Labor Adaptation of the Internally Displaced Population

Maria Aysa-Lastra
Florida International University

In this paper I investigate the labor market performance of internally displaced persons into urban labor markets relative to voluntary migrants and non-migrants. The analysis is based on retrospective labor and migration histories of economic, tied and forced migrants and non-migrants in Bogotá. Economic migrants are considered positive self-selected. Therefore, their participation in the urban labor market is expected to be higher than in the case of tied or forced migrants. Forced migrants are expected to show low probabilities of employment after displacement. The experience of internally displaced population in other countries suggests that the participation of forced migrants in informal activities is very high due to the low rates of formal employment and their need to generate income for family support. The data set used in this analysis allows descriptions of labor patters at different points in migration histories. The analysis is divided in three parts. First, description of the occupational and land tenure profiles of forced, tied and voluntary migrant population in the place of origin. Second, cross sectional descriptive analysis of unemployment and occupation profiles in Bogotá at the time of the survey. Third, estimation of the probability of being employed in different occupations at any point in time controlling for personal characteristics, time-specific migration experience and area of residence –rural/urban in the department they were living in a given year. The results show that employment probabilities of economic and forced migrants are different in Bogotá and in other places.

Migrant Labor Adaptation

Patterns of immigrant labor adaptation have been widely studied. Research had shown that recent immigrants tend to experience downward occupational mobility relative to their position at origin (Borjas, Bronars and Trejo 1992; Borjas and Tienda 1993; Chiswick 1978, 1999; Chiswick, Cohen and Zach 1997; McAllister 1995; Yamauchi 2004). A variety of factors explain this pattern. Immigrant skills may not be perfectly transferable between origin and destination. Immigrants usually lack labor market information. They might face entry barriers in employments that require credentials or certifications, particularly in urban labor market and specialized occupations. Immigrants might have lower levels of human capital compared to the native population. In addition, the process of migration might be considered as disruptive event in a working career. Other factors to consider are the role of asymmetric information and immigrant discrimination. Moreover, initial low labor market performance is suggested to be explained by distance moved and economic conditions at destination labor market in the case of internal migrants (Borjas et al. 1992).

These studies have also explored that the initial relative labor migrant disadvantage is overcome over time. The patterns of labor adaptation (measured in earnings, or occupational mobility) show a U shape: starting at the origin, there is a decline in the probability of employment or occupational mobility associated with migration, but as immigrants spent time at destination they improved their performance in the labor market. This pattern is steep for high-skilled immigrants and shallow for low-skilled immigrants (Chiswick, Lee and Paul W 2003; Long 2005).

Although, this pattern is similar for all migrant groups -economic, tied or forced, there is contention in the literature about how different migrant groups adapt to the labor markets at destination. It is argued that forced migrants and tied movers shown greater disadvantages when arriving at destination and although their labor market performance improves over time, their disadvantages do not disappear (Chiswick et al. 2003). However, recent studies have shown that there are different time horizons between refugees and economic migrants (Cortes 2004). Refugees who are unwilling or unable to return home have more incentives to invest in destination-specific human capital and over time would exhibit higher rates of human capital accumulation that would improve their labor market performance.

Balan (1969) argued that factors influencing relative occupational success of migrants when compare to natives are the rate of creation of new jobs in sectors of high productivity and the degree in which formal requirements are built into the city's occupational structure. Using data from Latin American countries he showed that migrants from rural areas with lack of credentials are at disadvantaged in their occupational mobility. In the case of forced migrants, particularly of internally displaced persons not only their lack of credentials can be a barrier, but in addition, sometimes they lack identification documents (Mooney and Jarrah 2005)[1].

Education and performance in the labor market are closely related. Offer (2004) using data from the 1995 Population Census of Isreal showed that education was an important factor for explaining differences in the probabilities of employment between

[1] During data collection, I noticed that IDPs frequently complain about the high cost of transportation and the lack of identification documents. The Solidarity Safety Net implemented a special program for issuing basic identifications (birth certificated and citizenship cards –*cedulas de ciudadania*) to the IDPs.

Israelis of Ethiopian origin and other Israelis. Although education is suggested to be the avenue for upward mobility for the Ethiopian community in Israel, their low levels of education might have some deteriorating effects in the occupational mobility of the group in the long run. If they did not go to school because they did not have enough resources, consequently they will not have enough education to generate resources in the future. Therefore, they are at risk of enter in a vicious circle. This same argument might be applied in the case of the internally displaced population. Their low performance in the labor market, or their lower probabilities of employment in the formal labor market might be explained by differences in the educational attainment, rather than on skill transferability. Internally displaced persons come mainly from rural areas. If the differences in the educational attainment of the rural and the urban population are considerable, then the poor adaptation of the internally displaced persons into urban labor markets is explained by structural differences in the provision of education, rather than by lack of experience in the urban labor market as it has been suggested.

As mentioned in Chapter two, self-positive selection of economic migrants explains their relative advantage in the labor market. Browning and Feindt (1969) using data collected in Monterrey, Mexico found that the positive selection of migrants decreased by migrant cohort. He suggested that those less positive self-selected newer cohorts -in which married males with families where migrating into the city, had more difficulties in adapting to the labor market than the older positively self-selected cohorts. His findings might imply that as the degree of positive self-selection decline the adaptation to the labor market in the urban destination is less successful within a given period of time.

In this chapter I explore labor patterns of internally displaced, economic and tied migrants to Bogotá. The questions driving the analysis are: Do occupation profiles in the areas of origin differ for internally displaced and voluntary migrants? Does the probability of employment at destination differ by migration experience? Which are the variables related to the probability of being employed in a specific occupation in a certain location at a given point in time?

Labor Adaptation of Forced Migrants

The labor adaptation of refugees has been more widely studied than the labor adaptation of the internally displaced persons for two reasons. First, because internal displacement is a more recent phenomenon due to increasing numbers of internal conflicts. Second, because comparable data on internally displaced persons is scarce.

The literature on refugee resettlement suggests that self-identification of refugees, attitudes towards displacement, ideological orientation in exile, cultural compatibility, social receptiveness and population policies of the host community help explain refugee outcomes in areas of reception. Those who chose to stay in host areas receptive to the needs of the newcomers would be more successful in their adaptation and integration to the new community that those who are expecting to return or are not welcomed by the host community (Kunz 1981). In depth interviews of Vietnamese refugees suggested that downward occupational mobility of immigrants is associated with the image they shape on themselves during resettlement (Finnan 1981).

The literature on the experience of forced migrants in urban settings indicates that forced migration has pervasive effects on the productivity of forced migrants (Davenport,

Moore and Poe 2003). It has been suggested that forced migrants lower their productivity in urban settings because of their rural origin. Internally displaced persons who arrive to urban areas had not developed skills in areas different than agriculture (U.S.CommitteeforRefugees 1999). In addition to their lack of skills to participate in the urban labor markets, the timing of their displacement might be correlated with times of economic difficulties at the macro level that increase competition in the labor market and make their adaptation more difficult (Collier et al. 2003; Kumar 1996).

The internally displaced in the urban areas of Khartoum (Jacobsen et al. 2001), Huambo (Angola) (Birkeland and Gomes 2001) and Lima (Stavropoulou 1998) and in camps in Freetown (Thomas 2003) or Katakwi (Uganda) (Arroyave 2002) are often facing long periods of unemployment. Since income generating activities in the formal labor market are not accessible, they adopted strategies using their labor force and social networks. The following activities were common among the internally displaced: trading fruits and vegetables, working in small businesses, washing clothes, household chores, and participation in food for work programs. Among the displaced households income generating strategies included child labor, inter- and intra-city migration and labor migration of household members. Similar income generating activities were observed in Indonesia among households as a response to the 1997 economic recession (González de la Rocha 1995). In conclusion, the participation of internally displaced persons in the informal labor markets already existent in the host areas is prevalent.

Internally displaced persons also use their social networks to generate coping strategies. They might marry off their daughters early and borrow from kin. Hein (1993) argues that like immigrants, refugees organize migration through social networks, but the

composition of the networks and the effects of migration on social identity differ. Forced migrants have a closer relation with the state as provider of support and opportunities.

In addition to all the mentioned reasons, there might be a certain degree of discrimination towards internally displaced persons which might partially explain their lack of employment opportunities in the labor market. This form of discrimination might be related to the fact that forced migrants bring security problems to the hosting area[2]. There is evidence that forced migrants carry security problems of the regions they flee to their host areas (Jacobsen 2003). Employers based on their perceptions about the political environment would be less willing to hire an internally displaced person than a voluntary migrants or a native, in order to avoid future difficulties and retain the marginal revenues of the training process.

In conclusion, internally displaced persons appear to be less likely to be employed in the urban labor markets for various reasons: lack of education, lack of urban labor force experience, lack of skills transferability, lack of information about the urban labor market, lack of credentials and potential discrimination based on their migration condition. In addition, internally displaced persons during arrival and resettlement period are embedded in a process of reconstruction of self-identification. Given their disadvantaged condition, this might be a process of acceptance of downward socioeconomic and occupational mobility. Internally displaced persons are likely to be engaged in temporal and informal labor market activities as coping and surviving strategy.

[2] In the third site the presence of paramilitary urban guerillas was evident. There were written threatens to the population, particularly those located in visible places in the main street of the neighborhood.

Colombian Migrant Performance in the Labor Market

In the last section of Chapter II I presented a description of internal migration patterns in Colombia and discussed migrant selectivity in this context. In this chapter I present a description of migrant adaptation in the urban labor markets. In order to explain migrant adaptation is necessary to describe the labor market structure in Bogotá.

As in any other Latin American country, Colombia suffered structural reforms in the 1990's that affect the composition of the labor market. This section is divided in three parts. The first part describes formal and informal labor markets and changes in the Colombian social security legislation. The second part discusses recent research about informal sector and migration in Colombia. The third part describes contemporary migrant profiles and internally displaced persons resettlement and integration in Bogotá.

Formal and Informal Urban Sectors

The ability of million of rural migrants to adapt to the urban environment and survive in rapidly growing shantytowns has been a subject of study during the last 30 years, when rapid urbanization process took place in developing countries. Keith Hart (1973)cited in(Portes and Schauffler 1993), described for the first time the concept of formal and informal income opportunities. Later PRELAC (1981) conceptualized the informal urban sector as "a way to establish an employment that constitutes an individual survival strategy more than a stable and permanent opportunity of income generation to support the family". The literature on vulnerability and socioeconomic conditions of the internally displaced (described in Chapter V) and the labor patterns presented in Chapter III, indicated that the PRELAC conceptualization in the urbanization period could serve

to describe the coping strategies of the internally displaced populations arriving to urban areas.

The study of informal labor markets has evolved since ILO provided the first definitions in the early 1970's. There are at least three approaches for the study of informal markets: dualistic, excessive regulated and structural articulation. The dualistic approach (PRELAC 1990) sustains that the informal sector is independent form the formal sector and characterizes the informal sector as a collection of marginal enterprises. The excessive regulated approach attributes the origins of informality to excess regulation of the economy. De Soto (1989) stated that informal economic activity gradually expanded in response to rigidities and limitations to the mercantilist state. The third approach was developed by Portes and Castells (Portes, Castells and Benton 1989). They claimed that the informal economy is characterized by unregulated income-generating activities closely related to the formal sector. The informal sector supplies low-cost goods and services for workers in formal enterprises. Given the heterogeneity of the informal sector they offered a typology of informal activities: direct subsistence activities; informal activities subordinate to production and marketing in the formal sector and autonomous informal enterprises with modern technology and capacity for capital accumulation. Studies using this approach have relied on the proportion of the economically active population that is not covered by the social security system[3].

[3] In the initial version of the questionnaire this question was included. In a review of the questionnaire in Colombia I decided to eliminate it given the differences in the coverage of social security, health services and the provision of welfare. However, the variable was not collected a description of the occupation of the person was asked. Given the location and characteristics of the neighborhoods and what I investigated in the field, more than half of the population living in the visited areas can be considered as workers in the informal sector.

In 1993 the pension and health care systems in Colombia were reformed. The three mayor changes were: 1) a significant increase in contribution rates paid by all active workers; 2) reduction of pension benefits for younger workers; and, 3) the introduction of a mixed defined benefit and defined contribution pension system. As a result the percent of wage paid by the worker for social security went from 2.2 in 1990 to 3.4 in 1996; and for health care services from 2.3 to 4 percent for the same years. The contributions for the employers were most affected. An employer paying 4.3 percent of wages in 1990 to the social security was paying 10.1 percent in 1993. The shared of health care services provided by the employer also increased from 4.7 to 8 percent between 1990 and 1996. Therefore, it is expected that as the hiring costs increased the number of formal workers decrease according to the excess regulated approach (Giugale, Lafourcade and Luff 2003).

Informal sector and Employment in Colombia

Flórez (2002) using data from the National Household Survey in Colombia explored the characteristics of the informal and the formal sectors from 1984 to 2000. She used a variety of measures to test if the dualistic, the excessive regulation or the structural articulation approach explained changes in the composition of the Colombian urban labor markets. She suggests that the informal sector is a heterogeneous sector that can be divided in three sub-sectors: subsistence workers, salaried workers and entrepreneurs. The subsistence workers sub-sector behaves as predicted by the dualistic approach, it expands in periods of economic crisis and shrinks in upturn years. The other two sub-sectors are pro-cyclical and attached to the patterns of the formal sector. She

identified seven trends that are important for the purpose of this analysis. One, increasing feminization of the labor force. Two, an employment life cycle that starts in the informal labor markets, progress to the formal labor market and finishes in the informal labor market. At the beginning of the cycle it is related to subsistence and at the end it is related to capital accumulation. Three, the structural reform increased the sensibility of health coverage to changes in the economic cycle. Four, informal sector absorbs most of the employed recent migrants (60% to 70%). In this regard she also observed that the proportion of recent migrants in the formal sector is sensitive to the economic cycle: 42.2% in 1998 and 33% in 2000 when the unemployment rate reached 20.4%. Five, an increasing more educated labor force and stable educational differences between the sectors. There were more educated people in the formal sector and less educated people in the informal sector. Six, low employment stability for salaried informal workers. Therefore, this was the most affected group during the economic crisis. Seven, informal salaried workers are over-represented in construction and manufactured goods industries.

In the analysis she offers a socioeconomic characterization of the population in each of the three sub-sectors in the informal labor market. She noticed that the subsistence sector accounted for 52% to 63% of the informal sector. This sector is composed of self-employed, unpaid family workers and domestic servants working in commerce and personal services with low wages and no previous labor experience. This sub-sector was composed by a high proportion of women, recent migrants, and persons with low education. She argued that given the large proportion of persons without previous experience in the labor market in this sector, it serves as the open door to the labor market for young less-educated and incoming workers. In the case of internal

displaced population, then it is expected that if their education levels are low relative to the natives and they do not have previous experience in the urban labor market, they would be more frequently employed in the subsistence sector.

The sub-sector of the informal salaried workers in large and small firms accounted for 30% to 40% of the informal sector. People in this group were young men, established migrants, persons with middle to high education, working in construction or manufacturing goods. Labor conditions were defined as unstable with wages higher than for the subsistence sub-sector. Employees in this sub-sector had previous labor force experience.

The third sub-sector of informal entrepreneurs accounted for 5% to 9% of the informal sector. Persons in this sub-sector were usually in the late phase of their life, cycle mainly natives or non-recent migrants, persons with middle to high education. The activities they performed were related to small commerce, manufactured goods. Labor stability and earnings were high.

In a second analysis Florez (2003) focused on the possible impacts of the internal conflict on the migration flows and the integration of recent migrants to the urban labor markets. From the analysis she concluded that there is an increasing participation of males in the migration flows and an increasing rural-urban flow. Migrants in urban areas showed high labor force participation, low unemployment and high participation in informal sector. Labor instability in the informal sector provoked that recent migrants were among the most affected groups during the economic crisis. However, with time there is a process of assimilation of recent migrants to the urban labor market. She did not reach conclusions about the impact of the conflict because the official household surveys

do not include geographic areas in the cities where displaced people are concentrated and questions about causes of migration were not considered. Therefore the lack of complete coverage and information on IDPs impeded the analysis of presumably different trends.

Contemporary Migrations to Bogotá

The importance of the rural-urban migration flows has decreased continually as a factor explaining urban population growth. There are studies suggesting that urban-urban migration patterns have increased, which is related to the degree of urbanization of the country (Flórez 2000; Martínez and Rincón 1996). An emergent pattern of migration is circular migration, which does not involve a change in the permanent place of residence and is more related with temporal and self-employment (González 2004). Other studies have shown that the profile of the migrant population has recently changed. There is a higher participation of rural origin, low educational level characteristics that are more related to the profile of internally displaced persons (Flórez 2003).

Using data from the National Household Survey Gutierrez et.al. (2000) analyzed the profile of migrant to Bogotá from 1995 to 1999. They claimed that the majority of migrants to Bogotá arrived from other urban centers and not from rural areas, as it was the case during the 1960's. Their estimates indicate that about 40% of the migrant population arrived from the departments of Cundinamarca, Boyacá y Tolima. The recent migrant population is clustered in the working age group. Sixty percent were between 20 and 39 years old. Two-thirds of the migrant population was women, same pattern as observed by Fields (1979) using the 1973 population census.

Using additional sources of data Gutierrez et. al. compare the recent migrant population, with the non-recent migrant population and the native population[4]. He found that recent migrants were more educated than natives and non-recent migrants. Sixty four percent of the recent migrant population has more than middle school education. The labor market participation rate[5] for recent migrants was 75.1%, 63.4% for natives and 66.5% for non-recent migrants. In conclusion, migrants who arrived to Bogotá between 1995 and 1999 were more educated and more active in the labor market than migrants who arrived between 1988 and 1993 or natives. These findings might suggests that although there is an apparent increment in rural-urban migration related to the armed conflict, the impact of these changing migrant profile is not noticed in the flow to Bogotá. The population of Bogotá and the migration flow to Bogotá are so numerous that the presence of the internally displaced population although considerable is lost in an aggregate analysis of the recent migrant population to the city, at least until 1999.

As explained in Chapter two the expansion of the Colombian armed conflict has provoked a rural-urban migration flow to the main cities which are hosting large proportions of the internally displaced population. Table 6.1 shows the number of persons hosted and the percentage distribution of the total registered internally displaced population by department capital. Fifty percent of the internally displaced population is hosted in the capital cities of the departments, and among them Bogotá, Medellín, Santa Marta, Sincelejo and Valledupar host 22.41 percent of forced migrants.

[Table 6.1 about here]

[4] He defined native population as those who were living in Bogotá before 1988.
[5] Defined as the number of persons working or looking for a job per 100 persons aged 15 to 65.

Hines and Balletto (2002) used a Vulnerability Analysis and Mapping Standard Analytical framework covering three components: comprehensive vulnerability assessment, periodic vulnerability monitoring and emergency vulnerability analysis and mapping to assess the conditions of the internally displaced population. Their assessment is based on data from the official Registration of Internally Displaced Population mentioned in Chapter three. They found that emergency humanitarian aid was not reaching the internally displaced population in the first three months after displacement[6]. They observed that the two most important factors leading to assistance dependency were the lack of security and lack of consistent access to all vulnerable groups in need. Their restricted movement and loss of access to their productive assets partially explain why the internally displaced were not able to restore their livelihoods were

As mentioned in Chapters two and five land tenure is one of the most important factors for explaining the origins and progression of the internal conflict in Colombia. One of the principal causes of displacement is guerillas and paramilitary illegal practice of land confiscation. Therefore, it is expected that land tenure for internally displaced persons was more frequent before displacement than for any other migrant group. Moreover, I expect that their agricultural activities were related to land tenure before displacement.

All studies on internally displaced persons in Colombia suggests that internally displaced persons experience long terms of unemployment in urban areas due to the lack of transferability of agricultural skills to the urban labor market (Arquidiocesis de Bogotá

[6] The Colombian legislation states that internally displaced population are entitled to three months of humanitarian emergency aid that includes monthly provisions of food and other personal care and hygiene products. This is the time assumed to be of best distress after displacement. After three months they should have pass the emergency situation and be able to restore their livelihoods.

and CODHES 1999; CODHES 1999; OIM 2002). I would argue that although the transferability of skills might explain why they do not find jobs in Bogotá, the main cause of their lack of success in the urban labor market is their low levels of education relative to the levels of education of people living in urban areas. Figure 6.1 shows time trends for urban and rural areas in Colombia and in Bogotá for the period 1985-2000. The pattern shows that the gap in basic education between rural and urban areas has remained almost constant –although, since 1998 there is a decline of the illiteracy rate in rural areas but a slight increase in Bogotá. The gap in the illiteracy rate between Bogotá and the rural areas is on average 17.7 percent higher in rural areas for the period 1985-2000.

[Figure 6.1 about here]

The patterns of migration to Bogotá and the characteristics of the internally displaced population in urban areas suggest that the occupation profiles of voluntary migrants should differ. These differences in occupation profiles along their migration histories should not only be related to their migrant condition, but to education level, land tenure, place of residence –urban/rural, and experience in urban or rural occupations.

Methodological Approach

In this section I present a comparative analysis of labor conditions of forced, economic and tied migrants. The analysis is divided in three parts. First, I present characteristics of household heads and spouses in the place of origin before the first migration trip. Second, I describe their characteristics in Bogotá. Third, I analyze labor trajectories outside Bogotá and in Bogotá by migration group.

Migration Typology

For the purpose of this analysis I used labor and migration histories of household heads and spouses described in Chapter three I used the migration histories starting at age 15 until the time of the survey[7]. I classify this population based on their reported causes of migration in their migration histories in four groups: forced migrants, economic migrants, tied migrants and natives.

Forced Migrants are those who at any point in their lives between age 15 and their arrival to Bogotá reported as a cause of migration the armed conflict (either because they felt insecure in the place of origin or because they were directly threatened). I asked about violent causes of migration in two sections of the questionnaire. The first question referred to the motivation for leaving a specific location. The second question asked specifically about any violence event at the personal, family and extended social circle in each of the locations the person had resided. Taking information from both sections I defined the number of forced migrants. Even if a person reported as a cause of migration economic reasons after being displaced I classify this person as a forced migrant. Research on internally displaced persons in Colombia suggests that once persons are displaced they move to other locations. The first move is from the usual place of residence to the next town or city. Afterwards they continue moving based on their perceptions about security in their places of origin or on their evaluation about labor perspectives in other areas. Although their motivations might not be related to political violence or persecution, they did not move for economic reasons in the first instance. Second, because they might be vulnerable starting at displacement when their used their

[7] I am not using the information during the first 15 years in the life histories because the migration experiences of those under 15 are more related to the migration of children as companions.

assets to cope with a generally unexpected violent event displacement. Third, there is no consensus in the literature on forced displacement about when displacement ends. Researchers have argued that it might end with resettlement, rehabilitation, reconstruction or restitution (Lippman and Malik September 2004).

Economic migrants are those who reported that they migrated to look for jobs, better opportunities, income, or because they had a job offer in the place of destination at any point before arriving to Bogotá. The main difference between forced and economic migrants then is that forced migrants were not planning to move from the original place of residence and economic migrants have incentives to leave to original place of residence.

The literature on migrant selectivity compares forced migrants with the economic and tied migrants and suggests that tied and economic migrants are not as positive self-selected as economic migrants. Therefore, I include in this analysis tied migrants as those who were never forced to migrate, did not pursue economic incentives in any of their moves before arriving to Bogotá and left their place of origin because they were following their families or husbands, or because they got separated from their families or husbands.

The total sample includes 1056 persons, 603 household heads and 453 spouses. According to the migrant classification, there are 116 forced migrants, 187 economic migrants, 118 tied migrants and 635 natives[8]. The person-years data set includes 27,454 observations.

[8] This group includes intra-urban migrants and non-migrants described in Chapters III (Research Design) and Chapter V (Socioeconomic Differentials).

The groups of variables considered for the analysis are: personal characteristics of household heads and spouses at a certain point in time, occupations, indicators of accumulated wealth (land and dwelling ownership), characteristics of the place of residence, migration experience (year of first trip, year of arrival to Bogotá and accumulated migration experiences in urban and rural areas) and labor market indicators (unemployment rate).

The data on occupations is central for this analysis. I coded about 1,200 different reported occupations using the occupations codes of the Latin American Migration Project. After analyzing the structure of the occupations in the studied areas and I further grouped the occupations in 9 groups according to their relative frequency, economic sector and predominant activity. The nine groups are: agriculture, skilled occupations, non-skilled occupations, construction workers, provision of security services, employed in the service and commerce sector, petty commerce (most of them street vendors), provision of personal services and domestic services[9].

According to the findings of Carmen Flórez described earlier in this Chapter I further classify informal and formal sectors based on the categories of occupations. Those who were employed as construction workers, petty commerce merchants, personal service providers, domestic service providers where considered into the informal sector. Those in skilled and non-skilled occupations, provision of security services, employed in the service and commerce sector are considered in the formal sector. The division between formal and informal sectors is related to the labor composition in urban areas. Agricultural activities are usually not considered in this classification. Therefore,

[9] The proportion of persons who reported being unemployed is very small, therefore I considered them among the population out of the labor force.

agricultural workers are not considered either formal or informal outside Bogotá. However, the agricultural activities related to the production of roses are concentrated in the areas surrounding the city of Bogotá. Persons living in Bogotá and working in agricultural related activities in the occupation codes they are classified as agricultural workers. Their employment conditions and the temporality of the jobs are more related to the characteristics of the informal sector, therefore, all workers working in agriculture related activities in Bogotá are considered as workers in the informal sector.

Characteristics of the Migrant Population in the Place of Origin

Table 6.2 shows main characteristics of the migrant population by migrant group the year before the first migration trip[10]. The data suggest that forced migrants and economic migrants did not have different levels of education or different occupations in the place of origin, particularly there are no observed differences in the proportion of persons working in agriculture before the first migration[11]. The patterns of land tenure are different between forced and economic migrants. Sixteen percent of forced migrants reported ownership of land in the place of origin, and only 7% of the economic migrant population. The distribution of forced and economic migrants in urban areas is not different[12]. Departments of origin were also different for forced and economic migrants. Forced migrants were more likely than economic migrants to arrive from the departments

[10] I performed t-test for the difference of means at 90% confidence level.
[11] The coefficient for domestic services is significant because if the economic migration of girls started before age 15, then their occupation was taken at age 15 to reflect not the occupation at origin, but the occupation during the first migration or at the youngest age considered in the analysis.
[12] The Colombian statistics did not distinguish between rural/urban, but between municipal seat or other location within the municipality (*resto*). Following this notion and based on the perception of the interviewees they were asked if the place they lived was in a rural area (*campo*) or in a town (*pueblo*). Another problem I faced with the distinction between rural and urban areas is that interviewers would know the name of the *vereda* or place they lived but usually were not familiar with the name of the municipality.

of Antioquia and Caquetá than economic migrants. Economic migrants were as likely as forced migrants to arrive from the department of Tolima. Regarding the year of the first migration, economic migrants are spread almost equally along the different intervals. Forced migrants were less likely to leave their usual place of residence before 1980 than economic migrants, and more likely to make the first trip after 1997 relative to economic migrants.

[Table 6.2 about here]

In general, tied migrants are similar to economic migrants. However, there are some differences. As expected, economic migrants were more likely to be males, household heads and be married than economic migrants. Tied migrants were more likely to be out of the labor force.

From the comparison of the characteristics in the place of origin the data show that: 1) there are no differences in education between forced and economic or tied migrants; 2) there are not differences in their participation in agricultural activities; and, 3) forced migrants were more likely to owned land in the place of origin than the other voluntary migrant groups. Forced migrants are more likely to arrive from departments where armed confrontations are more frequent such as Antioquia, Caquetá, and less likely to arrive from the traditional departments of expulsion of economic migrants to Bogotá such as Boyacá. The similarities between forced and economic migrants in terms of level of education might be explained by their similar access to education in the places of origin.

In order to explore the participation of forced and economic migrants in agricultural activities I estimate a logistic regression model predicting the probability of

working in agricultural activities before the first migration trip. Coefficient estimates, shown in second column of Table 6.3, indicate that forced migrants were not more likely to be working in agriculture than economic migrants when controlling for characteristics in the place of residence (urban/rural), land tenure and years of education. In Table 6.2 it is observed that the percentage of people out of the labor force is considerable. To verify which variables might be correlated with this trend I estimated a second model on the probability of being out of the labor force. Results suggest that more educated forced migrants were more likely to be out of the labor market in the original place of residence.[13]

[Table 6.3 about here]

From these data I cannot conclude that in the places of origin forced migrants were more likely to work in agriculture than economic migrants or that they were less educated than economic migrants. The data indicate that the levels of education and probability of being employed in agriculture were similar for both groups[14] in the place of origin before the first migration. The main characteristic of forced migrants in the place of origin is that they were more likely to own land than economic migrants.

Characteristics of the Migrant Population in Bogotá

Following the analysis of the migrant population in their places of origin, I present a comparison of the occupation profiles, cohorts of arrival and personal

[13] I checked the different categories for those out of the labor force and found that 8 forced migrants where students the year before the first migration trip but only 4 economic migrants were students. Probably a larger sample will allow further exploration of forced and economic migrant conditions in various occupation categories in the places of origin.

[14] I also estimate the characteristics of migrants the year before an economic migration, the year before a force migration and the year before a tied migration. The results were similar because forced migrants did not have many trips before their displacement.

characteristics of natives, forced, economic and tied migrants the year of the survey in Bogotá.

Table 6.4 shows the distribution of the characteristics for all groups. The data suggests that forced migrants were more likely to be household heads, males and were younger than economic migrants. Forced migrants were on average younger than economic migrants because they arrived more recently to Bogotá. The distribution and t-test differences for the year of arrival indicate that economic migrants arrived almost in similar proportions during the periods of time considered. In contrast, forced migrants arrived more recently to the city, the difference of means is largest for the most recent period 1997-2003, which is consistent with the patterns of displacement in Colombia and to Soacha described in Chapters three and four.

[Table 6.4 about here]

The distribution of occupations in Table 6.4 shows that forced migrants reported more frequently being employed in the provision of personal services than economic migrants. The t-test for the distribution of occupations is not significant for any other occupation. From the table I noticed that although the t-test for the difference of means is not significant there are three groups where the differences in proportions are considerable. To explore further if the differences can be noticed after controlling for personal characteristics and migration experience I estimated three logistic regression models on the probability of being in of the labor force, the probability of being employed as construction worker, and the probability of being employed in the provision of personal services.

[Table 6.5 about here]

Table 6.5 show coefficient estimates for each model. The results indicate that education and time spent in Bogotá are positively correlated with the probability of being in the labor force. Natives and forced migrants were less likely to be in the labor force then economic or tied migrants. The probability of employment in the construction sector is associated with low levels of education. Economic migrants and natives were more likely to be employed as construction workers than forced migrants. The last column shows the coefficients for the regression model of the probability of being employed in the provision of personal services. The sign of the coefficients indicate that forced migrants are more likely than economic migrants to work in the provision of personal services. Those who owned their dwelling are less likely to work on these occupations. This might be an indication that employment in the provision of personal services is more related to coping strategies than to accumulative strategies.[15]

To appreciate changes in the characteristics of migrants by cohorts of arrival to Bogotá, I estimated the distribution of variables related to personal characteristics, migration experience and occupation (see Table 6.6). The data shows that older cohorts were less educated than more recent cohorts. This indicates increasing access to education for the migrant population in the places of origin[16]. Other salient characteristic is that older cohorts were more likely to be retired.

[Table 6.6 about here]

[15] I included in a preliminary set of regression models an interaction term of forced-migrant and number of years spent in Bogotá. The resulting coefficients were small and non-statistically significant, so I dropped them from the analysis.

[16] Given the low levels of education overall (the average years of education is about 5) I would argue that the increasing levels of education are related to increasing provision of education in the places of origin.

By comparing the characteristics of migrant groups in the place of origin the year before the first migration and the characteristics of the same population the year of the survey in Bogotá at the time of the survey I observed the following trends. First, there are no differences in years of education between the economic migrant and the internally displaced population either in the areas of origin or in their place of residence in Bogotá. Therefore, the data cannot support the hypothesis of positive self-selection of the migrant population in terms of education[17].

A comparison of the characteristics of the place of residence in the place of origin and the occupation the year before the first migration trip indicates that forced migrants were not more likely to arrive from rural areas than economic migrants. In terms of occupation, forced migrants were not more likely than economic migrants to work in agricultural activities in their places of origin. The claim that forced migrants are less successful in the urban labor market apparently might not be explained by their rural origin, or their lack of skills for the urban labor market given their previous agricultural activities. Economic and forced migrants have similar backgrounds in these two variables.

The variable that determines differences between economic and forced migrants is land tenure. Forced migrants were more likely than economic migrants to own land in their original place of residence. In Bogotá the reported land tenure for both groups is similar. However, economic migrants are more likely to own their dwellings in Bogotá than forced migrants, which might indicate their relative success in the urban labor market.

[17] In Chapter three the data indicated that forced migrants were less educated than natives. Here I am comparing forced and economic migrants and I am just considering household heads and spouses.

Migration and Labor Trajectories

In this section I described labor trajectories based on the migration experience of the observed population. I analyzed the population during the years they did not lived in Bogotá, and during their years of residence in the city. The objective of this section is to describe the different patterns of occupation given the migration experience of the observed population.

I applied event history analysis models to predict the probability of being employed in any of the nine occupation groups and in the informal sector. I used person-years spent by the migrant population outside Bogotá. To evaluate if the experience in rural or urban areas determine the probability of employment in certain occupations I accumulated years of migration experience since first migration and divided them in years spent in rural or urban areas. In addition, I also included accumulated labor force experience in rural and urban areas[18].

Table 6.7 contains descriptive statistics of person-years lived by the population older than 15 years of age, who was not living in Bogotá and participating in the labor market. Table 6.8 includes estimation coefficients of the regression models by group of occupations.

[Tables 6.7 and 6.8 about here]

The second column in Table 6.8 shows coefficient estimates for the probability of being employed in agriculture in any person-year if the person was not living in Bogotá.

[18] I tried to include variables to control for location specific indicators of political violence and economic activity. I have a time series of internally displaced expulsion rates, homicide rates and unemployment rates by department from 1996 to 2003. When I included the variables the number of observations was drastically reduced because the majority of the experience in Bogotá is after 1996. Second I still analyze if the variables had some relation with the probability of employment. All coefficient estimates were non-significant.

The coefficient for land tenure suggests that the probability of being employed in agriculture is higher for those who own land in a given year. Years of labor force experience in rural areas is positively associated with the probability of being employed in agriculture. The negative coefficients for the accumulated years spent in areas out of Bogotá suggest that the probability of being employed in agriculture declines with time for economic migrants. This pattern might be caused by potential reductions in the agriculture sector related to the increasing number of violent events in the areas of displacement. The total effects for forced migrants is almost zero since the coefficient for the interaction term between migration experience and forced migrant is positive.

The probability of being employed as skilled worker in a given year outside Bogotá is positively related with education, land tenure and residing in an urban area. Tied migrants are more likely than economic migrants or forced migrants to be employed as a skilled workers.

The fourth column in Table 6.8 shows of the model predicting the probability of being employed as a non-skilled worker. The estimates indicate that the probability of employment in non-skilled occupations is negatively related to education, as is the case for agricultural workers. Non-skilled workers are more common among those living in urban areas and with rural experience[19]. Those who did not have previous labor force experience. Forced migrants and tied migrants are more likely to be employed as non-skilled workers than economic migrants outside Bogotá.

[19] In general, rural experience precedes urban experience. This is why I suggest that the coefficients for the years of labor force experience in rural areas refer to the rural experience before migrating, which implies rural origin.

The second page of Table 6.8 contains coefficient estimates for the models predicting the probability of being employed as a construction worker, in security services or in the service and commerce sector. The probability of having a job as a construction worker in a given year is associated with years of education and labor force experience in urban areas but rural origins. Forced migrants living outside Bogotá were more likely to be employed in the construction sector than economic migrants, but their probabilities decline over time.

Employees in security services were male household heads living in urban areas in all cases. The probability of employment in security services is associated with education, time spent in urban areas and with rural origin. Forced migrants or tied migrants were less likely than economic migrants to be employed in the provision of security services.

Employment in service and commerce sector is associated with years of education, owning land. Time spent in rural areas decreases the probability of employment in this sector. The accumulated experience as forced migrant increases the probability of being employed in service and commerce in areas outside Bogotá[20].

Third page of Table 6.8 includes models for the probability of employment in petty commerce (predominantly street vendors), employment in the provision of personal services and domestic services. Education and labor force experience in rural areas are negatively associated with employment in these occupations. Living in an urban area is positive correlated with being employed in any of these occupations. Persons with rural origins are likely to be employed in personal and domestic services. The models indicate

[20] The principal occupations in this group are activities related to services such as messengers, self-employed persons commerce activities and employees in shops.

that employment in personal and domestic services are initial opportunities for young persons entering the labor market.

Forced migrants and tied migrants are less likely to be self-employed in petty commerce activities and employed in domestic services than economic migrants. As migration experience increases for forced and tied migrants their probability of employment in these occupations also increases. Forced migrants were more likely to be employed in personal services than economic migrants, but as their migration experience increases in areas outside Bogotá their probability of employment in personal services decreases.

Table 6.9 shows coefficient estimates on the probability of being employed in the informal sector. I estimated this regression as a summary model for the estimations presented in Table 6.8. As I expected, years of education are negatively associated with being employed in the informal sector. Both measures of accumulated wealth are negatively associated with the probability of employment in the informal sector. Living in urban areas and additional labor force experience increases the probability of being employed in the informal sector. The effect of each additional year of labor force experience in urban areas has a larger impact than the years of labor force experience in rural areas. Forced Migrants are as likely as economic migrants to be employed in the informal sector; however, tied migrants are less likely than economic migrants to be employed in the informal sector. The results suggest that over time the trajectories are opposite. Tied migrants are more likely to be employed in the informal sector as their migration experience increases and the opposite happens to forced migrants during the years residing outside Bogotá.

The second part of this section refers to labor trajectories in Bogotá[21]. In this part person-years lived by natives are included in the analysis and natives are considered as the reference category. Table 6.10 shows descriptive statistics for the variables included in the models for person-years lived in Bogotá. On average 60% of person-years lived in Bogotá were spent in occupations in the informal sector, which include personal services, construction workers and domestic services, petty commerce and agriculture in areas surrounding Bogotá.

[Tables 6.10 and 6.11 about here]

Second column in Table 6.11 shows coefficient estimates for the probability of working in agriculture during the years residing in Bogotá. Homeownership is positive associated with the probability of being employed in agriculture[22,23]. There are no differences among natives and all migrant groups in the probability of employment in agricultural activities in the areas surrounding the city of Bogotá. Moreover, the probability of employed in agriculture increase over time for forced and tied migrants, and is positively related with labor force experience in rural areas.

Estimated coefficients of the probability of the employment in skilled occupations, while living in Bogotá, suggests that each additional year of education is positively related with the probability of being employed as a skilled worker. Economic and tied migrants are more likely to be employed as skilled workers than natives. There

[21] I tried various model specifications including homicide rate for the period 1996-2003 and unemployment rates for the period 1990-2003 which will cover the period of economic recession in Colombia starting in 1998. Unemployment rates were significant only for construction workers and petty commerce. By including macroeconomic variables in the model I would sacrifice all observations previous to 1990. At the end I decided to keep the models without considering the macroeconomic effects for the present analysis.
[22] The coefficient estimates for the models are not implying a causal relation. They are implying associations between the variables in a given point in time.
[23] Although homeownership is associated with wealth the conditions of the dwellings might help explain the rationale behind this correlation.

are no differences in the probability of employment in skilled occupations between forced migrants and natives.

For non-skilled occupations education is positive correlated but the coefficient is smaller than for skilled occupations. Years of labor force experience are negatively correlated with the probability of migration indicating that these are occupations where relatively inexperienced persons are employed. Forced migrants are less likely than natives to be employed as non-skilled workers; but, as time since displacement passes their probability of employment in non-skilled occupations increases.

Construction workers are less likely to have migration experience. In the case of forced migrants, the probability of employment decreases with time since displacement. The probability of working in construction is not positively related to education. Indeed, as education increases a person is more likely to be employed in other occupations different than construction in a given year. Finally as the number of years spent in Bogotá increases the probability of employment in the construction sector declines.

Persons that are employed in security services are more likely to have migration experience. In general as their migration experience increases the probability of being employed as security personnel decreases for forced and tied migrants[24]. The probability of employment in service and commerce related activities is also sensitive to the migration experience of the person in a given years but in the opposite direction. Economic and tied migrants are less likely to be employed in these activities than natives. For forced migrants as time since displacement increases the probability of employment in the service and commerce sector decreases. As in the case on non-skilled workers, the

[24] Security personnel refers mostly to doormen and watchmen.

probability of migration in this sector is negatively related to experience in the labor market.

Self-employment in petty commerce is also sensitive to migration experience. Economic migrants are less likely to be employed as street vendors or in petty commerce related activities than natives. Forced and tied migrants are more likely to be working in petty commerce related activities than natives. The likelihood of self-employment as street vendor for forced migrants decreases with time. Employment patterns of forced migrants in the provision of personal services are similar to their employment patterns in petty commerce. They are more likely to be employed in personal services than natives or voluntary migrants (economic and tied) but their probability decreases over time. In contrast, forced migrant females are less likely to be employed in domestic services than economic and tied migrants. A potential explanation is that forced migrants are less likely to have the network connections to be employed in domestic services.

Finally, the summary model indicates that the probability of being employed in the informal sector is negatively related with age, education and accumulated wealth (homeownership) and positively associated with experience in the labor force. Time spent in Bogotá decreases the chances of employment in the informal sector. Forced migrants are as likely as natives to be employed in occupations in the informal sector. However, economic and tied migrants are more likely to be employed in the formal sector.

From the models presented in this section I can conclude that there are differences in the labor trajectories of the different migrant groups. However, these differences are not explained by differences in education or previous labor force experience. I noticed

that the probabilities of employment in Bogotá and outside the city for forced migrants relative to economic migrants do not show similar patterns.

Economic migrants are as likely as forced migrants to be employed in agriculture and in the provision of personal services in Bogotá and in other locations. When forced migrants were in Bogotá they were more likely to be employed in petty commerce than in other areas. Forced migrants have more chances to be employed in the construction sector and in non-skilled occupations in areas outside Bogotá than in the city. The access to skilled occupations is also more restricted for forced migrants than for economic migrants. Forced migrants are at disadvantage in the provision of domestic services in both settings.

In the summary models there are no differences in the probability of employment for forced and economic migrants in the informal sector either in Bogotá or in other areas outside the city.

A caveat in this analysis is that the data used was collected in underdeveloped areas in the periphery of Bogotá where disadvantaged populations are located. The sample design might underestimate the differences between the economic and forced migrants to the city.

Conclusions

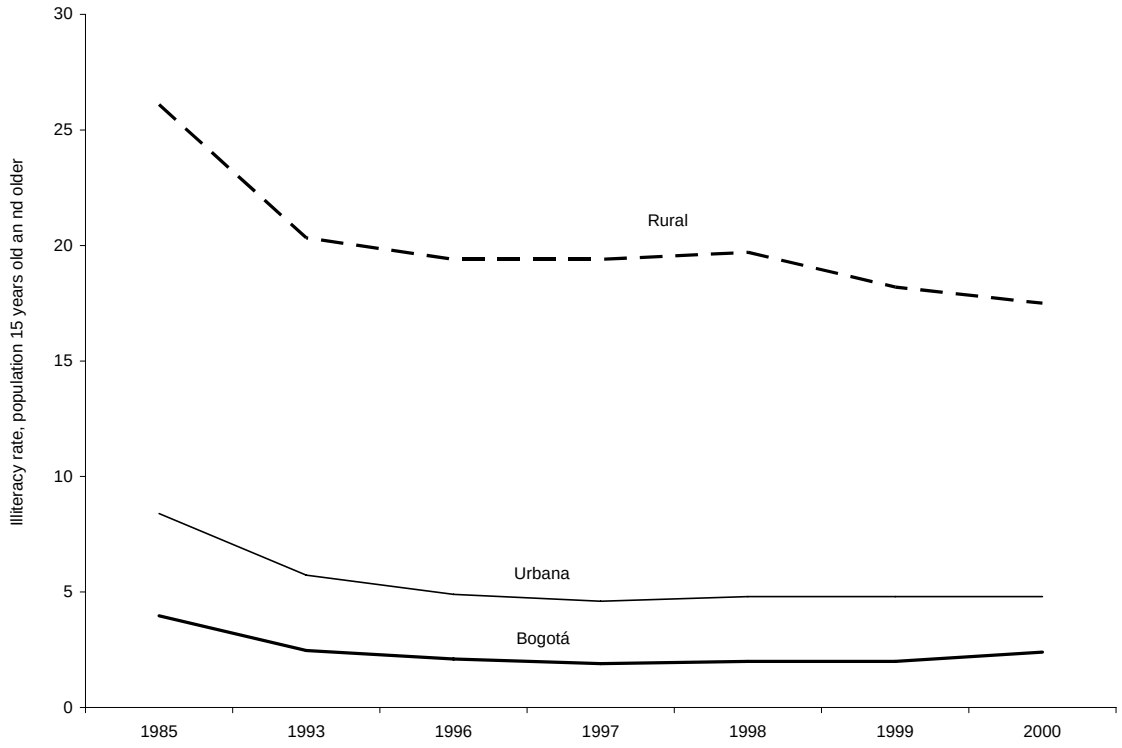
This analysis does not support the findings in other studies only relying on internally displaced populations. The comparison of migrant and labor trajectories show that although the labor patterns of forced migrants and economic migrants differ, these differences are not explained by their rural background or their presumed lack of

education. Forced migrants in this analysis show that they had access to land as a productive asset in the place of destination and that it was an important determinant in the probability of being employed in agriculture. After controlling for land tenure and location characteristics (urban/rural) tenure the differences in the probability of employment in agriculture were not different for economic and forced migrants.

I introduced the discussion on the informal sector and estimate models for predicting the probabilities of employment in each group of occupations to explore the following questions: Are forced migrants employed more frequently than economic migrants in activities related to coping strategies or cumulative strategies? Are the occupations of forced migrants more compatible with the dualistic approach or more linked to activities in the formal market?

The data show that forced migrants tend to be employed in activities related more frequently to coping strategies than to cumulative strategies, particularly when I analyze access of the forced migrant population to occupations in the skilled sector. Second, coping strategies are more related to the dualistic approach. Therefore, current labor patterns of forced migrants, although not drastically different from economic migrants in underdeveloped areas, are not likely to help the forced migrant population to fully integrate in the labor market and improve their living conditions in the future. This area of research needs further analysis.

Figure 6.1. Illiteracy Rate for Bogotá, Urban and Rural areas in Colombia, 1985-2000



Source: National Department of Planning, SISD 2.0

Table 6.1. Number of Persons Hosted in Department Capitals

Municipality	Departament	Number of Persons Hosted	% of the total IDP population
Bogota D.C.	Bogota D.C.	97,642	5.95%
Medellín	Antioquia	78,511	4.78%
Santa Marta	Magdalena	72,383	4.41%
Sincelejo	Sucre	67,888	4.13%
Valledupar	Cesar	51,645	3.14%
Cartagena	Bolívar	36,803	2.24%
Florencia	Caqueta	32,510	1.98%
Cali	Valle del Cauca	31,627	1.93%
Barranquilla	Atlantico	31,572	1.92%
Villavicencio	Meta	30,715	1.87%
Cucuta	Norte Santander	28,823	1.76%
Quibdo	Chocó	28,421	1.73%
Bucaramanga	Santander	23,490	1.43%
Barrancabermeja	Santander	20,919	1.27%
Monteria	Cordova	20,025	1.22%
Ibague	Tolima	19,027	1.16%
Pasto	Nariño	18,321	1.12%
Popayan	Cauca	17,634	1.07%
Neiva	Huila	15,649	0.95%
Pereira	Risaralda	14,856	0.90%
Riohacha	La Guajira	13,404	0.82%
San Jose Del Guaviare	Guaviare	13,261	0.81%
Soacha	Cundinamarca	13,239	0.81%
Mocoa	Putumayo	12,953	0.79%
Apartado	Antioquia	8,131	0.50%
Yopal	Casanare	7,329	0.45%
Manizales	Caldas	5,590	0.34%
Armenia	Quindio	5,451	0.33%
Arauca	Arauca	4,060	0.25%
Puerto Carreño	Vichada	992	0.06%
Mitu	Vaupes	709	0.04%
Leticia	Amazonas	353	0.02%
Total		1,642,242	50.17%

Source: Solidarity Safety Net 2004

Table 6.2. Characteristics of the Household Head and Spouse the Year Before the First Migration by Migration Experience

Variable	Forced Migrants		Voluntary Migrants			
			Economic Migrants		Tied Migrants	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
N	116		187		118	
Head [a]	0.8190*	0.3867	0.7005	0.4593	0.5763*	0.4963
Sex	0.6638*	0.4745	0.5668	0.4968	0.3983*	0.4916
Mean Age	26.4052*	9.9669	23.4385	7.2616	25.6695*	10.8911
Mean Years of Education	4.9914	3.0260	4.5348	3.0272	4.4746	3.4659
Married	0.5259*	0.5015	0.3369	0.4739	0.4831*	0.5018
Owned Dwelling	0.1034	0.3059	0.0535	0.2256	0.0169	0.1296
Owned Land	0.1638	0.3717	0.0749	0.2639	0.0508	0.2206
Main Occupations						
Out of the Labor Force	0.2328	0.4244	0.1711	0.3776	0.3136*	0.4659
Agriculture	0.3707	0.4851	0.3904	0.4891	0.3051	0.4624
Skilled	0.0603	0.2392	0.0802	0.2724	0.0678	0.2525
Non-Skilled	0.0948	0.2942	0.0535	0.2256	0.0339	0.1817
Construction workers	0.0603	0.2392	0.0321	0.1767	0.0339	0.1817
Security Services	0.0086	0.0928	0.0267	0.1617	0.0169	0.1296
Services and Commerce	0.0259	0.1594	0.0107	0.1031	0.0424	0.2023
Petty Commerce	0.0345	0.1833	0.0214	0.1451	0.0000*	0.0000
Personal Services	0.0431	0.2040	0.0642	0.2457	0.0593	0.2372
Domestic Services	0.0431*	0.2040	0.1230	0.3293	0.0932	0.2920
Urban Area	0.4914	0.5021	0.5294	0.5005	0.5339	0.5010
State of Origin						
Antioquia	0.0862*	0.2819	0.0374	0.1903	0.0339	0.1817
Boyacá	0.0517*	0.2224	0.1444	0.3524	0.1102	0.3144
Caldas	0.0345	0.1833	0.0642	0.2457	0.0593	0.2372
Caquetá	0.0690*	0.2545	0.0053	0.0731	0.0085	0.0921
Cundinamarca	0.1552	0.3636	0.2299	0.4219	0.3475*	0.4782
Meta	0.0603	0.2392	0.0535	0.2256	0.0339	0.1817
Nariño	0.0172	0.1307	0.0267	0.1617	0.0085	0.0921
Santander	0.0948	0.2942	0.0642	0.2457	0.0508	0.2206
Tolima	0.2069	0.4068	0.1337	0.3412	0.1695*	0.3768
Valle	0.0086	0.0928	0.0160	0.1260	0.0339	0.1817
Year of First Trip						
Before 1969	0.1034*	0.3059	0.1711	0.3776	0.0508*	0.2206
1970-1979	0.0517*	0.2224	0.2299	0.4219	0.1356*	0.3438
1980-1989	0.3103	0.4646	0.3102	0.4638	0.4237	0.4963
1990-1996	0.2672	0.4444	0.2299	0.4219	0.2627	0.4420
1997-2003	0.2672*	0.4444	0.0588	0.2359	0.1271*	0.3345

* T-test for the difference of means; $p<0.1$

a. Time Constant variable fixed at the year of the survey

Source: Colombian Survey on Forced Migration, own calculations

Table 6.3. Binary Logistic Regression Estimates of the Probability of Being Employed in Agriculture or Out of the Labor Force the Year Before the First Migration Trip

Variable	Agriculture ß (SE)		Out of Labor Force ß (SE)	
Intercept	-0.0381		-0.9123	*
	(0.5721)		0.5075	
Personal Characteristics				
Male	1.2401	***	-3.0358	***
	(0.3389)		0.3726	
Age	0.0294	*	-0.00084	
	(0.0175)		0.0151	
Years of Education	-0.0389		0.1096	*
	(0.0500)		0.0443	
Owned Land	1.3448	**	-0.2338	
	(0.5988)		0.4924	
Living in Urban Area	-2.8946	***	-0.2733	
	(0.3124)		0.2872	
Migrant Experience				
Economic Migrant (Ref)				
Forced Migrant	-0.4749		0.8467	*
	(0.3698)		0.3613	
Tied Migrant	-0.1998		0.5791	*
	(0.3694)		0.3192	
N	421		421	
Log Likelihood Ratio	161.773		120.4615	
Percent Concordant	86.9		83.7	

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001

Source: Colombian Survey on Forced Migration, own calculations

Table 6.4. Characteristics of the Household Head and the Spouse at the Time of the Survey in Bogotá by Reported Migration Experience

Variable	Natives		Forced Migrants	
	Mean	Std Dev	Mean	Std Dev
N	635		116	
Personal Characteristics				
Head	0.4866*	0.5002	0.8190*	0.3867
Male	0.4066*	0.4916	0.6638*	0.4745
Mean Age	37.6205*	10.7277	41.5000*	12.8676
Mean Years of Education	5.8208*	2.9887	4.9914	3.0260
Married	0.7984	0.4015	0.6638	0.4745
Owned Dwelling	0.5197	0.5000	0.4483*	0.4995
Owned Land	0.0299	0.1705	0.0603	0.2392
Main Occupations				
Out of the Labor Force	0.3039*	0.4603	0.3190	0.4681
Agriculture	0.0205	0.1417	0.0172	0.1307
Skilled	0.0283	0.1661	0.0259	0.1594
Non-Skilled	0.1465	0.3538	0.1034	0.3059
Construction workers	0.1291	0.3356	0.1121	0.3168
Security Services	0.0425*	0.2019	0.0948	0.2942
Services and Commerce	0.0551	0.2284	0.0776	0.2687
Petty Commerce	0.0598	0.2374	0.0690	0.2545
Personal Services	0.0945	0.2927	0.1207*	0.3272
Domestic Services	0.0992	0.2992	0.0517	0.2224
Migration Experience				
Number of Previous Trips	0.0000	0.0000	2.2414	1.6023
Year of Arrival				
Before 1969	---	---	0.0431*	0.2040
1970-1979	---	---	0.0603*	0.2392
1980-1989	---	---	0.2241	0.4188
1990-1996	---	---	0.3276	0.4714
1997-2003	---	---	0.3448*	0.4774

Table 6.4 Continuation

Variable	Voluntary Migrants			
	Economic Migrants		Tied Migrants	
	Mean	Std Dev	Mean	Std Dev
N	187		118	
Personal Characteristics				
Head	0.7005	0.4593	0.5763*	0.4963
Male	0.5668	0.4968	0.3983*	0.4916
Mean Age	44.9144	12.7056	42.1017*	13.8159
Mean Years of Education	4.5348	3.0272	4.4746	3.4659
Married	0.7433	0.4380	0.7458	0.4373
Owned Dwelling	0.5775	0.4953	0.4915	0.5021
Owned Land	0.0588	0.2359	0.0254	0.1581
Main Occupations				
Out of the Labor Force	0.2353	0.4253	0.2966	0.4587
Agriculture	0.0160	0.1260	0.0169	0.1296
Skilled	0.0535	0.2256	0.0339	0.1817
Non-Skilled	0.1123	0.3166	0.1525	0.3611
Construction workers	0.1604	0.3680	0.0847*	0.2797
Security Services	0.0856	0.2805	0.0424	0.2023
Services and Commerce	0.0642	0.2457	0.0847	0.2797
Petty Commerce	0.0909	0.2883	0.1102	0.3144
Personal Services	0.0749	0.2639	0.0593	0.2372
Domestic Services	0.0856	0.2805	0.0847	0.2797
Migration Experience				
Number of Previous Trips	2.4652	1.5632	1.9068*	1.0701
Year of Arrival				
Before 1969	0.1283	0.3354	0.0678*	0.2525
1970-1979	0.2139	0.4112	0.1780	0.3841
1980-1989	0.2674	0.4438	0.3220	0.4692
1990-1996	0.2888	0.4544	0.3390	0.4754
1997-2003	0.1016	0.3029	0.0932	0.2920

* T-test for the difference of means; $p<0.1$. Economic migrant is the reference category
Source: Colombian Survey on Forced Migration, own calculations

Table 6.5. Binary Logistic Regression Estimated of the Probability of Being in the Labor Force Employed in the Construction Sector or Employed in Personal Services during the Year of the Survey in Bogotá.

Variable	In Labor Force ß (SE)		Construction ß (SE)		Personal Services ß (SE)	
Intercept	0.8634	+	-5.0339	***	-1.4552	*
	0.4775		0.8655		0.7346	
Personal Characteristics						
Head	0.7708	***	0.6037	*	0.3508	
	0.1854		0.3066		0.2691	
Male	1.9548	***	4.0705	***	-0.8630	**
	0.2065		0.6038		0.2739	
Age	-0.0342	***	0.00135		-0.0317	+
	0.00936		0.0128		0.0175	
Years of Education	0.0848	**	-0.0896	*	0.0337	
	0.0284		0.0391		0.0383	
Married	-0.2596		0.1633		-0.0913	
	0.1987		0.2757		0.2670	
Accumulated Wealth						
Owned Dwelling	-0.2124		-0.2731		-0.5305	*
	0.1558		0.2084		0.2242	
Migration Experience						
Economic Migrant (Ref)						
Native	-0.4270	+	0.3954		-0.1670	
	0.2369		0.2938		0.3462	
Tied Migrants	0.0281		-0.3332		-0.4068	
	0.3038		0.4233		0.4863	
Forced Migrants	-0.9162	**	-0.7247	+	0.6257	+
	0.3136		0.3869		0.4164	
Years of Accumulated Experience in Bogotá	0.0285	**	-0.0117		0.0378	*
	0.0105		0.0142		0.0183	
N	1,046		1,046		1,046	
Log Likelihood Ratio	245.4712		216.6787		28.6610	
Percent Concordant	78.7		84.4		65.1	

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001

Source: Colombian Survey on Forced Migration, own calculations

Table 6.6. Characteristics of the Household Head and the Spouse at the Time of the Survey in Bogotá by Cohort of Arrival to Bogotá

Variable	Before 1969		1970-1979		1980-1989	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
N	37		68		114	
Personal Characteristics						
Head	0.7568	0.4350	0.7206	0.4520	0.7018	0.4595
Male	0.6216	0.4917	0.5588	0.5002	0.4825	0.5019
Mean Age	63.6486*	9.5691	48.500*	8.5597	42.3070*	10.4341
Mean Years of Education	2.8649*	3.6527	4.0000*	2.9625	5.0526	3.3362
Married	0.7568	0.4350	0.7206	0.4520	0.6754*	0.4703
Accumulated Wealth						
Owned Dwelling	0.5135	0.5067	0.5882	0.4958	0.5263	0.5015
Migration Experience						
Number of previous trips	2.2703	1.2616	2.7941*	1.8002	2.1579	1.5144
Occupations						
Out of the Labor Force	0.4865*	0.5067	0.1618*	0.3710	0.2281	0.4214
Agriculture	0.0541	0.2292	0.0000	0.0000	0.0263	0.1608
Skilled	0.0000*	0.0000	0.0735	0.2629	0.0439	0.2057
Non-Skilled	0.0000*	0.0000	0.2206	0.4177	0.0789	0.2708
Construction workers	0.1892	0.3971	0.1618	0.3710	0.1491	0.3578
Security Services	0.0270*	0.1644	0.0441	0.2069	0.0702	0.2566
Services and Commerce	0.0811	0.2767	0.0882	0.2857	0.0877	0.2841
Petty Commerce	0.0541	0.2292	0.0882	0.2857	0.0877	0.2841
Personal Services	0.0541	0.2292	0.0735	0.2629	0.1140	0.3193
Domestic Services	0.0541	0.2292	0.0882	0.2857	0.1053	0.3082

Table 6.6. Continuation

Variable	1990-1996		1997-2003	
	Mean	Std Dev	Mean	Std Dev
N	132		70	
Personal Characteristics				
Head	0.6591	0.4758	0.7143	0.4550
Male	0.5530	0.4991	0.5857	0.4962
Mean Age	37.8561	11.7266	38.6857	12.7615
Mean Years of Education	5.1061	3.0599	4.6714	2.5179
Married	0.7727	0.4207	0.6857	0.4676
Accumulated Wealth				
Owned Dwelling	0.5152	0.5017	0.4429	0.5003
Migration Experience				
Number of previous trips	2.0076	1.1883	2.3000	1.5166
Occupations				
Out of the Labor Force	0.2652	0.4431	0.3714	0.4867
Agriculture	0.0076	0.0870	0.0143	0.1195
Skilled	0.0455	0.2091	0.0143	0.1195
Non-Skilled	0.1288	0.3362	0.1429	0.3525
Construction workers	0.1061	0.3091	0.0571	0.2338
Security Services	0.0985	0.2991	0.1000	0.3022
Services and Commerce	0.0455	0.2091	0.0857	0.2820
Petty Commerce	0.1061	0.3091	0.0857	0.2820
Personal Services	0.0682	0.2530	0.0857	0.2820
Domestic Services	0.0758	0.2656	0.0286	0.1678

* T-test for the difference of means; $p<0.1$. The cohort arriving between 1990 and 1996 is the reference category

Source: Colombian Survey on Forced Migration, own calculations

Table 6.7. Descriptive Statistics of Household Heads and Spouses for Years living Outside Bogotá.

Intercept	N	Mean	Std. Dev.	Minimum	Maximum
Occupation					
Employed in Agriculture	4,173	0.6104	0.4877	0	1
Employed as Skilled Employee	4,173	0.0424	0.2016	0	1
Employed as Unskilled Worker	4,173	0.0652	0.2469	0	1
Employed in Construction Sector	4,173	0.0482	0.2141	0	1
Employed in the Provision of Security Services	4,173	0.0189	0.1363	0	1
Employed in Services and Commerce Sector	4,173	0.0316	0.1750	0	1
Petty Commerce	4,173	0.0240	0.1530	0	1
Employed in the Provision of Personal Services	4,173	0.0685	0.2527	0	1
Employed in the Provision of Domestic Services	4,173	0.0896	0.2857	0	1
Employed in the Informal Sector	1,621	0.5928	0.4915	0	1
Personal Characteristics					
Head [a]	4,173	0.8073	0.3944	0	1
Male	4,173	0.7014	0.4577	0	1
Age	4,173	26.6899	10.1091	15	69
Years of Education	4,173	3.7913	3.0320	0	16
Indicators of Accumulated Wealth					
Owns a House	4,173	0.0247	0.1552	0	1
Owns Land	4,173	0.1289	0.3352	0	1
Characteristics of the place of residence					
Living in Urban Area	4,173	0.4050	0.4909	0	1
Labor Force Experience					
Years of Labor Force Experience in Rural Areas	4,173	7.6791	9.5436	0	55
Years of Labor Force Experience in Urban Areas	4,173	4.2773	7.0601	0	49
Migration Experience					
Economic Migrant [a]	4,173	0.2027	0.4021	0	1
Forced Migrant [a]	4,173	0.3554	0.4787	0	1
Tied Migrant [a]	4,173	0.4419	0.4967	0	1
Accumulated Migration Experience	4,173	3.8354	6.1518	0	44
Accumulated Years Spent in Urban Areas Out of Bogotá	4,173	8.0578	9.8010	0	55
Accumulated Years Spent in Rural Areas Out of Bogotá	4,173	3.5885	6.8958	0	50

a. Time constant

Source: Colombian Survey on Forced Migration, own calculations

Table 6.8. Binary Logistic Regression Estimates of the Probability of Being Employed in one of Nine Groups of Occupations for Households Heads and Spouses not Living in Bogotá in a Given Year

Variables	Agriculture ß (S.E.)		Skilled ß (S.E.)		Non-Skilled ß (S.E.)	
Intercept	-1.7244	**	-7.9965	***	-10.3381	***
	(0.6506)		(0.9746)		0.9773	
Personal Characteristics						
Head	0.0988		-1.1281	***	0.9804	***
	(0.1733)		(0.2292)		0.2831	
Male	0.4851	**	1.4356	***	1.5958	***
	(0.1566)		(0.2480)		0.2283	
Age	0.2508	***	0.1962	**	0.3974	***
	(0.0475)		(0.0656)		0.0655	
Age Square	0.000233		-0.00183	*	-0.00511	***
	(0.000647)		(0.000957)		0.000932	
Years of Education	-0.0865	***	0.2176	***	-0.0483	*
	(0.0200)		(0.0271)		0.0244	
Indicators of Accumulated Wealth						
Owns a house	-0.1565		-0.9358		0.0561	
	(0.4005)		(0.7670)		0.4615	
Owns land	1.4991	***	1.3642	***	-1.9122	***
	(0.2062)		(0.2556)		0.4755	
Characteristics of the place of residence						
Living in Urban Area	-3.2362	***	1.3384	***	0.9514	***
	(0.1437)		(0.2636)		0.1941	
Labor Force Experience						
Years of Labor Force Experience in Rural	0.3851	***	-0.3708	***	-0.2405	***
	(0.0323)		(0.0506)		0.0322	
Years of Labor Force Experience in Urban	-0.2436	***	-0.0575	+	-0.0773	*
	(0.0331)		(0.0341)		0.0306	
Migration Experience out of Bogotá						
Accumulated Years Spent in Urban Areas	-0.2311	***	-0.0512	+	-0.00716	
	(0.0223)		(0.0304)		0.0238	
Accumulated Years Spent in Rural Areas	-0.5026	***	0.0911	***	0.0651	**
	(0.02673)		(0.0252)		0.0245	
Forced Migrant	-0.1539		-0.1051		0.3127	*
	(0.14503)		(0.2483)		0.1638	
Tied Migrant	-0.2647		1.0588	***	0.5333	**
	(0.16633)		(0.2377)		0.1901	
Forced Migrant*Accumulated Mig. Exp.	0.0518	*	0.00627		-0.0169	
	(0.02363)		(0.0233)		0.0198	
Tied Migrant*Accumulated Mig. Exp.	-0.0584		-0.3877	*	-0.2572	*
	(0.03793)		(0.1746)		0.1250	
N	4,173		4,173		4,173	
Likelihood Ratio	3,466.01		472.3002		339.8288	
Percent Concordant	95.8		88.3		81.6	

Table 6.8. Continuation

Variables	Construction ß (S.E.)		Security ß (S.E.)		Service and Commerce ß (S.E.)	
Intercept	-5.9997	***	-7.0443	***	-7.4756	***
	1.2208		1.5243		1.9691	
Personal Characteristics						
Head	2.9060	***			-1.2057	***
	0.4882				0.2455	
Male					0.2128	
					0.2705	
Age	-0.0818		0.1203		0.3615	*
	0.0767		0.1055		0.1543	
Age Square	-0.00225	**	-0.00278	*	-0.0130	***
	0.000801		0.00137		0.00273	
Years of Education	0.1196	***	0.2255	***	0.1625	***
	0.0255		0.0388		0.0346	
Indicators of Accumulated Wealth						
Owned Dwelling	-0.3544		2.9523	***	0.9583	+
	0.5531		0.4098		0.5484	
Owned Land	-2.1179	***	-1.9057	**	1.2739	***
	0.5454		0.6241		0.2717	
Characteristics of the place of residence						
Living in Urban Area	1.5842	***			1.3839	***
	0.2435				0.3607	
Labor Force Experience						
Years of Labor Force Experience in Rural	0.0258		-0.0620		-0.4187	***
	0.0525		0.0480		0.0789	
Years of Labor Force Experience in Urban	0.2713	***	0.0494		0.0187	
	0.0537		0.0474		0.0450	
Migration Experience out of Bogotá						
Accumulated Years Spent in Urban Areas	-0.0164		0.1411	***	0.2677	***
	0.0216		0.0360		0.0791	
Accumulated Years Spent in Rural Areas	0.1271	***	0.0870	*	0.3108	***
	0.0237		0.0354		0.0803	
Forced Migrant	0.7263	***	-1.0633	**	-0.1838	
	0.1901		0.3553		0.2912	
Tied Migrant	0.6222	**	-3.5945	**	-0.2734	
	0.2298		1.0927		0.3496	
Forced Migrant*Accumulated Mig. Exp	-0.1392	***	0.00739		0.1784	***
	0.0249		0.0312		0.0324	
Tied Migrant*Accumulated Mig Exp	-0.0717		0.0335		-0.1978	
	0.0723		0.3611		0.1851	
N	4,173		4,173		4,173	
Likelihood Ratio	410.3527		211.4526		390.3466	
Percent Concordant	86		87.8		89.5	

Table 6.8. Continuation

Variables	Petty Commerce ß (S.E.)		Personal Services ß (S.E.)		Domestic Services ß (S.E.)	
Intercept	-6.4195	***	-1.5908	*	1.7313	*
	1.4545		0.8086		0.7563	
Personal Characteristics						
Head	-1.5960	***	0.5815	**	-1.2532	***
	0.3080		0.1942		0.1342	
Male	1.4149	***	-0.4767	**		
	0.3145		0.1664			
Age	0.2685	*	-0.1615	**	-0.1830	***
	0.1093		0.0553		0.0545	
Age Square	-0.00200		0.00156	*	0.00130	*
	0.00167		0.000662		0.000651	
Years of Education	-0.0558		-0.1268	***	-0.1842	***
	0.0378		0.0247		0.0239	
Indicators of Accumulated Wealth						
Owned their House	-0.5341		-2.1174	*	-1.4889	*
	0.8339		1.0266		0.7667	
Owned Land			-0.9491	**	0.5626	**
			0.3080		0.1912	
Characteristics of the place of residence						
Living in Urban Area	1.2191	*	2.4951	***	1.2652	***
	0.5429		0.2287		0.1746	
Labor Force Experience						
Years of Labor Force Experience in Rural	-0.3230	***	-0.1491	***	-0.2315	***
	0.0873		0.0329		0.0326	
Years of Labor Force Experience in Urban	-0.0993	*	0.0488		0.0253	
	0.0484		0.0313		0.0285	
Migration Experience out of Bogotá						
Accumulated Years Spent in Urban Areas	-0.0383		0.0508	*	0.0768	**
	0.0326		0.0205		0.0288	
Accumulated Years Spent in Rural Areas	-0.4943	***	0.1380	***	0.1559	***
	0.1321		0.0237		0.0294	
Forced Migrant	-1.2906	**	0.4912	**	-1.0923	***
	0.3961		0.1767		0.2156	
Tied Migrant	-2.3570	***	0.1290		-0.5139	**
	0.5345		0.1855		0.1740	
Forced Migrant*Accumulated Mig. Exp.	0.0672		-0.2494	***	0.1012	***
	0.0452		0.0588		0.0214	
Tied Migrant*Accumulated Mig. Exp.	0.2090	*	0.1170	**	0.1966	***
	0.0859		0.0397		0.0371	
N	4,173		4,173		4,173	
Likelihood Ratio	313.2153		551.0805		774.5817	
Percent Concordant	90.5		85.7		87.5	

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001 / *Source: CSFM, own calculations*

Table 6.9. Binary Logistic Regression Estimates of the Probability of Being Employed in the Informal Sector for Household Heads and Spouses not Living in Bogotá in a Given Year

Variables	Informal ß (S.E.)	
Intercept	5.5539	***
	(0.7626)	
Personal Characteristics		
Head	0.8116	***
	(0.1780)	
Male	-2.0178	***
	(0.1761)	
Age	-0.2980	***
	(0.0532)	
Age Square	0.00286	***
	(0.000684)	
Years of Education	-0.1503	***
	(0.0196)	
Indicators of Accumulated Wealth		
Owns a House	-1.6125	***
	(0.4558)	
Owns Land	-1.3435	***
	(0.2204)	
Characteristics of the place of residence		
Living in Urban Area	0.6769	***
	(0.1875)	
Labor Force Experience		
Years of Labor Force Experience in Rural Areas	0.0640	*
	(0.0282)	
Years of Labor Force Experience in Urban Areas	0.1290	***
	(0.0260)	
Migration Experience		
Accumulated Years Spent in Urban Areas Out of Bogotá	0.0166	
	(0.0210)	
Accumulated Years Spent in Rural Areas Out of Bogotá	0.0300	
	(0.0207)	
Economic Migrant (Ref)		
Forced Migrant	0.1422	
	(0.1555)	
Tied Migrant	-0.7472	***
	(0.1776)	
Forced Migrant*Accumulated Migration Experience	-0.0654	***
	(0.0173)	
Tied Migrant*Accumulated Migration Experience	0.5645	***
	(0.1135)	
N= 1612 / Likelihood Ratio=417.4253 / Percent Concordant = 78.1		

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001 / *Source: CSFM, own calculations*

Table 6.10. Descriptive Statistics of Household Heads and Spouses for Years living in Bogotá.

Intercept	N	Mean	Std. Dev.	Min	Max
Occupation					
Employed in Agriculture	14,660	0.0291	0.1682	0	1
Employed as Skilled Employee	14,660	0.0409	0.1981	0	1
Employed as Unskilled Worker	14,660	0.2034	0.4025	0	1
Employed in Construction Sector	14,660	0.1971	0.3978	0	1
Employed in the Provision of Security Services	14,660	0.0725	0.2593	0	1
Employed in Services and Commerce Sector	14,660	0.0750	0.2635	0	1
Petty Commerce	14,660	0.0739	0.2617	0	1
Employed in the Provision of Personal Services	14,660	0.1316	0.3380	0	1
Employed in the Provision of Domestic Services	14,660	0.1720	0.3774	0	1
Employed in the Informal Sector	14,596	0.6064	0.4886	0	1
Characteristics of the Household Head					
Head	14,660	0.6708	0.4699	0	1
Male	14,585	0.5635	0.4960	0	1
Age	14,660	31.6568	10.9705	15	81
Years of Education	14,502	5.0094	3.0691	0	16
Indicators of Accumulated Wealth					
Owns House	14,660	0.2507	0.4334	0	1
Labor Force Experience					
Years of Labor Force Experience in Rural Areas	14,660	2.8308	6.4253	0	55
Years of Labor Force Experience in Urban Areas	14,660	13.0505	9.4993	0	58
Migration Experience					
Accumulated Years Spent in Bogotá	14,660	12.7441	9.2108	1	64
Native	14,660	0.6494	0.4772	0	1
Economic Migrant	14,660	0.1963	0.3972	0	1
Forced Migrant	14,660	0.0681	0.2519	0	1
Tied Migrant	14,660	0.0862	0.2807	0	1
Accumulated Migration Experience	14,660	4.4459	8.6337	0	64

Source: Colombian Survey on Forced Migration, own calculations

Table 6.11. Binary Logistic Regression Estimates of the Probability of Being Employed in one of Nine Groups of Occupations for Households Heads and Spouses Living in Bogotá in a Given Year

Variables	Agriculture ß (S.E.)		Skilled ß (S.E.)		Non-Skilled ß (S.E.)	
Intercept	-1.9297	***	-5.2629	***	-2.9884	***
	(0.5548)		(0.4274)		(0.2149)	
Personal Characteristics						
Head	-0.5615	***	0.00983		0.0738	
	(0.1499)		(0.1070)		(0.0551)	
Male	-0.1247		0.1145		1.2170	***
	(0.1537)		(0.1035)		(0.0549)	
Age	-0.0791	*	0.0242		0.0443	***
	(0.0339)		(0.0254)		(0.0133)	
Age Square	-0.00222	***	-0.00034		-0.00070	***
	(0.000435)		(0.000321)		(0.000171)	
Years of Education	0.00781		0.1914	***	0.0765	***
	(0.0235)		(0.0136)		(0.00751)	
Indicators of Accumulated Wealth						
Owns House	0.6813	***	0.2150	*	0.0600	
	(0.1477)		(0.0978)		(0.0529)	
Labor Force Experience						
Years of Labor Force Exp in Rural Areas	0.2885	***	-0.0241		-0.0606	***
	(0.0221)		(0.0151)		(0.00804)	
Years of Labor Force Exp in Urban	-0.1392	***	0.00821		-0.0170	*
	(0.0204)		(0.0126)		(0.00665)	
Migration Experience						
Accumulated Years Spent in Bogotá	0.2424	***	0.0114		0.00786	
	(0.0132)		(0.00938)		(0.00509)	
Native (Ref)						
Economic Migrant	0.3239		0.6411	***	-0.0329	
	(0.2505)		(0.1800)		(0.1014)	
Forced Migrant	-0.5309		0.2169		-0.3390	**
	(0.3354)		(0.2238)		(0.1135)	
Tied Migrant	-0.4958		1.1842	***	-0.2386	+
	(0.4294)		(0.2348)		(0.1330)	
Forced Migrant*Accumulated Mig Exp	0.0603	***	0.0218		0.0541	***
	(0.0137)		(0.0141)		(0.00717)	
Tied Migrant*Accumulated Mig Exp	0.0985	**	-0.0915	***	0.0464	***
	(0.0317)		(0.0238)		(0.00938)	
Economic Mig*Accumulated Mig Exp	-0.0141		0.0137		-0.00837	
	(0.0158)		(0.00947)		(0.00633)	
N	14,502		14,502		14,502	
Likelihood Ratio	1208.059		324.101		1159.597	
Percent Concordant	84.4		66.7		69.6	

Table 6.11. Continuation

Variables	Construction ß (S.E.)		Security ß (S.E.)		Service and Commerce ß (S.E.)	
Intercept	-0.1656		-6.4995	***	-3.5082	***
	(0.2429)		(0.3952)		(0.2627)	
Personal Characteristics						
Head	1.4354	***	0.2890	**	-0.0169	
	(0.0634)		(0.1072)		(0.0736)	
Male			2.0608	***	-1.0104	***
			(0.1281)		(0.0797)	
Age	-0.1438	***	0.0754	***	0.0486	**
	(0.0153)		(0.0218)		(0.0150)	
Age Square	-0.00006		-0.00127	***	0.000314	+
	(0.000129)		(0.000230)		(0.000186)	
Years of Education	-0.0350	***	0.0291	*	0.0988	***
	(0.00821)		(0.0118)		(0.0111)	
Indicators of Accumulated Wealth						
Owns House	-0.1081	*	0.2081	**	0.1923	*
	(0.0555)		(0.0762)		(0.0763)	
Labor Force Experience						
Years of Labor Force Exp in Rural Areas	0.1971	***	0.0386	**	-0.00746	
	(0.0123)		(0.0143)		(0.00811)	
Years of Labor Force Exp in Urban	0.1924	***	0.0365	**	-0.0799	***
	(0.0123)		(0.0141)		(0.00751)	
Migration Experience						
Accumulated Years Spent in Bogotá	-0.0451	***	0.00248		0.00443	
	(0.00457)		(0.00651)		(0.00701)	
Native (Ref)						
Economic Migrant	-0.3223	***	0.7561	***	-0.4445	**
	(0.0962)		(0.1349)		(0.1659)	
Forced Migrant	-0.4579	***	0.7697	***	0.0675	
	(0.1085)		(0.1437)		(0.1652)	
Tied Migrant	-0.8825	***	1.3174	***	-0.3697	+
	(0.1435)		(0.1811)		(0.1969)	
Forced Migrant*Accumulated Mig Exp	-0.0262	***	-0.0250	**	-0.0209	*
	(0.00610)		(0.00947)		(0.00896)	
Tied Migrant*Accumulated Mig Exp	0.0303	**	-0.0646	***	0.0246	+
	(0.00980)		(0.0145)		(0.0128)	
Economic Mig*Accumulated Mig Exp	-0.00554		-0.00515		0.00767	
	(0.00528)		(0.00695)		(0.00878)	
N	14,502		14,502		14,502	
Likelihood Ratio	1555.945		995.126		559.409	
Percent Concordant	72.6		77		70	

Table 6.11. Continuation

Variables	Petty Commerce ß (S.E.)		Personal Services ß (S.E.)		Domestic Services ß (S.E.)	
Intercept	-3.8176	***	-1.6763	***	1.3407	***
	(0.3040)		(0.2365)		0.2084	
Personal Characteristics						
Head	0.3375	***	-0.1472	*	-1.3429	***
	(0.0765)		(0.0572)		(0.0495)	
Male	-0.4796	***	-0.9805	***		
	(0.0750)		(0.0609)			
Age	0.0830	***	0.0290	+	-0.0618	***
	(0.0182)		(0.0149)		(0.0129)	
Age Square	-0.00063	**	-0.00047	*	0.000932	***
	(0.000230)		(0.000196)		(0.000163)	
Years of Education	-0.0180		0.0108		-0.2022	***
	(0.0113)		(0.00881)		(0.00918)	
Indicators of Accumulated Wealth						
Owns House	0.00337		-0.4958	***	-0.0825	
	(0.0771)		(0.0678)		(0.0608)	
Labor Force Experience						
Years of Labor Force Exp in Rural Areas	-0.0755	***	-0.0429	***	-0.1073	***
	(0.0105)		(0.00967)		(0.00903)	
Years of Labor Force Exp in Urban	-0.0244	**	0.00687		-0.00081	
	(0.00786)		(0.00716)		(0.00663)	
Migration Experience						
Accumulated Years Spent in Bogotá	-0.00538		0.00197		-0.00592	
	(0.00692)		(0.00610)		(0.00510)	
Native (Ref)						
Economic Migrant	-0.6310	***	-0.2390	+	0.4764	***
	(0.1681)		(0.1246)		(0.1039)	
Forced Migrant	0.4524	**	0.6227	***	-0.1811	
	(0.1633)		(0.1269)		(0.1518)	
Tied Migrant	0.2891	+	-0.6436	***	0.7474	***
	(0.1701)		(0.1740)		(0.1332)	
Forced Migrant*Accumulated Mig Exp	-0.0675	**	-0.0565	***	0.00634	
	(0.0218)		(0.0158)		(0.0104)	
Tied Migrant*Accumulated Mig Exp	0.00609		0.0193		-0.0916	***
	(0.0121)		(0.0130)		(0.0126)	
Economic Mig*Accumulated Mig Exp	0.0391	***	0.00620		-0.0254	***
	(0.00835)		(0.00740)		(0.00643)	
N	14,502		14,502		14,502	
Likelihood Ratio	232.122		721.220		1873.713	
Percent Concordant	62.7		67.8		76.2	

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001

Source: Colombian Survey on Forced Migration, own calculations

Table 6.12. Binary Logistic Regression Estimates of the Probability of Being Employed in the Informal Sector for Household Heads and Spouses Living in Bogotá in a Given Year

Variables	Informal ß (S.E.)	
Intercept	2.9862	***
	(0.1666)	
Personal Characteristics		
Head	-0.0661	
	(0.0451)	
Male	-1.0251	***
	(0.0445)	
Age	-0.0694	***
	(0.00982)	
Age Square	0.000411	***
	(0.000118)	
Years of Education	-0.1363	***
	(0.00653)	
Indicators of Accumulated Wealth		
Owns House	-0.2170	***
	(0.0438)	
Labor Force Experience		
Years of Labor Force Experience in Rural Areas	0.0489	***
	(0.00597)	
Years of Labor Force Experience in Urban Areas	0.0496	***
	(0.00550)	
Migration Experience		
Accumulated Years Spent in Bogotá	-0.00860	*
	(0.00390)	
Native (Ref)		
Economic Migrant	-0.1446	+
	(0.0809)	
Forced Migrant	-0.0954	
	(0.0905)	
Tied Migrant	-0.3014	**
	(0.1064)	
Forced Migrant*Accumulated Migration Experience	-0.0171	**
	(0.00547)	
Tied Migrant*Accumulated Migration Experience	-0.00928	
	(0.00771)	
Economic Migrant*Accumulated Migration Exp	-0.00355	
	(0.00456)	
N	14,502	
Likelihood Ratio	1507.896	
Percent Concordant	68.1	

+ = p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001

Source: Colombian Survey on Forced Migration, own calculations