotomous variables for each half year throughout the study period. While a fixed control for each month would be the most conservative approach, it would also overspecify the model and subsume the monthly variances in violent and political events that we are investigating. As such, we use half years as the next most conservative option.

### **Analytic Strategy**

We use discrete-time event history models with logistic regression equations to predict any return migration to the Chitwan Valley during the study period in any given month. This study is of any return migration, as opposed to first return migration, meaning that if a person return migrates, then out-migrates again, they are again exposed to the risk of return migration and contribute person-months to our sample. Person-months are the unit of exposure to risk. The models test the monthly hazard of return migration, contingent upon violent and political events

and various control measures. We lag all time-varying measures (including violent and political events) by one month in order to assure that the outcomes we measure occurred chronologically after the event. For example, the models test the effect of a major gun battle in April on return migration in May. Thus this is an examination of the immediate effects of conflict events on demographic behaviors.

## **Results**

### *Individual Characteristics*

Estimates for the socio-demographic measures are consistent with our expectations. As shown in Table 2, the influence of gender, age, children ever born, caste, land ownership, household quality, and distance to Narayanghat are all positive and significant. Though only marginally significant, the estimate for gender shows that being a woman slightly increases the odds of return migrating by 1.08 compared to men. As age increases, the odds of return migrating increase. However, the magnitude of this effect is functionally small, rounding to just above 1.00. The number of children ever born increases the odds of return by 1.09. Likewise, being high caste or high status also increases the odds of return by 1.09 compared to being low caste or low status. Increasing the log amount of land owned increases the odds of return by 1.05. Additionally, as the count of positive household quality indicators increases, the odds of return migrating increases by 1.05, though this effect marginally decreases as quality increases. Lastly, as distance from the nearest urban center, Narayanghat, increases, the odds of return increase by 1.01.

[Table 2 about here.]

In contrast, the influence of months away since out-migrating, education, and marital status are negative, though only time away is significant and education only marginally so. So as the number of months away since out-migrating increases and as the years of completed education increase, the odds of return decrease by 0.94 and 0.99, respectively.

\* Note- We intend to add a discussion here about how these effects are consistent with what would be expected in periods of relative peace, based on theories relating economic and social factors to return migration decision-making. This is important, perhaps even more important that the results for conflict related events, because it suggests that these patterns continue during periods of conflict. It is often assumed that the conflict is the only important decision making factor during a conflict, but here we show evidence that economics and social norms remain key factors as well.

### *Conflict-Related Events*

We find strong results for conflict-related events. As the number of gun battles experienced since the beginning of conflict increases, the odds of return decrease by 0.78. However, the squared term shows that the marginal effect of gun battles is positive, so the negative effect of gun battles on the odds of return migrating becomes less powerful as the number of gun battles increases. We find a similar relationship for bomb blasts and states of emergency. As the number of bomb blasts increases, the odds of return migrating decrease by 0.97, though the marginal effect of this decreases with increases in the number of bomb blasts experienced since the beginning of conflict. For states of emergency, we find that the first declared state of emergency decreased the odds of return migrating by 0.64, but by the time of the second declared state of emergency, the odds of return actually increased to 1.05.

The case of ceasefires is somewhat different. After the first ceasefire, the odds of return migrating decreased by 0.79. After the second, the odds decreased even further by 0.67. By the third ceasefire, the odds level out and remain the same as the preceding ceasefire period.

\* Note- we intend to add more to this results section, to discuss the effects of all conflict events, as shown in Model 2. Then we will progress to more discussion of how the effects of these events change over time, which is shown in Model 3, Table 2.

## **Conclusion**

TO BE ADDED

## References

## Tables and Figures

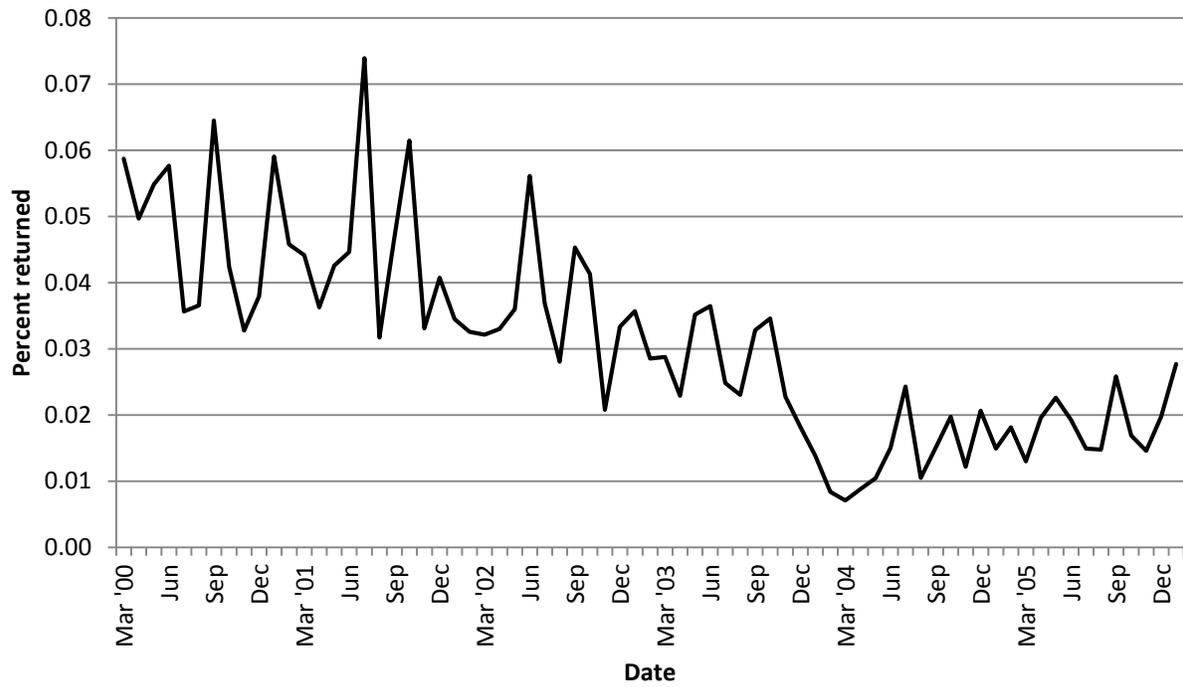


Figure 1. Percent of migrants from Chitwan Valley Family Study who returned to the Chitwan Valley each month.

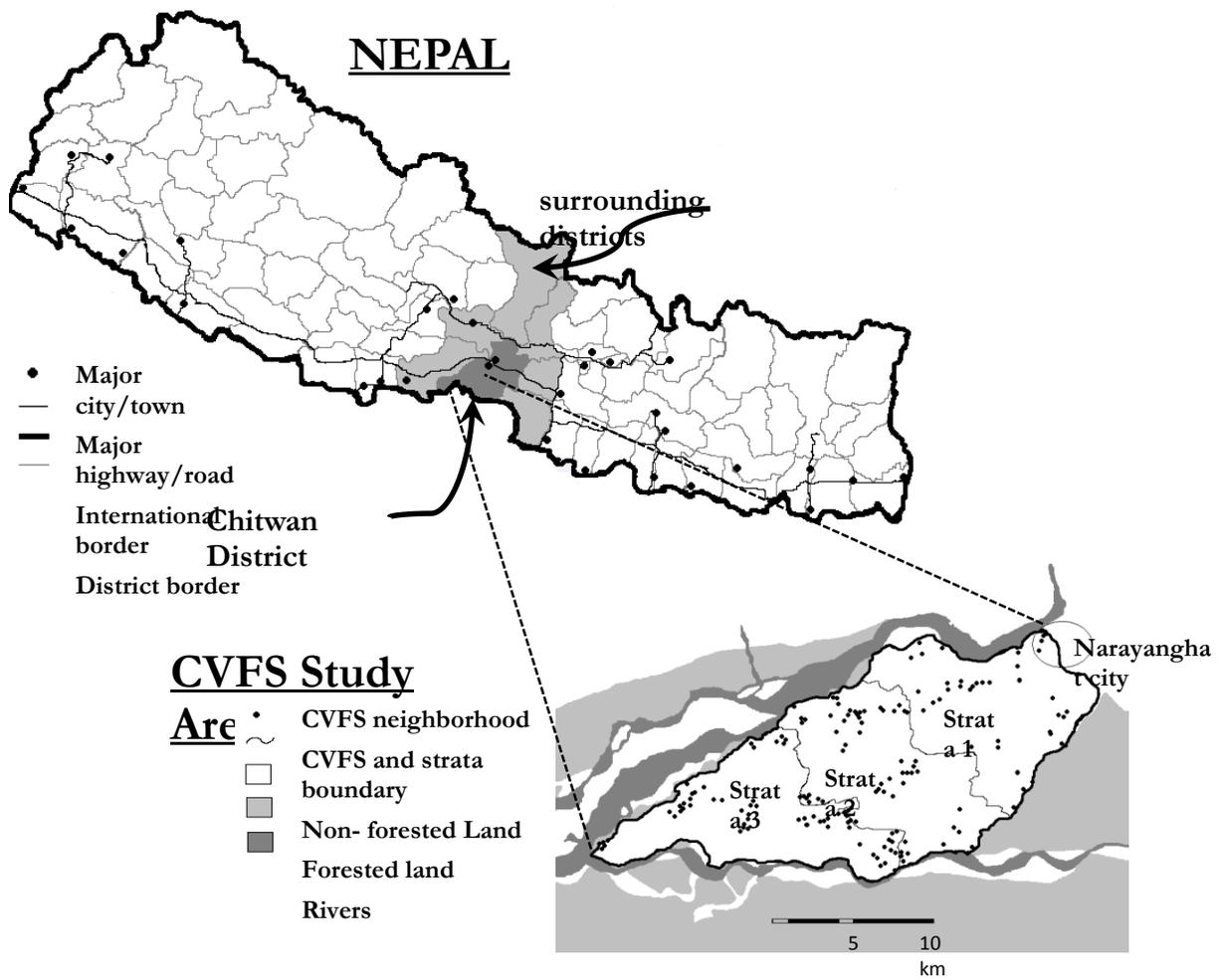


Figure 2. Map of Nepal and Chitwan Valley Family Study area.

FIGURE 3 TO BE ADDED

Figure 3. Timeline of violent and political events in Chitwan, Nepal 2000-2006

Table 1. Descriptive statistics of the CVFS sample.

TABLE 1 TO BE ADDED

Table 2. Logistic regression results from event history models of return migration to Chitwan Nepal.

	<b>Model 1 Baseline</b>	<b>Model 2 Conflict events</b>	<b>Model 3 Conflict events, change over time</b>
Number of gun battles last month		0.92 * (2.05)	
Number of gun battles ever			0.78 *** (3.07)
Number of gun battles ever, squared			1.01 * (1.93)
Number of bomb blasts last month		0.95 *** (3.09)	
Number of bomb blasts ever			0.97 ** (2.73)
Number of bomb blasts ever, squared			1.00 *** (3.61)
Ceasefire last month		0.74 *** (4.30)	
First ceasefire			0.79 ** (2.36)
Second ceasefire			0.67 *** (3.11)
Third ceasefire			0.67 ** (2.56)
State of emergency		0.74 *** (4.10)	
First state of emergency			0.65 *** (4.94)
Second state of emergency			1.05 (0.26)
International migrant	3.18 *** (18.81)	3.19 *** (18.85)	3.19 *** (18.85)
Number of months away this migration	0.94 *** (39.25)	0.94 *** (39.06)	0.94 *** (39.12)
Gender	1.08 * (1.84)	1.08 * (1.77)	1.08 * (1.76)
Age	1.01 * (2.14)	1.01 * (2.04)	1.01 * (2.04)
Education	0.99 * (1.72)	0.99 * (1.67)	0.99 * (1.68)
Number of children	1.09 *** (7.53)	1.09 *** (7.53)	1.09 *** (7.55)
Married	0.99 (0.06)	0.99 (0.10)	0.99 (0.10)
High caste	1.08 * (1.97)	1.09 * (2.02)	1.09 * (2.03)
Ln number of kattha land	1.06 ** (3.05)	1.05 ** (3.01)	1.06 ** (3.03)
House and durable goods index	1.05 ** (2.63)	1.04 ** (2.58)	1.05 ** (2.61)

House and durable goods index, squared	1.00 * (2.30)	1.00 * (2.26)	1.00 * (2.30)
Distance to Narayanghat	1.01 ** (2.43)	1.01 ** (2.43)	1.01 ** (2.43)
Sept 2000 – Feb 2001	1.07 (0.87)	1.07 (0.87)	1.07 (0.86)
Mar – Aug 2001	1.12 ^ (1.31)	1.16 * (1.70)	1.15 ^ (1.61)
Sept 2001 – Feb 2002	1.05 (0.52)	1.44 *** (3.42)	1.45 *** (3.09)
Mar – Aug 2002	0.98 (0.19)	1.32 ** (2.45)	1.52 *** (3.47)
Sept 2002 – Feb 2003	0.97 (0.33)	1.04 (0.40)	1.22 * (2.02)
Mar – Aug 2003	0.87 ^ (1.55)	0.94 (0.63)	1.27 * (1.95)
Sept 2003 – Feb 2004	0.67 *** (4.06)	1.11 (0.81)	1.92 *** (3.42)
Mar – Aug 2004	0.44 *** (7.40)	0.61 *** (3.45)	2.95 ** (2.72)
Sept 2004 – Feb 2005	0.65 *** (4.22)	0.80 * (1.88)	2.44 * (1.83)
Mar – Aug 2005	0.67 *** (3.92)	0.87 (1.27)	1.82 (1.04)
Sept 2005 – Jan 2006	0.82 * (1.99)	1.08 (0.67)	2.37 ^ (1.41)
-2 log likelihood	24091	24044.3	24019.2