Forthcoming International Migration Studies

MIGRATION AS A RISKY ENTERPRISE: A DIAGNOSTIC FOR BANGLADESH

Narayan Das, Alain de Janvry, Sakib Mahmood, and Elisabeth Sadoulet

April 16, 2018

Abstract

We provide a quantitative diagnostic of attempts by Bangladeshi workers at migrating to foreign countries and the risks that they face in doing so. We show that migration failures may be as high as one third of attempts at migrating, with large financial losses for households with an aspiring migrant. Using a duration model, we find that success in migrating is associated with a current higher national migration, a larger village migration network, and an urban residence. We also find that in spite of the high cost of failure, there are still large expected gains from trying to migrate.

Keywords: International migration, Bangladesh, migration failure

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Narayan Das, BRAC Research and Evaluation Division, narayan.cd@brac.net. Alain de Janvry, University of California at Berkeley and FERDI, alain@berkeley.edu. Sakib Mahmood, University of California at Berkeley, sakib@berkeley.edu. Elisabeth Sadoulet, University of California at Berkeley and FERDI, esadoulet@berkeley.edu

I. The challenge of migration

International migration plays an important role for in Bangladeshi economy. In 2015, remittances accounted for more than USD 14 billion, about 7.4% of GDP.[1] This dwarfs the USD 3 billion in foreign aid and the USD 2.2 billion in foreign direct investment the country received that year.[2] In the generation of foreign exchange, remittances come only second to garment exports that reached USD20 billion in fiscal year 2014-15.[3] With an increasing migration rate, remittances are expected to play an even more prominent role in Bangladesh's future. While women constitute the majority of workers in the garment sector, men dominate migration (Rahman and Siddiqui, 2015; International Organization for Migration, 2010). Around 10% of the national male labor force in Bangladesh is migrants, with some 0.6 million new migrants departing each year.[4] Most migrants are poor, rural, and low-skilled individuals who work on short-term contracts, mainly in the Persian Gulf, Malaysia, Singapore, Lebanon, and Jordan.[5] Migration has become a major lifeblood to Bangladesh's economy. Making sure that willing and able candidates effectively succeed in migrating is thus an important national policy issue.

At the individual level, international migration's impact has been substantial as well. In spite of a remarkably rapid decline in the fertility rate (Paul, 1997), Bangladesh still has a large labor force growth rate[6] and extensive surplus labor, especially among young unskilled male workers. For them, in spite of costs and risks, migration offers a unique opportunity to escape unemployment and poverty. When successful, it has been an avenue for poverty reduction for rural households (Afsar et al., 2002; Raihan et al., 2009; Sharma and Zaman, 2009).[7] In the 2009 Bangladesh Household Remittance Survey (BHRS) (International Organization for Migration, 2010), the most comprehensive source of information on migrants so far, migrant households were found to be earning annually twice as much as the average resident household in Bangladesh. Since migrants usually get short-term contracts, there is a general concern that accrued benefits might only be temporary.[8] However, our data, which we discuss below, show that individuals who have successfully migrated once manage to re-migrate with relative ease. They can also extend their stay by renewing their contracts for subsequent terms by agreement between employer and employee (Islam, 2015).[9] Successful migrants are therefore likely to reap benefits for extended periods of time, with lasting impacts on the income

[1] http://www.bmet.org.bd/BMET/stattisticalDataAction
[2] http://www.bangladesh-bank.org/econdata/index.php
[3] https://www.bb.org.bd/openpdf.php
[4] Up to June 2007, five million Bangladeshi workers had been employed abroad (Islam, 2015). Nearly 98% of migrants are males (International Organization for Migration, 2010). In 2007, the working-age male population was around 42.2 million (estimate based on statistics reported in ADB, 2016). Hence, in 2007, 11.7% of the national male labor force were migrants. Regarding yearly departure, official statistics (available at http://www.bmet.gov.bd/BMET/viewStatReport.action?reportnumber=20) show that in 2017, 0.76 million Bangladeshi workers departed the home country.
[5] Persian Gulf countries includes Oman, the United Arab Emirates, Saudi Arabia, Qatar, Bahrain, Kuwait, and Iraq (http://www.bmet.gov.bd/BMET/viewStatReport.action?reportnumber=16).
[6] The total fertility rate was 4.0 for the generation of workers currently entering the labor force. http://www.bbs.gov.bd/WebTestApplication/userfiles/Image/Census2011/Bangladesh_glance.pdf
[7] Afsar et al. (2002) estimated that 21 percent of migrant households were moderately poor prior to overseas migration, while this percentage fell to 7 percent after migration. In a benefit-cost analysis of migration, the same study found a ratio of 2.9. Using computable general equilibrium modeling of the Bangladesh economy and micro-econometric analysis at the household level, Raihan et al. (2009) show that 1.7 out of the 9 percentage-point reduction in the poverty headcount ratio during 2000-2005 was due to the growth in remittances. They also find positive and significant impacts of remittances on the household's food and housing-related expenditures. Further work by Sharma and Zaman (2009) showed that overseas migration conveyed substantial benefits to families in terms of household consumption, use of modern agricultural inputs, and level of household savings. Except for possibly negative short-run effects (Gibson et al., 2011), that international migration creates positive income and developmental effects for emitting households has been widely noted in the literature (Özden et al., 2011; Gibson et al., 2014).
[8] According to Islam (2015), duration of the initial contract period is generally 2 to 3 years.
[9] In the 2009 BHRS (IOM, 2010), 57% of migrants were found to stay abroad more than five years.

and welfare of households. In the BHRS, 70% of respondents expressed confidence in sustaining their increases in income through the skills learned and assets acquired in migrating, and 88% of households with migrants reported enhanced educational opportunities for their children, resulting in permanent investment in human capital. This is for successful migrants. The other side of the coin, however, vastly ignored and un-documented, is the large rate of migration failure that leaves poor potential migrants generally worse-off after having invested in migration and failed to either leave the country or find a job at destination. Migration thus appears as a risky enterprise with potentially large negative effects for many.

Newspapers in Bangladesh extensively report on the plight of prospective migrants, exposing malpractice by dishonest middlemen, issuance of fake visas, arbitrary visa cancelations in the host country, and failure to find the expected job at destination (International Organization for Migration, 2002). Fraudulent agents appear to be particularly active in the migration business, where they deal with a poor and ill-informed clientele, especially in rural areas. Systematic evidence on the issue remains, however, scarce. Purvez and Karim (2009) conducted a pioneering study of migration from Bangladesh, pointing out the scope of migration failures and identifying the sources of failure. Their database, though, was very limited and the reported information more in the nature of case studies. Our study attempts to fill the gap by providing a quantitative description of migration failure in Bangladesh. Through a unique data collection strategy using high-frequency recalls to characterize attempts at migration (with both successes and failures) and migration itself (including early returns that indicate migration failures), we provide a diagnostic assessment of the extent of migration failure, its cost on failing households, and its proximate, non-causal determinants.

There is an important literature showing the role of risk of failure in holding back migration, both domestically and internationally. Bryan, Chowdhury, and Mobarak (2014) used a randomized control trial in Bangladesh to show that a small cash incentive to rural households close to subsistence can induce a large response in seasonal rural-urban domestic migration, with high rewards for the household. They attribute this effect to the fact that the risk of not matching to an employer at destination was holding back the very poor from migrating. Risk reduction by subsidizing migration's cost can thus help poor households take advantage of migration's benefits. Much attention has also been given in the literature to the role of social networks in facilitating migration (Massey and Garcia-España, 1987; McKenzie and Rapoport, 2010). Social networks have many facilitating functions, including that of reducing the risk of migration failures, in particular through the provision of information on how to migrate and find a job at destination (Dolfin and Genicot, 2010). Finally, several studies have emphasized the high chance of failure after having migrated, including the risk of falling victim to human trafficking and forced labor (Harroff-Tavel and Nasri, 2013; UNODC, 2011). In our study, we characterize migration failure after departure by the migrant's return less than six months after the departure date. We show, however, that the incidence of migration failure after departure is less important than failure before departure, but after funds have been spent in attempting to migrate.

Using high-intensity recall data collected across 496 villages in Bangladesh, our analysis suggests that a significant proportion of new migration attempts end in failure. A conservative estimate from our village census data suggests that 28% of attempts at migrating are unsuccessful. A broader definition of failed migration, however, indicates that the rate can be as high as 34%. These failures impose a huge cost on the households of failed migrants, with a median loss of USD 250. This is approximately 24% of annual earnings for an average Bangladeshi household and clearly much more for a poor rural household with median annual earning of USD 109. Furthermore, evidence indicates that failure discourages potential migrants from trying to migrate again. We argue that at the aggregate level, total migration is constrained by the number of available jobs for Bangladeshis in the destination countries, partly established by agreements signed between governments. Hence, as the number of aspiring migrants steadily rises, the countrywide failure rate reflects the demand constraint. At the individual level, who fails among applicants is strongly correlated with how knowledgeable and experienced with the migration process an applicant is. At that level, the main correlates of success are the size of the community migration network and an urban residence, while attempting to migrate through relatives does not significantly correlate with success. Finally, we show that earnings abroad

for successful migrants are a multiple of earnings on the domestic labor market. As a consequence, in spite of the high risk of failure and associated costs, attempts at migrating remain a powerful attraction.

In what follows, we provide a brief review of the migration process in Section II and present the data used in Section III. We give in Section IV an estimation of the extent of migration failure and in Section V of the cost of failure. We then use econometric analysis in Section VI to identify the correlates of both failure and success in migration. In Section VII, we ask whether the cost of failure may deter future migration. Section VIII concludes with policy recommendations to help candidates to migration achieve a higher rate of success.

II. The migration process

Significant emigration out of Bangladesh started in the early 1980s and grew steadily to reach 200-220 thousand migrants per year in 2006, for a total population of almost 150 million (Figure 1). Since then, it has dramatically increased, reaching almost 900 thousand in 2008 and passing the million mark in 2017. Yet as seen in Figure 1, the migrant flow has been extremely erratic over the last 10 years. These fluctuations are largely driven by the demand for labor in destination countries and the nature of bilateral relations between Bangladesh and those countries. Significant restrictions on Bangladeshi migrant workers were imposed during this period by countries such as Kuwait, Malaysia, and Saudi Arabia. Restrictions from Saudi Arabia reduced the flow of Bangladeshi migrants from more than 200,000 in 2007 to 132,000 in 2008 and only 10,000 in 2009, before picking up again to reach 60,000 in 2016 and 140,000 in 2017 (Figure 1).[10]

The Bangladeshi government's institution that regulates and supervises migration is the Bureau of Manpower Employment and Training (BMET). Established in 1976 as a department attached to the then Ministry of Manpower Development and Social Welfare, it is now under the Ministry of Expatriate Welfare and Overseas Employment. BMET issues licenses to the recruitment agencies that operate in Bangladesh, giving them authorization to recruit migrants and providing emigration clearance after verifying visas and employment contracts (Rahman, 2012). It also organizes training sessions for aspiring migrants, keeps track of migrants who depart with their clearance, and maintains a database that includes information on aspiring migrants (ILO, 2015).[11]

The actual recruitment of migrants is done through public agencies, social networks, and private recruitment agencies (Rahman, 2012).[12] The government participates in recruitment through two small-scale initiatives. One is the Bangladesh Overseas Employment and Services Ltd (BOESL), which has been operating since 1984 and caters mainly to high-skilled workers and professionals (Siddiqui et al., 2008). The other is a lottery system for selecting migrants to Malaysia. Social network migration comes in the form of an individual aspiring migrant obtaining a job and a visa through a migrant living abroad and to which he/she is connected. Migration through these individual relationships is cumulative in that the more people from the network live abroad, the easier it is to find a way to migrate. However, for foreign firms or projects with large labor needs, migration is most often mediated through private recruitment agencies that can gather from

[10] Despite these country-level fluctuations, the share of the Persian Gulf countries among destinations has been consistently very high, remaining above 75% almost every year.

[11] Officially, all job seekers must be registered in the BMET database through the District Employment and Manpower Offices (DEMOs) or the Bangladesh Association of International Recruiting Agencies (BAIRA) offices. Recruitment agencies, however, complain that the work skills and vital information reported in the database are inaccurate and therefore avoid using it (ILO, 2015).

[12] In many countries, social networks and private recruitment agencies do most of the job matching. Because of the absence of international job descriptions and of information on workers' credentials, bureaucratic public labor exchanges are generally ill-suited for cross-border matching of workers to jobs (Martin, 2010)

a few dozen to hundreds of migrants.[13] Currently, there are 898 private recruitment agencies in Bangladesh, regrouped under the Bangladesh Association of International Recruiting Agencies (BAIRA) created in 1984.[14] Migration through these agencies, as discussed in Rahman (2012), proceeds as follows.[15] Recruitment agencies in a destination country send a request for a given number of migrants with specific qualifications to their counterparts in Bangladesh. The recruitment agencies in Bangladesh get initial clearance from BMET, allowing them to recruit. They are located mostly in the two large cities of Dhaka and Chittagong, while most prospective migrants are dispersed throughout the country and in rural areas. Recruitment agencies thus rely on a large number of middlemen and their sub-agents to help them recruit prospective migrants. These intermediaries submit information on the vital characteristics and work experience of applicants from which the agencies select future migrants. In many cases, selection includes an interview by the agency, implying that the migrant must travel to the city where the agency is located. The agencies in destination countries process the visas and pass them to the agencies in Bangladesh, which obtain final clearance from BMET. Only then is the migrant able to depart.

The middlemen provide the critical link between prospective migrants and agencies. There may be several layers of middlemen. The recruitment agency is typically in contact with a few middlemen in the city, who themselves are in contact with large numbers of middlemen in the rural areas. These sub-agents are from the rural areas, and many are returnee migrants themselves. Their personal knowledge of the conditions abroad, and to a certain extent of the process of migration, is an important source of information for prospective migrants (Akram, 2007). Middlemen may also assist potential migrants in obtaining a passport if they do not already have one, passing medical check-ups, opening a bank account, or similar tasks. Middlemen are independent agents, usually working with several recruitment agencies.

The full cost of arranging for migration is borne by the migrant him//herself. It includes formal fees and expenses (such as government fees, passport fees, medical check-up fee, air ticket), fees to the many intermediaries and brokers involved in the process (the recruitment agency in the destination country, the Bangladeshi recruitment agency, and all the middlemen and sub-agents that served as intermediaries), as well as personal costs such as travel to cities to obtain documents, get trained, go to interviews, etc. Intermediaries' fees are very high, with kickbacks reported in the order of USD 1,500 to 1,800. Rahman (2012) estimates that these intermediary fees account for more than 75% of the overall migration costs. Fees are often all paid to the intermediary who has direct contact with the aspiring migrant, and migrants do not know how much they actually pay for the different fees and to the different intermediaries. These opaque transactions leave wide-open the possibility for over-charging by intermediaries. Recruitment agencies' procedures specify that intermediaries should be paid 7-10% of the total cost charged to migrants and that migrants should not be charged until they have been selected for a job. It is, however, very common for intermediaries to engage with a potential migrant before knowing of a job opportunity and to ask for a deposit at the onset of their discussions equal to one-fourth to one-half of the agreed cost (Rahman, 2011). If a job opportunity for this aspiring migrant does not materialize, intermediaries do not hesitate to leave him without news for a long time, to send him for an interview to which they refer too many applicants or for which the migrant is clearly not qualified,[16] or even to provide him with a false work permit or visa. Evidence also

[13] Rahman (2012) reports that 58% of the total migration from Bangladesh to Gulf countries is arranged through personal networks. Using household survey data for selected regions of Bangladesh, Das et al. (2015) also find that 58% of aspiring migrants try to arrange their migration through personal networks, 33% through middlemen, 7% directly through recruitment agencies, and 2% through other channels such as the BOESL lottery system. Based on data collected by the Bangladesh Institute of Development Studies, Kikkawa and Otsuka (2016) estimate that in 2014, 58% of migrants relied on social networks and 40% on recruitment agencies, with a growing role over time for the latter.

[14] http://www.bmet.gov.bd/BMET/agentlistpreview.action?type=valid

[15] The migration process through agencies discussed below also draws findings from case studies conducted by the first author of this study, who interviewed three middlemen from Narsingdhi district and a recruitment agency located in Dhaka in October 2016.

[16] Agencies usually interview about twice as many applicants as jobs they have to fill. But we also heard of cases where they received 10 times more applicants that had been sent by intermediaries.

shows that some middlemen prolong the recruitment process simply to make a profit with the cash paid in advance (Rahman, 2015).

In many countries, job brokers and recruiters for international migration are known to engage in fraudulent practices (Abella, 2014), and recruiters of Bangladeshi workers are no exception. What makes potential migrants vulnerable is that they are mostly unskilled and poorly educated workers. Das et al. (2015) found that migrants from Bangladesh had on average 6 years of education, 67% had no experience in skilled work, and 22% were unemployed in their home country. Similarly, Islam (2015) found that 50% of migrants from Bangladesh were unskilled, 16% semi-skilled, and the rest skilled or professionals. Most aspiring migrants know little about the process of migration and the required documents (Das *et al*., 2015) perhaps because they are not educated and certainly because institutionalized information campaigns are rarely available to them (Siddiqui *et al.,* 2008). Recruiting agency may also cheat employers, providing low-skilled workers to employers that requested semi-skilled workers, leading the employer to refuse to pay the worker the agreed-upon wage once at destination. This is yet another way in which migrants report to have been cheated by intermediaries (ILO, 2014a). Migration through social networks is also importantly exposed to failure. Case study evidence from our fieldwork suggests that the family or community member's failure originates mainly in lack of understanding of the administrative process to obtain the necessary documents and contracts. In other cases, abuse may occur within the social network itself.

Despite what appears to be a decentralized system, in the end the total number of migrants that depart each year from Bangladesh is by and large determined by memorandums of understanding and bilateral agreements signed between the Bangladesh government and various countries. The ILO (2015) reports that eleven bilateral agreements and nine MOUs have been signed between the Government of Bangladesh and such countries as the UAE, the Libyan Arab Jamahiriya, Kuwait, Oman, Malaysia, the Maldives, and the Republic of Korea. Recent negotiations include a contract with the Government of Qatar to send 30,000 female workers for domestic work and other services. Destination countries often impose further restrictions on migration flows due to Bangladesh exceeding its quota or irregularities in the process of sending migrants. This was notably the case with Saudi Arabia in 2009 for exceeding quotas (ILO, 2015) and with Malaysia in 2009 for irregularities (ILO, 2014b).[17]

Female migration is a recent phenomenon for Bangladesh, but it seems to suffer from the same problems as male migration. An International Labor Organization study found that domestic workers are recruited through a chain of sub-agents that connect to recruitment agencies in Dacca, the capital city, and that the combination of high recruitment fees, high-interest loans, and low or unpaid salaries can trap workers in exploitative situations. Human Rights Watch also reports the payment of fees of up to USD1,265, while Bangladeshi regulation imposes a cap at USD259.[18]

Illegal or irregular migration is observed in Asian countries, including Bangladesh.[19] According to Wickramasekera (2002), irregular migrants account for 30 to 40% of the estimated 6 million migrants in Asia. Although a precise figure for the number of illegal migrants from Bangladesh is not available, several studies provide insights regarding illegal or irregular migration from Bangladesh to Malaysia and the Gulf countries. Ullah (2013), for example, using a sample of 72 migrants to Malaysia, shows that around 36% held tourist visas, 33% had no visas, and 9% had neither visa nor passport. They ultimately entered Malaysia using long overland routes that took two to three months.[20] The mean length of their stay in Malaysia was almost nine years. Illegally travelling from Bangladesh to the Gulf countries is not easy because of their location, but

[17] Complaints against recruitment agencies were that they sent workers with false documents while charging high fees on workers (Jureidini, 2014). Consequently, in 2013, the Government of Bangladesh barred private recruitment agencies from sending workers to Malaysia (ILO, 2015).

[18] https://www.hrw.org/news/2016/12/08/bangladesh-improve-protections-migrant-domestic-workers.

[19] "Illegal" is against the law, while "irregular" is against the regulations (Ullah, 2017).

[20] Most workers went to Malaysia through Thailand or Singapore via various routes. For example, about 21% entered Malaysia through the Bangladesh-Bangkok-Songkhla route through deep forests, riding on the back of cars or trucks.

Ullah (2017) observes that there is a significant number of irregular migrants from Bangladesh. He interviewed 45 irregular migrants in Saudi Arabia and showed that: (i) 42% went on Umrah and Haj visas and overstayed; (ii) 13% were left in Saudi Arabia by some government official; (iii) 16% were left by some music band; and (iv) the rest (29%) overstayed their tourist visas. No precise data on the number of irregular migrants from Bangladesh to Saudi Arabia are available, but Ullah (2017) mentions that nearly 40,000 Bangladeshi pilgrims went to Saudi Arabia on Umrah visas last year, and as per Saudi Government allegation 11,483 pilgrims did not return to Bangladesh in the last few years. For Kuwait, a main destination country for Bangladeshi workers, Bangladesh has a sizeable proportion of undocumented migrants (9.2%) (De Bel-Air, 2017). De Bel-Air (2017) also shows that 66% of all irregular migrants in Bahrain (in 2014, there were about 60,700 irregular workers) are Bangladeshi.

With migration of Bangladeshi workers to foreign countries offering both enormous promise and high risk to those attempting to migrate, we proceed to develop a data base to characterize the corresponding costs, risks, and potential rewards.

III. Data

The data used in this paper were collected throughout Bangladesh in May-June 2013 by the University of California at Berkeley in collaboration with BRAC's (originally known as the Bangladesh Rural Advancement Committee) Research and Evaluation Division (RED). Each BRAC branch office covers a radius of 4-5 km, creating a network of approximately 2,100 branches that service almost all rural and urban regions of the country. In July 2011, BRAC launched a Migrant Loan Program that had been rolled out to more than 1,700 branches by 2014, of which 496 were randomly selected for our survey. We randomly selected one village within the coverage area of each branch, or a neighborhood in the 44 urban branches. The 1,700 branch offices covered by this study are scattered across Bangladesh's 64 districts, and our 496 sample branches are in 62 districts. This sample is thus largely representative of the Bangladesh population. In each village, we first conducted a short census to identify households with members that had migrated or attempted to migrate overseas over the 35-month period preceding May 2013. The census included information on the basic socioeconomic characteristics of 55,565 households, with all adults 15 to 50 years of age. A stratified sample of 10 households was then selected from the census for each village or neighborhood to obtain a strong representation of households with migrants and with members that attempted but failed to migrate. These households completed a survey with extensive information on their migration experience. The sample for the survey consisted of 4,960 households with information on all adults 15 to 50 years of age. The census gives a complete picture of the intensity of migration in each village, but few characteristics on the households or migrants. In contrast, the survey allows for a detailed characterization of migration experiences. All analyses done with the household survey use sampling weights.

Data collection was performed by 65 field enumerators. Each village was covered by one enumerator who (1) walked door to door to conduct the census, (2) sent the list to the central manager who drew the sample of households, and then (3) proceeded with the household survey. The census was limited to 120 households for large village/neighborhood containing more than 120 households. If no one was available to respond to the census or survey, the household was skipped and replaced it by the next household on the list. The census collected information on land holdings (disaggregated by ownership status, i.e., owned and rented land) and household size. For each household member aged 15-50, it asked about the member's current age, education, gender, and migration status (described in the next section) for each month since June 2010. Household-level information was collected from the household head; individual-level information from the individual, if available, and from the household head otherwise. The choice of collecting three years of information was a compromise between possible recall problems and having enough historical data to observe a sufficient number of migration attempts and capture enough complete migration events (which a priori were expected to be of 2-3 years like many labor contracts). The household survey collected information on the demographic characteristics of household members, education and main occupation of members aged six

years or above, and school enrolment status of children. At the household level, it collected information on the amount of productive and durable asset holdings, housing conditions, financial assets and liabilities, social networks, and food security. At the individual level, the survey collected information on all members that had been involved with migration. For migrants, it asked the destination country and migration costs.[21] For those that failed in attempting to migrate, the survey asked questions related to reasons for failure, medium through which they attempted to migrate, amount of financial losses, etc. For individuals trying to migrate, information was asked on the medium through which the aspiring migrant was trying to migrate, the amount of expenses incurred as of the interview date, and the types of problems he faced in attempting to migrate. The household-level information was asked to the household head if available, otherwise to the main female household member. Fifty-six percent of respondents for household-level information were household heads. Information related to migration failure and costs were collected from the concerned individuals, or the main respondent if not available.

An obvious concern is the reliability of recall data, especially in the census. For migration itself, recall should not be a problem, except maybe on the exact date, as migrating to a foreign country is a pretty dramatic event that lasts for several months. As we will see in the next paragraph, the aggregate migration pattern in our sample tracks national migration, which gives further confidence in these survey data. More problematic maybe is recall of attempts at migrating that were unsuccessful. In particular the length of the period that the person is considered trying to migrate may not be precisely defined or recalled. The binary information that we use here (whether a person has engaged in processes and expenses toward migration over the last 3 years) is likely less subject to error. In addition, in a different study conducted in 2015-16, in which 2,842 similarly selected potential migrants were followed with telephone calls over a 2 to 6 months period, we found a failure rate of the same order of magnitude.

IV. Migration and migration failure counts from the village censuses

The censuses contain recall data over three years on a total of 143,164 individuals and provide information on household members and their "status" with regard to migration. For *each* of the 35 months recorded on the census (from June 2010 to April 2013), individuals were registered as "migrant" if they were abroad, "trying to migrate" if they were engaged in and had committed financial resources to the process of migration, "failed migrant" if they were stopping their quest after having committed some resources, or "resident" if none of the above. Thus, in effect, the data allow us to establish the migration status of each individual in any particular month over this three-year period. This rich dataset enables us to identify the number of migrants, old migrants, new migrants, having attempted to migrate, failed migrants, and residents based on the status they reported over the three-year period. We define six categories of individuals as follows:

Migrant: An individual is categorized as migrant if he/she reported the status of "migrant" at any point in time in each of the 35 months recorded in the census. Such an individual can be categorized as an old or new migrant.

Old migrant: Old migrants are individuals who first migrated before the beginning of the recall period, i.e., before June 2010. They are identified as those whose status was "migrant" on the first month (June 2010) of the census.

New migrant: New migrants are individuals who migrated for the first time over the last three years, i.e., migrating after June 2010 and having never migrated before. Since this is not directly reported in the data, new migrants are identified as being "residents" on the first month (June 2010) of the census and reporting the status of "migrant" in subsequent months. This may lead to an over-count of new migrations as older migrants

[21] We attempted to get employment and earnings in the destination country but had a large number of missing data (12% and 35%, respectively).

who were visiting home on June 2010, and are thus recorded as "resident" on that month, will also count as new migrants. We identify these potential re-migrants as being residents in June 2010, but migrating within the next 6 months, and this without having a period of "trying to migrate." This is because when we look at the subset of older migrants, almost none in our census reported "trying to migrate" when visiting home or re-migrating, and migrants that we clearly identify as visiting home stay between 2 to 6 months (only 5% stay more than 6 months).

Attempting to migrate: An individual is classified as attempting to migrate if he/she is observed as "trying to migrate" during the period under study but was neither successful in migrating nor had declared outright failure. Two groups are clearly distinct: some hopeful migrants tried for many months before reporting again as residents; others were still trying to migrate by April 2013. Among the latter we consider as failed migrants those who reported having tried to migrate for more than 12 months by April 2013.

Failed migrant: Two definitions are used. A strict definition includes individuals with the recorded status of "failed migrant" at any point over the recorded 35 months. There are, however, instances mentioned above that are not recorded as clearly but most likely reflect failures: individuals who tried to migrate during many months, before getting discouraged and signing in again as "resident," or those who had been attempting to migrate for more than 12 months at the time of the census.

Residents: Residents are defined as the subset of individuals who were not migrant, failed migrant, or having attempted to migrate.

Participation in migration by category of migrant based on the above definitions is given in Table 1. Since almost 98% of migrants are male, the information is only reported for males. Of the 75,448 males in our censuses, 13.3% were participating in migration while 86.7 % were residents. Of the former, 57.6% were migrant as of June 2010, with a staggering 43% of them never returning home over the three years of observation (permanent migrants). We observe 2,096 new migrants, representing 20.9% of the population engaged in migration. The number of potential re-migrants in that group is minimal. The remaining were individuals who were either still trying to migrate (for less than 12 months) or who had failed in their migration attempt. The latter group accounts for 10.6% of individuals participating in migration (8.3% having explicitly failed and 2.3% having attempted without success). By construction, these four categories constitute an almost exhaustive partition of the adult population. There are only 28 cases of individuals who experienced both an event of successful migration and a failure.

While this categorization of the adult population in terms of migration status is an accurate snapshot, failure events should be measured against migration attempts during the period and not against the stock of migrants. This is what we do in Table 2, assessing failure separately for new migrants (since June 2010) and re-migrating old migrants (since before June 2010). For new migrants, we mentioned above two instances of explicit failure to migrate. Another frequent type of failure is the case of a migrant that undertook the trip to the migration destination, but who for various reasons returned after a very short stay there. Short migrations are not profitable enough to recoup the large cost, suggesting involuntary repatriation. While there is no explicit recording of these cases as failure, they can be identified by the length of stay at destination. An expanded measure of failure is thus defined as including very short migration durations (less than 6 months), i.e., individuals whose status was reported as "migrant" for a short duration. Using the above definitions of new migrant and failed migrant, we find evidence that a large share of migration attempts result in failure. Our most conservative estimate suggests a migration failure rate of at least 28.4% among new migrants. If we account for discouraged attempts and define short duration migrations as failures, the rate increases to 33.6% and 34.6%, respectively, suggesting that more than 1 in 3 migration attempts were unsuccessful during these three years of observation. In contrast, we expect a much lower failure rate among attempts at re-migrating by old migrants. Defining re-migration for an older migrant is, however, not without ambiguity. Many of the 2,331 events that we observed were migrants who returned abroad after visiting their family, without loss of visa and/or job at their destinations. The lower-bound failure rate calculated on that population is very low, namely 0.39%. On the other hand, if one considers only cases where the migrant registered a period of

"trying to migrate" before actually migrating, we may be under-counting true re-migration. The corresponding upper-bound figure for the migration failure rate is 15.5%. Even this upper bound is less than half the failure rate of new migrants. This is not surprising as many may have kept their contact at the point of destination or simply know their way through the system.

Information on country-wise migration failure is not available in the survey. Thus, to understand country-wise failure rates, we use information collected for an evaluation of the Safe Migration Project implemented by BRAC in Bangladesh (Das *et al.*, 2015). The baseline survey in September-December 2014 covered a total of 3,120 potential migrants (i.e., "trying to migrate" in the terminology of this paper, those who had started the process and invested time and resources). These potential migrants were identified through a village census of 608 villages from 50 sub-districts of Bangladesh. The potential migrants covered by this survey were followed up through phone calls until June 2016. In the phone survey, 2,842 potential migrants were successfully reached. Of these 2,842 individuals, 22.8% declared failure. Country-wise analysis shows that the failure rate is between 18 and 24% for Saudi Arabia, Malaysia, Kuwait, Bahrain, Singapore, and Qatar. For UAE and Oman, it is between 26 and 29%. The failure rate for Iraq and Libya is relatively low, though these two countries account for a small proportion of potential migrants. For other countries, the rate is, on average, 28%.

V. The cost of migration failure

Due to administrative procedures and distance, the cost of migration to destination countries is extremely high, especially in relation to the domestic incomes of candidates to migration. It is also highly risky as costs must be incurred as an upfront investment before success in migration is secured. The average cost of financing migration reported by the International Organization for Migration stands at BDT 219,394 (USD 3,171 at the 2009 exchange rate), which amounts to three years of income for the average Bangladeshi (International Organization for Migration, 2010). This happens in spite of the government-set maximum recruiting charge of BDT 84,000 (USD 1,230), which applies as of 2006 to migrants going to the Gulf States and Malaysia (Martin, 2010).[22] The International Organization for Migration (2010) shows that about 59.5% of these costs go to intermediaries, 10.3% to recruitment agencies, 9.3% for the visa, and the rest for airfare, passport, a medical certificate, and other expenses. Martin (2005) shows that Bangladeshi migrants in Kuwait paid in 1995 the highest recruitment fees and had the lowest monthly earnings, compared to migrants from countries such as Pakistan and Sri Lanka. In the 1970s and early 1980s, the expense for migrants' airplane tickets to Gulf countries was typically borne by the employer (Gamburd, 2000; Gardner, 2010). Now, due to increased international competition, these charges are borne by the migrant (Shah, 1994; Gamburd, 2000; Gardner, 2010). This has become a major hurdle to migration, and a high source of risk if migration fails, given the income level of potential migrant households. For this reason, the government has taken initiatives to cut the role of middlemen and recruiting agencies and to directly operate as the agent for migrants. BOESL – a government recruitment agency – has been set up for this purpose. However, as mentioned earlier, it has so far met with limited coverage and modest success.

In our own household survey data, the average household spent USD 3,322 to migrate (median USD 3,125), with large variation, as shown in Figure 2.1. A large share of this cost went to intermediaries providing work permits. This cost must be incurred even if migration fails, although the earlier the aspiring migrant stops his/her quest to migration, the lower is the lost. The frequency distribution of cost of failure is reported in Figure 2.2. The average cost of failure is USD 818 while the median cost is much lower at USD 250, suggesting that many aspiring migrants declare failure early in the process. Around 30% of failed migrants invested more than USD 1,000 in the pursuit of migration. With the average Bangladeshi earning an annual income of approximately USD 1,040, the loss is substantial.

[22] Other studies also document migration's high cost. Siddiqui (2011), as cited in Siddiqui (2016), for example, documents that the cost of male migration to Saudi Arabia ranged from USD 4,000 to 5,400 in 2011.

On the behavioral side, the cost of migration failure appears to be discouragement in trying to migrate again, as least as observed within the three-year window over which data have been collected. A large share of failed migrants stop "trying to migrate" altogether during that period once migration failure occurred. These potential migrants were thus seemingly deprived of migration's future benefit, at least for some time. As shown on Figure 3, which tracks the proportion of potential migrants remaining residents by month after a migration failure, approximately 80% made no further attempt at migrating in the following three years. Only 5% of potential migrants did not stop trying to migrate following a failure, and another 15% started trying to migrate again over the following three years. But then, as the estimated trajectory shows, residency leveled off at around 80%. Some migrants may have learned from failure that they were not fit for migration. However, estimating a duration model shows no evidence that the time over which potential migrants remain residents after a failure is related to their age, education, household size, or land ownership. Abandoning attempts at migrating could also be due to the large monetary loss, and failed migrants might very well try migrating again after three years. But given that the median cost of failure stands at only 10% of the total cost of migration, however, some behavioral response might also be involved.

We observed a differentially high rate of unemployment among people "still trying" to migrate in 2013 (significantly different at 1% from that of failed migrants and at 5% from that of discouraged). The rate of unemployment was 2.4% among residents, but 15.4% among those still trying to migrate. This suggests that hardship, acting as a push factor, was a powerful incentive for failed migrants to keep on trying. Discouragement in trying to migrate may thus only be a transitory phenomenon as the hardship of unemployment keeps on motivating migration.

VI. The correlates of migration failure and success

A significant factor associated with migration failure is weak demand for migrants at the international level. As mentioned earlier, aggregate migration from Bangladesh is exogenously determined based on agreements and manpower contracts signed by the Bangladeshi government with other nations. Figure 4.1 shows the total monthly number of migrant departures over the three years of our analysis, as reported by BMET, the official bureau in charge of migration. We observe a large increase (at a rate of 49% per year) from July 2010 until May 2012 and then a dramatic drop. This drop was due to tensions between Bangladesh and its partners, notably the UAE, a major destination country for Bangladeshi migrants, which stopped issuing all entry permits for Bangladeshi passport holders in August 2012.[23] Information from BMET indicates that the total number of Bangladeshi workers who left for the UAE fell drastically from 215,452 in 2012 to 14,241 in 2013. The drop in national departures began in June 2012, before the UAE action, as Figure 4.1 shows, perhaps because in late May 2012, Bangladesh banned the export of manpower to Libya as a stable government was established there.[24] As Figure 4.1 also shows, departures in our sample of migrants track relatively well national departures.

In spite of fluctuating departures, the supply of individuals attempting to migrate follows a steady upward trend, as can be seen in Figure 4.2. In our data, we observe a steady increase in people trying to migrate at an annual rate of 39%. To the extent that our sample is representative of the country, it is not surprising that the observed failure rate in the sample is a mirror image of the aggregate departure of migrants. Migration failure is thus importantly demand-driven.[25] Countries have different ways of dealing with an

[23] http://print.thefinancialexpress-bd.com/2014/10/24/62718/print and http://print.thefinancialexpress-bd.com/2013/11/19/4667/print

[24] http://www.tripolipost.com/articledetail.asp?c=1&i=8469

[25] With a steady growth in the supply of aspiring migrants, departure and failure rates are necessarily mirror images of each other. We argue that aggregate flows of departures are largely exogenous and hence causal to failures. It is not impossible, though harder, to point to specific independent factors that would explain large variations in failure to migrate in the population of aspiring migrants, which would then result in corresponding fluctuating departures. On the other hand, failure rates may in themselves affect the composition of aspiring migrants, creating a complex relationship.

excess supply of job seekers relative to job offers, notably selecting migrants based on explicit criteria. In Bangladesh, the issue is *de facto* solved through the role of intermediaries. When facing a weak job demand, intermediaries have a higher likelihood of failing to place their clients abroad and opt to renege on contracts, even though they have already cashed in advances for their services. Migrants are mainly rural low-skilled laborers with little education and often ignorant of the migration process or unable to deal with it on their own. Their main source of information becomes the middlemen, thereby exposing them to a high risk of fraud.

How do potential migrants currently trying to migrate and those who declared migration failure perceive the difficulties they face in migration? This is explored in Table 3 based on questions of perception asked to potential and failed migrants. Among the first, main declared difficulties are lack of information and difficulty with the required paperwork (57%) and financial constraints (57%). In a sense, both of these difficulties could be alleviated by specialized interventions, one to assist migrants with the administrative process of migration[26] and the other to provide dedicated credit lines. Exposure to fraudulent agents (only reported in 3% of cases) is not yet revealed as individuals are still trying to migrate. However, among those who had already declared failure, more than half (51%) reported fraudulent agents or visa scams as the main causes of failure. Other important causes of failure were financial difficulties (20%), family or medical problems (19%), and failure to obtain a visa (9%).

While the aggregate failure rate is importantly influenced by exogenous aggregate demand, who fails among aspiring migrants is not random. There exists a strong negative correlation between the failure rate and the total number of migrants in the village. The more migrants a village has abroad, the less the chance of failure for potential new migrants. A non-parametric estimation indicates that the failure rate declines from more than 20 percent to around 5 percent as the number of migrants in the village increases from 0 to 60. Migration is thus an accelerating process whereby greater migration success is associated with more previous migrants. Successful migrants have on average 35 other migrants in the village compared to 23 for failed migrants. Other revealing contrasts between new and failed migrants suggest the importance of education. New migrants also have higher savings, but this is already partially endogenous to the migration outcome. A large share of migrants report that they finance the cost of migration by borrowing money from friends and family, while others finance it through selling or mortgaging land, selling assets such as livestock, and drawing down their savings (see information from case studies of migrants in Akram, 2007). For those who lack sufficient wealth or access to wealthy patrons, difficulty of accessing credit can be a major barrier.

Another way of analyzing the difficulty of migrating is to consider the time it takes for those that try to migrate to eventually succeed. Considering all men that attempted to migrate for the first time at some point over the three years of observation, Figure 5 reports their cumulative success rate over time. Only 25% of those trying to migrate succeeded in migrating in six months, 50% in a year, and after 36 months 40% had failed to achieve their goal and were still trying. The shape of the success rate curve in Figure 5 shows that, after 13 months of trying, few migrants were to achieve success. Analyzing information on Bangladeshi migrants to Saudi Arabia, Rahman (2011) shows that a migrant on average needed about 5.22 months to complete the process in Bangladesh. This figure is lower than what we find in this study, likely because our estimation is based on information for migrants to all countries and includes failed attempts.

We estimate a duration model of migration success. This analysis does not distinguish between the different forms of failure mentioned above, as they all fall under non-success, but it allows us to use all the available information, even from recent entry into the migration process, to determine the correlates of success or non-success and to include varying circumstances such as the national context for migration and evolution of the migration network size. The Cox duration model specifies that the probability $h(t)$ of being successful in any time period t is proportional to $e^{\beta_1 x_1 + \cdots + \beta_k x_k}$, where the x_j are factors such as migration network size (which varies over time) or household and migrant characteristics. Table 4 reports estimates of

[26] Beam et al. (2016), however, show that country-initiated facilitation to increase success in migration is not easily met with success.

the hazard ratios, e^{β_j}, which give the relative probability of success induced by a one-unit increase in the right-hand-side variables. The key correlates of interest are the aggregate migration context and the social network—where aggregate migration is the flow of national migration in the corresponding month and social network is characterized by the total migration per village (community network) and the number of migrant relatives for each individual (kinship network). Also of interest are migrants' individual characteristics as they tell us what type of selection there is in being a successful migrant.

We perform the estimation on the full village census (Columns 1 and 2) and on the survey sample (Column 3), which contains information on migration experience such as migrating through a relative and participation to a training course. The estimate indicates that aggregate departures (national migration) significantly affect the individual probability of success in migration. An additional 1,000 migrants/month is associated with an increase in the probability of being successful of 0.8 to 0.9% with census data and 1.6% with survey data. Availability of a community migration network is significantly correlated with a higher success rate. Having one more migrant in your village increases the probability to successfully migrate in a given month by 1.2 to 1.7%. Having one more member of your family abroad increases the probability of success by 3.3% (in Column 3), although this effect is not statistically significant because of a very large standard error. These effects are large. National migration exerts a significant impact on the probability of success, with a one standard-deviation decrease in monthly migration associated with a 10.9% lower chance of success at the individual level. Since the volume of nationwide migration is exogenously determined, the relationship between migration success and nationwide migration documented in Table 4 can be interpreted as likely causal. These results are robust to controlling for total land owned by the household, housing conditions, age, education, rural/urban residence, and whether the individual has received training through a publicly available government program (Column 3). Similarly, one standard deviation of the cross-section distribution of the village network size, equal to 18.2 migrants, is associated with a 24% difference in the chance of success.[27] This finding that social networks are positively correlated with successful migration is consistent with results obtained by Massey and España (1987), Winters et al. (2001), and Munshi (2003) for Mexico. They show that those with family or community networks face lower risks and lower costs in migration. Among individual characteristics, having an urban residence is a factor of success. This likely corresponds to better access to information and lesser dependence on intermediaries.

VII. Will the cost of migration failure deter future migration?

Is the probability of failure in migration a deterrent in trying to migrate? In a Harris and Todaro (1970) perspective, the decision to migrate is given by the wage in Bangladesh (W_B), the wage in the Gulf countries (W_G), the cost of migration (C_M), and the likelihood of success in migration (P). In our context, failure entails having incurred costs (C_F) and staying in Bangladesh, where the person can earn W_B. Attempt at migrating will continue for as long as the expected gain from this attempt is higher than the opportunity cost of staying in Bangladesh:

$$P(W_G - C_M) + (1 - P)(W_B - C_F) \geq W_B$$

We can use this simple framework to do a back of the envelope calculation of migration's net benefits. Wage data come from information we collected for an evaluation of the Safe Migration Project implemented by BRAC in Bangladesh (Das et al. 2015). The baseline survey in September-December 2014 covered a total of 3,120 potential migrants (i.e., "trying to migrate" in the terminology of this paper, those who had started the process and invested time and resources). These potential migrants were identified through a village census of

[27] The mean and standard deviation of the variable "number of migrants in village" reported in the first column of Table 4 are computed from the individual information used in this analysis. Villages with a large number of potential migrants are thus over-represented. Using village level data, the number of migrants varies from 0 to 94, with a mean value of 19.5 and a standard deviation of 18.2. The effect on the probability of success is calculated as $e^{\beta \Delta x} = 1.012^{18.2} = 1.242$.

608 villages from 50 sub-districts of Bangladesh. We collected information on their jobs and earnings and followed up with phone calls in 2015-16. As of June 2016, 754 potential migrants were found to have left the country, and we reached 288 of them, obtaining information on their jobs and wages overseas. While this is possibly a selected subsample, Figure 6 shows that the distribution of their earnings in Bangladesh in the baseline survey is not different from that of all migrants or potential migrants. The average monthly earnings of these three groups (migrants with overseas information, migrants, and potential migrants) in Bangladesh were USD 106.2, 105.4, and 109.1, respectively. This similarity is also found when splitting the sample between wage earners and self-employed. We will thus take W_B= USD 109. The average wage overseas is USD 373.2, and this is similar across the different destination countries (USD 373 in the Gulf and USD 366.8 in Malaysia), slightly higher for those who work in construction (USD 404.6) than in other jobs. We will thus take W_G= USD 373. From the information reported in Section V, the cost of migration to the Gulf countries is on average USD 3,322. As mentioned earlier, 79.2% of migrants from Bangladesh work in the Gulf countries and 10% in Malaysia. However, according to the International Organization for Migration (2010), the costs of migration are quite similar for Malaysia and the Gulf countries. With a two-year contract, the cost of migration is thus C_M = USD 138/month. As also reported in Section V, the average cost of failure is USD 818, which similarly spread over two years gives C_F = USD 34/month.

The expected value when attempting to migrate is a monthly income of:

$$P(W_G - C_M) + (1 - P)(W_B - C_F) = 0.66 * (373 - 138) + 0.34 * (109 - 34) = \text{USD } 180.6$$

which is much higher than the USD 109 monthly earnings in Bangladesh. This leaves a large expected gain from migration, despite the high failure rate, the high cost of migration, and possible differences in costs of living, inducing aspiring migrants to try again. If left unchecked, fraudulent agents can thus still extract large rents from potential migrants before deterring attempts at migrating. A similar back of the envelope calculation for a safe migration, using the benchmark cost set by the government of Bangladesh at USD 1230 or USD 51/month (Martin, 2010) spread over 2 years, will give an expected value of 373 – 51 = USD 322/month. Market equilibrium will not deter fraud for a long time, even though it robs migrants of 43% of the expected value of a safe migration. Protection of migrants against rent extraction must come from government regulation of the migration agencies or from NGO support in informing migrants and exposing fraud.

VIII. Conclusion

International migration in search of employment is a costly and risky enterprise. When potential migrants are poor, migration failure not only robs households from a unique opportunity to move out of poverty but also pushes them further into poverty. We studied migration failure in the context of attempts by mainly young unskilled rural Bangladeshi male workers at migrating to the Gulf Countries. Some attention has been given in the literature to the impact of risk on the decision to migrate and to migration failure once in the country of destination. By contrast, little attention has been given to failure to leave the country when eventually large expenditures have already been incurred toward migrating. We use a unique data collection strategy to characterize migration and migration failure, combining village censuses with household surveys with high-intensity recalls on migration status over the last three years.

We find that up to 34% of potential migrants fail to migrate and that the average monetary loss exceeds USD 818, which is nearly 80% of the average national per capita income. Failure to leave the country is much larger than failure once migrated. The main declared causes of failure to leave are abuse by fraudulent agents made easy by lack of information for candidates to migration and financial difficulties. Success in migration is associated with a higher level of national migration, a larger village migration network, and an urban residence. In spite of the high rate of migration failure and the high cost of migration, the expected gain from migration remains large, explaining why the phenomenon of attempts at migrating and potential large losses from failure for poor households remains unabated.

Policy implications suggest the need to offer more information and better administrative assistance to migrants, as well as to give them access to lines of credit to be refunded through migration earnings. In that perspective, BRAC recently introduced both a Safe Migration Program (Purvez and Karim, 2009) that provides information, assistance, and training to migrants and a Migrant Loan Program to extend microfinance loans to candidates to migration. Given the role of migration networks in successful migration, this assistance is all the more important for residents of villages with no such networks who will be less able to use migration as a shock-coping device when adversity strikes. The critical issues of fraudulent agents, falsified documents, and unmet wage expectations once at destination, leading to costly migration failures for very poor and highly exposed households, remain enormous problems that must be addressed.

Research implications of our diagnostic of the risks and proximate causes of migration failure suggest the need for careful experimentation with programs designed to reduce risks and facilitate access to migration finance for aspiring migrants. Prior research with results on such programs have been largely negative (Beam et al., 2016). This indicates that research needs to go beyond impact evaluation to experimentation with alternative potential designs for such programs, opening an area of research that could have immense welfare benefits.

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Table 1. Participation in migration among the population

	Numbers		Share in population (%)	Share in non-residents (%)
Migrants	7871		10.4	
Old migrants (by June 2010)		5775		57.6
Permanent migrants		2464		24.6
New migrants since June 2010		2096		20.9
Potential re-migrants		68		0.7
Failed migration	832		1.1	8.3
Attempted to migrate without success	1346		1.8	13.4
Discouraged / More than 12 months		227		2.3
Still attempting in April 2013		1119		11.2
Residents	65427		86.7	
Total male population	75448		100.0	

Failed migrants are those that declared failure. Individuals are classified as attempted without success if they recorded trying to migrate and then abandoning, or if they were still trying to migrate at the time of the census but had been doing so for more than 12 months. Residents include members of the households that are non-residents but not migrants. The total of subcategories in the first column does not add to the total population because 28 individuals experienced both migration and failure.

Source: Household census

Table 2. Migration failure among new and old migrants

	Number	Percentage
New migrants since June 2010		
Failure in migration		
1 Declared failed attempt at migrating	832	
2 Discouraged / More than 12 months	227	
3 Stayed less than 6 months abroad	49	
Successful new migrants		
4 All successful	2096	
Failure rate in migration		
(i) Strict definition [1/(1+4)]		28.4
(ii) Including discouraged [(1+2)/ (1+2+4)]		33.6
(iii) Including short stay abroad [(1+2+3)/ (1+2+3+4)]		34.6
Old migrants, since before June 2010		
5 Declared failed attempt at migrating	9	
Re-migration events among older migrants		
6 Those who 'try' preceding re-migration event	58	
7 Any remigration event (visiting migrant)	2331	
Failure rate among re-migrating older migrants		
Strict definition [5/6]		15.5
Including visiting migrants [5/7]		0.39

Row 6. 'Trying' before migration event is considered 'proper' re-migration since almost all new migrants have status 'trying' before migrating.
Row 7. This is an overcount as many visiting migrants aren't necessarily re-migrating but just at home on vacation.
Source: Household census

Table 3. Perceived reasons for migration failure

Main two difficulties encountered by individuals attempting to migrate (%) [1]	
Financial	56.8
Paperwork / lack of information	56.8
Difficulty obtaining visa	12.0
Fraudulent agent	3.0
Number of respondents	203
Main reason for failed migration (%)	
Fraudulent agent / fake visa	50.6
Financial	20.1
Family problem or medically unfit	19.2
Could not obtain the visa	8.7
Other	1.4
Number of observations	633

[1] The percentages do not add to 100 as individuals attempting to migrate could give two answers, and 75 of them did

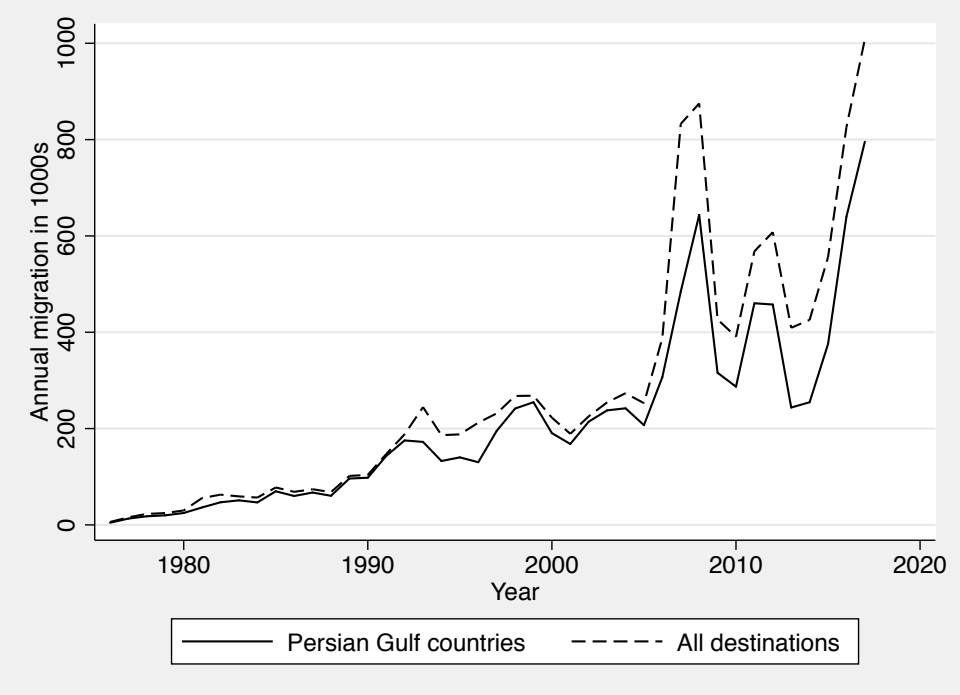
Source: Household survey

Table 4. Duration model for success in migrating

	Mean (st. dev.)	Hazard ratio for success (1)	(2)	(3)
National migration (1000s migrants/month)	42.7	1.009**	1.008**	1.016**
	(12.8)	(0.002)	(0.002)	(0.004)
Migration network				
Number of migrants in village	30.8		1.012**	1.017**
	(21.1)		(0.001)	(0.003)
Number of migrant relatives[1]	2.2			1.033
	(1.9)			(0.036)
Migration through relative [1]	0.5			1.154
	(0.5)			(0.133)
Household assets				
Land owned by household (acre)	0.69		1.000	1.001
	(1.3)		(0.000)	(0.001)
Individual characteristics				
Age	27.38		0.994*	1.005
	(7.51)		(0.003)	(0.008)
Education (years)	6.90		1.007	1.003
	(5.00)		(0.004)	(0.014)
Urban	0.05		1.335**	1.645*
	(0.23)		(0.133)	(0.360)
Has received training[1]	0.17			0.894
	(0.38)			(0.146)
Number of individuals		4279	4279	1602
Number of observed migration		2156	2156	808
Number of explicit failure		849	849	573
Average success rate any month		0.050	0.050	0.041

Robust standard errors clustered at the individual level in parentheses
Col. (1)-(2) from household census data. Col. (3) from household survey data, using sampling weights
[1] Mean value from survey data
*** p<0.01, ** p<0.05, * p<0.1

Figure 1. Migration trends of Bangladesh



Source: BMET http://www.bmet.gov.bd/BMET/stattisticalDataAction

Figure 2.1. Cost of successful migrations

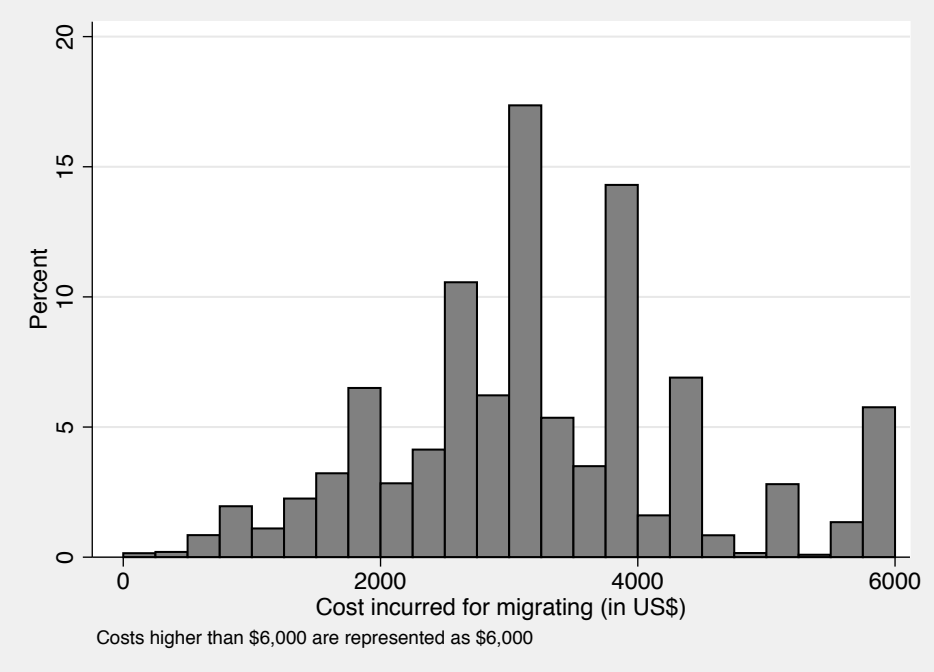


Figure 2.2. Cost of migration failures

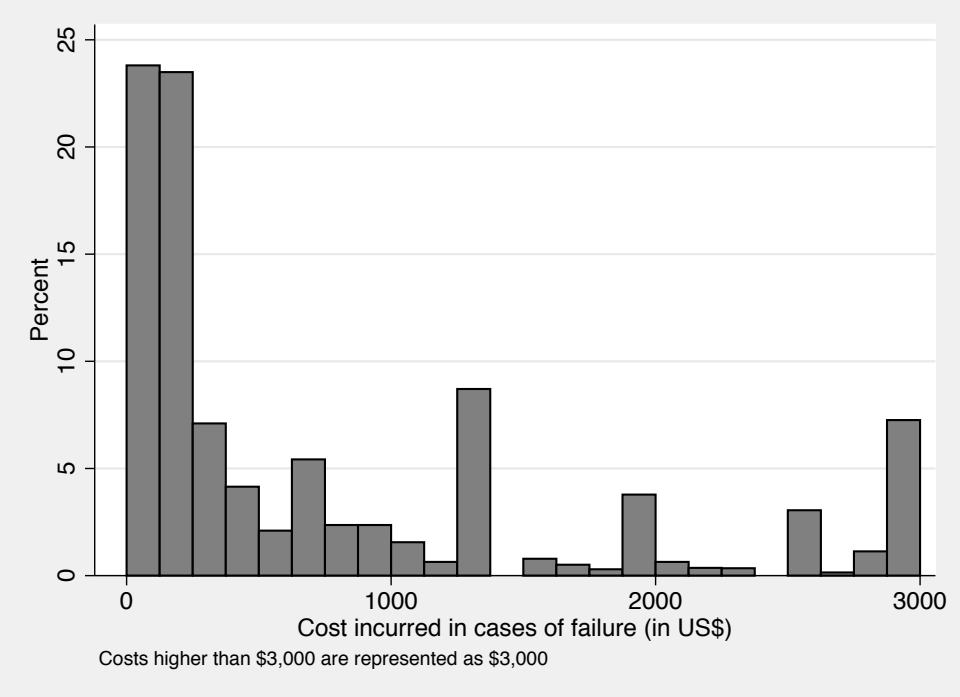


Figure 3. Discouragement effect of failures over a three-year period

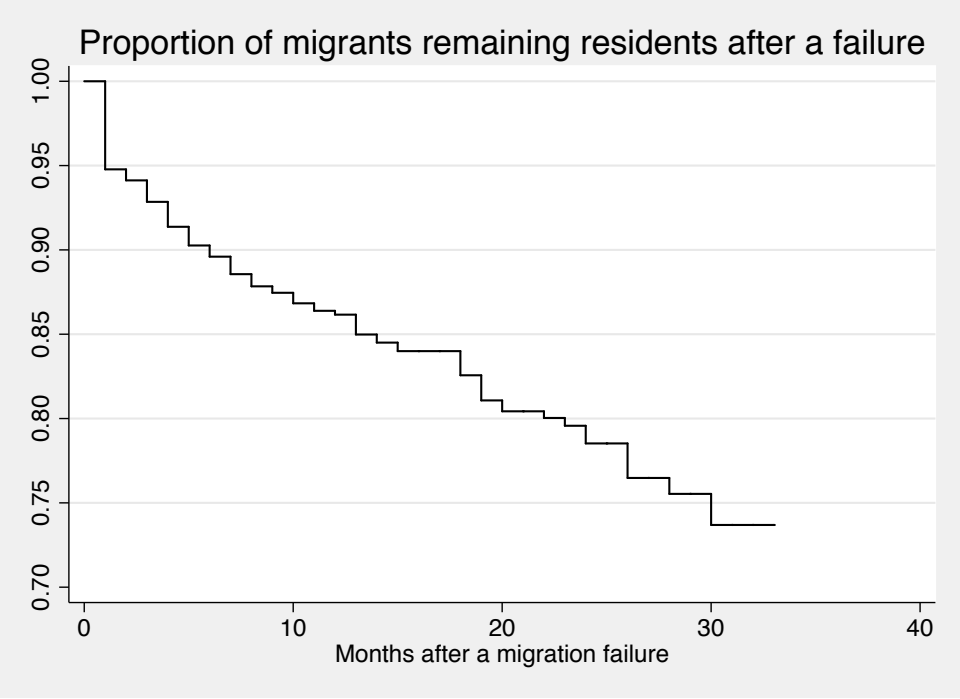


Figure 4.1. Migration departures per month

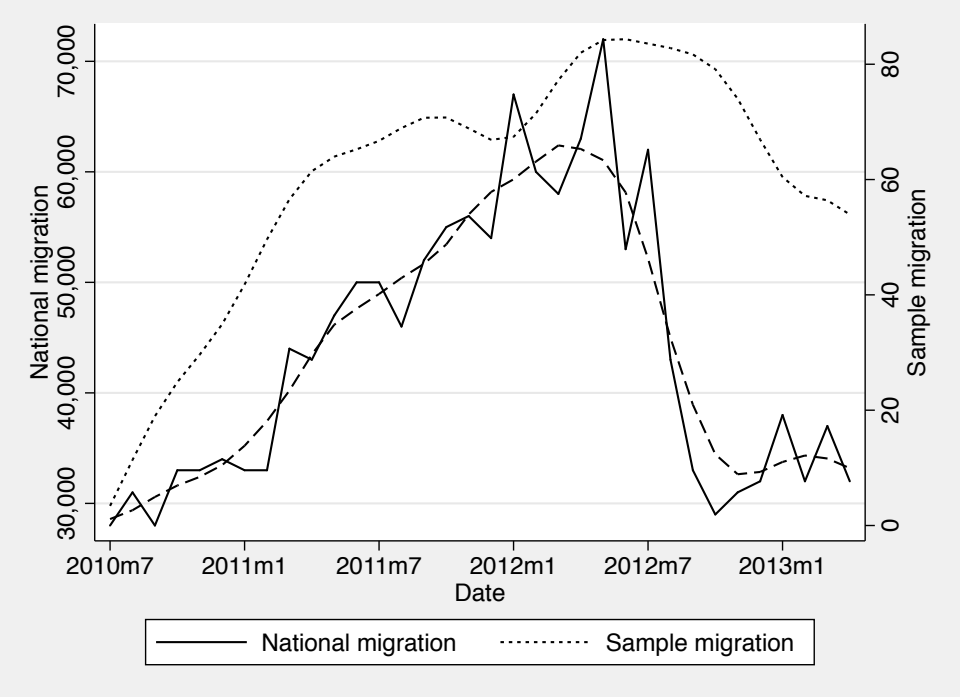


Figure 4.2. Attempts at migrating and failure rate per month

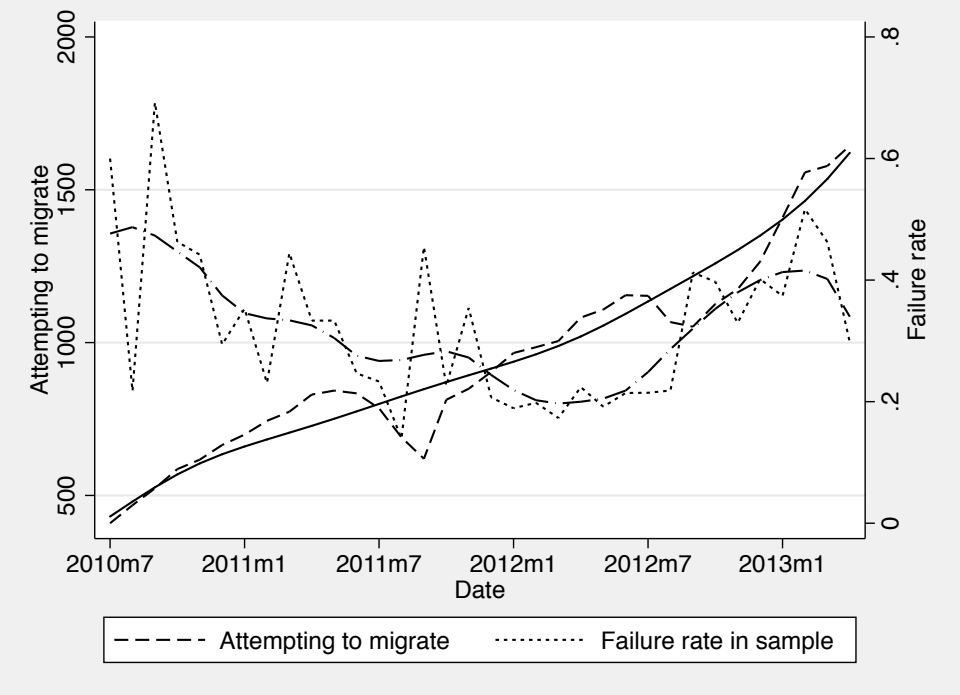


Figure 5. Time to success in migration

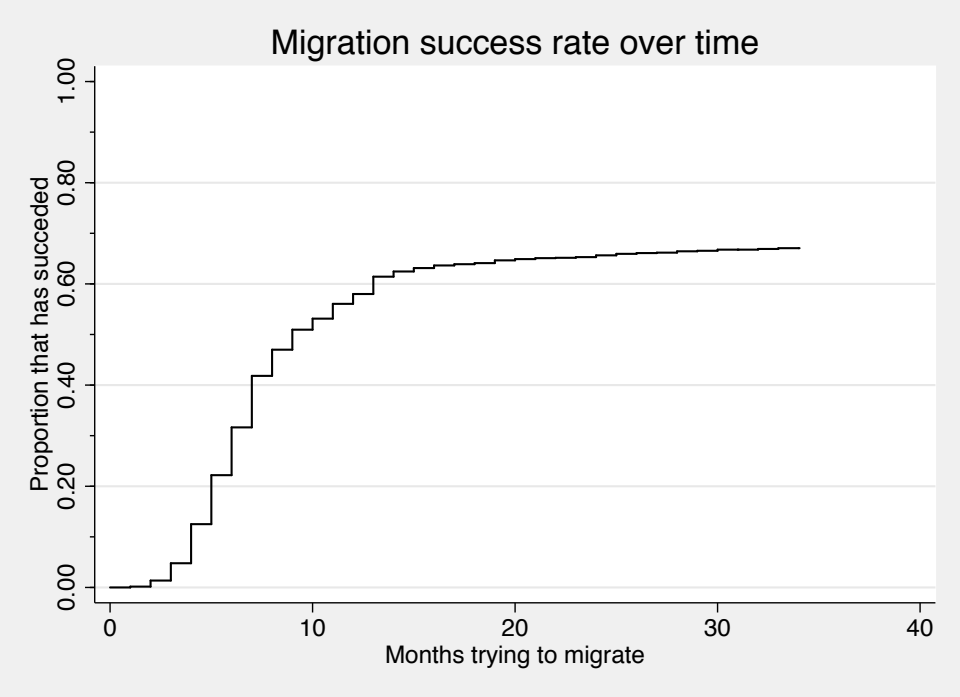


Figure 6. Earnings in Bangladesh and overseas for migrants