Deficiencies in Conditions of Work as a Cost to Labor Migration: Concepts, Extent, and Implications

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Deficiencies in Conditions of Work as a Cost to Labor Migration: Concepts, Extent, and Implications*

Mariya Aleksynska, Samia Kazi Aoul and Veronica Petrencu (Preotu)†

Abstract

This paper sets out three goals. First, it provides a conceptual framework for analyzing migration costs associated with deficiencies in the conditions of work abroad, which is an insufficiently explored aspect of the existing theoretical frameworks on migration decision making. Second, using a novel data set, the KNOMAD migration surveys, it examines the nature and extent of the losses that migrant workers experience due to deficiencies in working conditions. Specifically, the paper shows that working conditions, such as contractual status, level of wages and periodicity of wage payments, hours worked, occupational safety and health issues, as well as trade union involvement and discrimination are areas in which migrant workers report substantial short-falls compared with decent work. Expressing these deficits in monetary terms, the analysis finds that the aggregate losses due to deficiencies in the conditions of work abroad represent 27 percent of total actual wages, and are twice as high as the recruitment and travel costs incurred to migrate. These costs vary across migration corridors as well as across migrants’ age, gender, and sector of activity. For example, female domestic workers have some of the highest costs due to prohibitively excessive hours, while men in construction have high costs due to unexpected wage deductions, long hours, exposure to adverse climate conditions, and particularly high incidence of work-related traumatic injuries. Although the data show a relatively low incidence of occupational safety and health problems among domestic workers, this is likely because migrants who suffered from fatal injuries, including as a result of violence or unsafe work, were not captured by the survey. Lastly, the paper empirically shows that deficiencies in working conditions can negatively affect the amount of remittances, and tend to shorten migration duration, warranting policy attention to tackle the migration and development inefficiencies created by poor working conditions.

Keywords: migration decision, migration costs, protection of migrants’ rights, working conditions

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1. Introduction

International migration has been growing incessantly throughout the world, reaching 244 million migrants in 2015,\(^1\) of whom about 207 million are of working age and 150 million are employed.\(^2\) Over the past decades, South-South labor migration overtook South-North labor migration in absolute and relative terms, and its growth is expected to continue. Labor migration is an outcome of development and a major contributor to development through remittances, transfer of skill and technologies, and through trade, foreign direct investment, and tourism development, thanks to the business networks that migrants establish abroad. Yet, the success to which this developmental potential of migration can be unleashed depends to a large degree on the extent to which its benefits can outweigh various types of costs incurred in the migration process.

The existing literature provides abundant evidence on various benefits, but also the costs associated with the general migration process (ILO 2016a; Abella and Martin 2014; Abella, Martin and Yi 2015) or its outcomes. For example, World Bank (2016) highlights the still substantial costs of remitting money, although these costs have been declining (Ratha 2005; Mohapatra and Ratha 2011). In contrast, the literature is still relatively silent on some of the key costs incurred by labor migrants, namely, the costs associated with deficiencies in the conditions of work abroad. Working conditions cover a broad range of issues, including contractual issues, working time, wages and remuneration, occupational safety and health conditions, access to social security, as well as many other topics, such as work organization, work-life balance, and opportunities for training. Moreover, these conditions of work should be viewed in the light of the fundamental principles and rights at work, which include freedom of association and the effective recognition of the right to collective bargaining, elimination of forced or compulsory labor, abolition of child labor, and elimination of discrimination in employment and occupation.\(^3\)

In destination countries, migrant workers often lack adequate information about labor markets and migrants’ rights, and may not have sufficient social networks or language skills to claim them. In addition, because migrants may be under pressure to pay off the costs associated with migration and send remittances, they may end up working in sectors and jobs that do not match their skills, and where the working conditions are particularly difficult (see ILO (2014a) for an overview). Therefore, it is reasonable to expect that migrant workers may face poorer conditions of work compared with the conditions native-born workers face, migrants’ own past experience in their origin country, or their compatriots back home working in the same sectors and occupations. Although many studies highlight these issues, a global assessment of the costs incurred by deficiencies in working conditions remains largely unexplored. How large are the costs in absolute terms, and compared with other costs, such as the costs to organize the trip? What is the size of such costs compared with the wages that migrant

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1 UN-DESA (2015).
2 ILO (2015a).
3 The fundamental principles and rights at work are enshrined in the Declaration on Fundamental Principles and Rights at Work, which commits the 187 Member States of the International Labour Organization (ILO) to respect and promote these principles and rights, whether or not they have ratified the relevant Conventions. ILO also has a historic mandate to work on all the issues of working conditions outlined here. This mandate dates back to the creation of the ILO in 1919, as part of the Treaty of Versailles that ended World War I, and when the first ILO Convention—the Hours of Work (Industry) Convention, 1919 (No. 1) was adopted. Since then, ILO has developed many international labor standards in each of the outlined areas of working conditions.
workers expect to receive over the duration of the migration project? How do these costs affect other migration outcomes, notably the amount of remittances and the duration of the stay abroad?

This paper sets three goals to answer these questions. First, it provides a theoretical reflection on how the costs associated with deficiencies in the conditions of work may enter the existing theoretical migration decision-making frameworks and alter the decision-making process on labor migration. Second, it offers empirical evidence on the migration costs associated with deficiencies in the conditions of work of migrants abroad, bringing to light the existence and types of such costs. The paper shows that poor working conditions constitute a nonnegligible part of the overall costs of migration, being twice as high as the aggregate costs of organizing the travel and paperwork for migration. These costs also vary tremendously across migration corridors and sectors, as well as migrants’ gender and education.

Since much of these costs are unknown in advance, and revealed only at destination, the paper also improves our understanding of inefficiencies that can occur in the migration process. It shows that the revealed conditions of work at the destination do not necessarily coincide with the expectations that migrants have prior to departure, and that failure to account for the costs of migration linked to the conditions of work raises issues of accuracy of migration decisions, false hopes, and efficiency losses in general. And yet, it is these conditions that determine to a large extent all other migration outcomes: the amount and periodicity of remittances, the possibility of integration and hence developing business network potential, the success of the overall migration project, and the probability of return and its timing. Indeed, the empirical part of this paper shows, as its third goal, that poorer working conditions are negatively correlated with the amount of remittances, and lead to shorter duration of a migration project. The evidence on unfavorable conditions of work abroad—coupled with the lack of resources, limited legal channels for migration, and other potential risks of migration—can also help to explain the discrepancy between the global number of people willing to migrate and the actual number of people migrating.

The analysis in this paper builds on survey data on various costs incurred by low-skilled migrants, collected in the framework of the World Bank’s Global Knowledge Partnership on Migration and Development (KNOMAD) project,5 in collaboration with the International Labour Organization (ILO). The survey includes a conceptually novel module on conditions of work that migrants have incurred while abroad. In its first round of currently available data, the survey was conducted along seven migration corridors linking selected Gulf, Asian, and African countries that are particularly known for the intensity of labor migration. The paper focuses on Asian origin countries, and thus also contributes to the still scarce literature for this region. One of the limitations of the survey is that it was conducted mainly among return migrants, most of them migrated through recruitment agencies. On the one hand, this raises the issue of self-selection of migrants into these specific channels, and most probably mitigates negative conditions of work. On the other hand, such self-selection, coupled with the often formal aspect of this type of migration experience, allows us to qualify the findings reported in this paper as a lower bound of migration costs. Quite likely, migration outside such formal schemes can

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4 For example, the Gallup (2010–12) survey found that 16 percent of the world’s adult population would like to migrate (i.e., 700 million people), but there are only 232 million migrants in the world (UN-DESA 2013). This may be because the costs of a migration project remain generally higher than the benefits.

5 For details, see the project’s website: http://www.knomad.org/.
give rise to even higher costs, and we discuss this issue in detail in the paper. We show that even such lower bound migration costs may be nonnegligible.

The results of this study are revealing, especially in the light of the existing policy tools and international standards aimed at protecting migrant workers’ rights and regulating labor migration. Relevant international instruments include the ILO’s 1998 Declaration on Fundamental Principles and Rights at Work, as well as international labor standards developed by ILO and addressing various aspects of working conditions. In principle, the instruments are applicable to all workers, irrespective of nationality and migration status unless otherwise stated. There are also international legal instruments specific to migrants. These instruments include the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, 1990; the ILO Migration for Employment Convention, 1949 (No. 97 Revised) and its accompanying Migration for Employment Recommendation, 1949 (No. 86 Revised); and the ILO’s Migrant Workers (supplementary provisions) Convention, 1975 (No. 143) and its accompanying Migrant Workers Recommendation, 1975 (No. 151). The ILO’s Multilateral Framework on Labour Migration also provides a set of nonbinding principles and guidelines for a rights-based approach to labor migration, which takes into account labor market needs. Other instruments that are relevant to migrants’ conditions of work include the Domestic Workers Convention, 2011 (No 189); the Equality of Treatment (Social Security) Convention, 1962 (No. 118); and the Maintenance of Social Security Rights Convention, 1982 (No. 157), with its accompanying Maintenance of Social Security Rights Recommendation, 1983 (No. 167).

In addition, many countries have signed bilateral agreements with the aim to ensure migrant protection and equality of treatment between migrants and the native-born. For example, the Philippines has signed 49 such agreements with 25 countries, to improve the protection of nationals migrating for work in those countries (McKenzie and Yang 2015). Despite the good will that governments and social partners of destination and origin countries have shown, the implementation of international labor standards and bilateral agreements often remains weak, due to lack of capacity and resources, insufficient incentivizing mechanisms, or poor monitoring and compliance. The growing general, not just labor, migration flows, the increasing role of private agencies in the recruitment process, the short-term and temporary character of migration, as well as the increase in irregular migration make the effective protection of migrants’ rights under these conventions and agreements even more difficult (Koser 2013; HRW 2010a, 2010b). Thus, the evidence provided in this paper helps to shed light on the extent to which current instruments are effective, what improvements can be made to the enforcement of the existing frameworks, and what are the areas in which inefficiencies can be tackled by specific policy interventions aimed at their minimization.

In the light of the United Nations 2030 Agenda for Sustainable Development, Sustainable Development Goal 8 (Promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), higher costs at the workplace would be one of the key impediments to achieving this goal. This is especially true for origin countries whose economic outcomes largely depend on remittances, and hence on decent employment of their nationals abroad. Equally important is understanding to what extent the costs at the workplace differ across men and women, so that all workers’ rights can be equally protected.

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The rest of the paper is organized as follows. Section 2 reviews the existing theoretical and empirical literature on the costs and benefits of migration, and, building on this, conceptualizes how conditions of work enter the migration decision-making process. Section 3 describes the data, and section 4 contains exhaustive descriptive statistics on migrants’ conditions of work abroad. Section 5 provides a framework for aggregating the various costs associated with deficiencies in labor conditions, to assess their global extent. Section 6 offers a formal statistical analysis for testing the hypotheses set out in section 2. The last section concludes.

2. Conceptualization of the migration decision and migration costs

Bodvarsson and Van den Berg (2009), who provide one of the most extensive literature reviews on migration decision making, note that there is no single universal model for understanding why people migrate. This is because migration is a complex phenomenon. It is determined by various factors, ranging from macro determinants that are specific to origin and destination countries, to micro determinants that go well beyond pure economic rationales. Moreover, specialists from various disciplines, including economics, sociology, anthropology, and political science, have different views on migration decision making and reasons for migration.

Despite the absence of a universal model, many studies offer insights on migration decision making, and the number of such studies has grown substantially in the past years. Acknowledging the existence of the multitude of views, as well as the divergence of the conceptual frameworks of various disciplines, in this section, we mainly focus on the economics literature of migration decisions. The main reason for this is that, in this project, we are concerned with international labor migrants, those who made a conscious choice to move to another country for gainful employment, and hence for primarily economic motives. We disregard refugees, asylum seekers, and family members accompanying or re-joining immigrants, or students—although they represent very important proportions of international migrants, and many of them end up taking gainful employment. We also disregard the literature that focuses on migration decision making by individuals as consumers of public goods or as producers of goods and services for own consumption abroad. This relatively narrow focus allows us to streamline the debate and advance our arguments on the role of the conditions of work in destination countries as an important, although often neglected, component of migration decision making.

2.1. Overall Costs and Benefits of Labor Migration and Migration Decision Making

The economic theory of international migration views the decision to migrate as an investment decision, in which individuals compare the gains from migrating (lifetime, or those spread over the migration period) with the costs incurred in this process. The theory implicitly assumes that candidates for migration maximize their utility through maximization of their income received abroad compared with income received at home, taking into account the various costs associated with migration.

The pioneering work of Sjaastad (1962) set the scene for research on individual migration decision making, by proposing to view migration as an individual investment resulting from comparing the expected benefits and costs of migration. He also offered the first classification of the costs and benefits of migration, flagging private and public costs and, among the former, the monetary and nonmonetary costs of migration.

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7 Other literature reviews on this topic include, among others, Borjas (1994, 1999, and 2015) and Kolev (2013).
Sjaastad’s (1962) original contribution contained just a few examples of such various costs; subsequent studies built on this and added many others. For example, his model implicitly assumed that information about labor market opportunities and outcomes in terms of wages and living costs is perfectly available to candidates for migration. In other words, the model did not build in the uncertainty aspect. However, not only is uncertainty always present, but also the extent of uncertainty can affect migration decision making and thus also affect the selection of migrants, that is, those who will migrate (Bertoli 2010; McKenzie, Gibson, and Stillman 2013). Potentially, the degree of uncertainty may be so high that sufficiently risk-averse candidates for migration may prefer not to migrate. To allow for this uncertainty, Todaro (1969) introduced the probability that migrants will (not) find work at the destination; in other words, he operationalized the expected income hypothesis.

Chiswick (1999) made the distinction between direct, “out-of-pocket” costs that migrants incur (in a very large sense, including transport costs, but also the costs of transferring one’s skills to the host labor market), and indirect or opportunity costs (such as foregone income in the home country). He showed that such costs vary across individuals, with the variation depending on their skill and resulting in positive or negative selection of immigrants. Figure 1 summarizes these complementary proposals to structure migration costs and benefits, although their categorization can be debatable and contains a certain element of subjective judgement.
Another important theoretical contribution to the literature on migration decision making is the work of Burda (1995). He develops a model of the option value of waiting to migrate, according to which it makes sense to wait until the labor market conditions at the destination become sufficiently favorable. Deferring the migration decision may reflect an economically rational choice, to the extent that it allows the migrant to benefit from a favorable turn of events. As migration is an investment, it represents incurring an immediate, upfront fixed cost for future and possibly uncertain gains. According to the model, an increase in uncertainty associated with migration, as well as fixed costs, can impact the migration decision and ultimately reduce the probability that migration will take place.
Sudden changes in migration are also possible, caused by unobservable changes in subjective assessments of risk or perceived fixed costs. Similar models have been used to model the effects of migration networks—as cost reducers—on the decision and timing of migration (Moretto and Vergalli 2008; Vergalli 2008).

Subsequent studies allow structuring migration factors in ways that are different from what is shown in figure 1, although not contradictory, and rather in the framework of micro-macro, supply-demand, or push-and-pull factors (figure 2).

In such frameworks, micro or individual-level determinants include, first and foremost, age and family profile: young, single, childless individuals have a greater propensity to move than older, married, and "tied" movers (see Mincer (1978) for pioneering theoretical discussion, and for ample empirical evidence since then, Kaestner and Malamud (2014)). The frameworks also include individual-level economic determinants, such as individual wages at home and abroad, and notably wage and income differentials, which vary by skill level. Borjas (1987) and Chiswisk (1999) are pioneering studies, and more recent studies include Grogger and Hanson (2011) and Bertoli, Fernandez-Huertas Moraga, and Ortega (2013), among others. Individual migration decision factors also include underemployed diplomas in the home country, and better career prospects abroad (Kahanec 2013; Ozden and Phillips 2015); transferability of skills and diplomas (Friedberg 2000; Chiswick and Miller 2009; Mattoo, Neagu, and Ozden 2008); language skills (Dustmann 1994; Chiswick and Miller 2015); previous migration experience (Delechat 2001); and possibility to finance migration (Chiquiar and Hanson 2005; Belot and Hatton 2012; Friebel and Guriev 2006; Dustmann and Okatenko 2014).

Among the macro determinants, the factors that affect labor migration the most are demographic or migration pressures in the origin country; unemployment; poverty; inequality; factors in origin countries, such as land rights; and economic prospects in the destination country, such as demand for workers, better quality of life, freedom, security, social protection, migration policies, or exit and entry barriers. For example, cross-country evidence shows that the relationship between emigration rates and economic development takes an inverted-U shape (see Clark, Hatton, and Williamson (2007) and Clemens (2014) for a review of recent evidence), since individuals from the poorest countries cannot afford to incur the costs of migration, and individuals from rich countries have fewer incentives to migrate. Nonlabor migration factors also include the necessity to escape physical insecurity (conflict, massacre, and persecution) or climate change, and labor migration factors may add to those.

Conversely, supply-side or push factors for migration, which can be measured at the micro or macro level, include issues such as poverty, poor institutions, and overall well-being in the origin countries, but also issues such as import competition. Demand-side or pull factors include destination-specific economic and political conditions. They largely determine migrants' sorting across countries. Existing empirical studies show that the migration response to changes in the pull factors, such as economic opportunities abroad, may be sizeable (Bertoli, Fernandez-Huertas Moraga, and Ortega 2013; McKenzie, Theoharides, and Yang 2014), and that it is pull factors rather than push factors that largely explain migration flows across countries (Mayda 2010). Temporary migrants, in particular, can be much more prone to changes in the economic conditions in potential destination countries (Bertoli, Fernandez-Huertas Moraga, and Keita 2016).
Figure 2. Structuring Migration Factors

Micro determinants
(individual decision to move)

Macro determinants
(differences in aggregate factors in home and host countries)

Supply or “push” factors
(reasons to leave (or not) a specific home country)

Demand or “pull” factors
(reasons to choose (or not) a specific destination)

Note: Authors’ elaboration based on the literature discussed in section 2.1.

In addition, recent literature highlights the importance of bilateral factors in migration decision making. Bilateral factors include various aspects that define proximity between origin and destination countries, such as lower physical distance between countries, as well as whether origin and destination countries share common borders, common past, common language, and common religion, or have signed bilateral migration agreements. Such factors are usually viewed as lowering the direct and indirect costs of migration (Mayda 2010; Belot and Hatton 2012; Gubert and Nordman 2009). Affinity in terms of economic development, as well as migration policies, have also been shown to play a role (Ortega and Peri 2012). Moreover, the cost of moving is expected to decline with the presence of ethnic networks abroad. Such networks can help to reduce the direct and indirect, monetary and nonmonetary costs of migration. They help by providing information related to finding a job and adapting to a local labor market (Munshi 2003; Elsner et al. 2013). They also help by mitigating the psychological costs of migration, and capitalize on human capital that cannot be transferred abroad but can still be valuable within the migrant community (Chiswick 2003). Finally, recent studies point to the importance of considering "multilateral resistance to migration," in other words, the need to look at the migration decision in the context of multiple destination countries, to take into account

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8 The literature on the role of migration networks in reducing migration costs is vast. Prominent examples of such studies include Carrington, Detragiache, and Vishwanath (1996), who show that migration costs decrease with the previous stock of migrants, thus leading to the potential increase in migration flows even if the wage differential between origin and destination decreases. McKenzie and Rapoport (2010) show that the individual propensity to migrate increases with education if networks are small and migration costs are high. Beine, Docquier, and Ozden (2011) find that larger migrant networks imply a negative selection into migration, since these networks reduce the costs of migration for the low skilled. Bertoli, Docquier, and Ruyssen (2015) exploit the Gallup survey on intended destinations of potential migrants, to show that the choice of the destination is strictly linked to whether the respondent has a friend in that country.
the relative attractiveness of one country or location vis-à-vis others (Kennan and Walker 2011; Bertoli and Huertas-Moraga 2013).

By affecting the costs and benefits of migration, the micro-macro and supply-demand factors largely determine the size of migration flows and the types of migrants in terms of their skills and labor market potential. As such, these factors lie at the heart of the selection models (pioneered by Borjas 1987) that show that, depending on the interplay of these factors, either positive or negative selection of immigrants can take place. For example, Chiswick (1999), Chiquiar and Hanson (2005), and Grogger and Hanson (2011) show that because such various migration costs differ among individuals, positive and negative selection can be observed. Interestingly, although migrants may be negatively selected in observable, objective skills, such as those demonstrated by diplomas, they still may be positively selected in unobservable skills, such as talent or entrepreneurial ability (Mattoo, Neagu, and Ozden 2008; Fernandez-Huertas Moraga 2011; Aleksynska and Tritah 2013). Selection by skill and talent can have nonnegligible implications for migrants' adaptability (assimilation and/or integration) at their destination, thus affecting home and host countries' labor markets and societies at large (among recent papers, see Docquier, Ozden, and Peri (2014); Dustmann and Glitz (2011); and Algan et al. (2012), for country case studies and extensive literature overviews), as well as the development potential of migration.

2.2 Conditions of Work in a Host Country: Points of Entry into Existing Theoretical Frameworks

With the major exception of wages, conditions of work abroad are usually not explicitly considered as representing costs or benefits to migration in the majority of studies reviewed in the previous section. At best, the conditions of work are considered only tentatively. However, it is these conditions, coupled with other costs incurred in the migration process (figure 3), that, to a large extent, determine whether and how the expected gains from migration will be realized. Mounting empirical and anecdotal evidence on the extent of these costs begs for including these costs in existing theoretical frameworks, as well as in empirical studies addressing the migration decision-making process. This section reflects on how working conditions may enter the various theoretical models outlined. It also provides a review of the empirical evidence on the existence of such costs, especially in the context of South-South, and specifically Asian, migration, to set the scene for the empirical analysis in this paper.

In this paper, by conditions of work, we understand contractual status; working time; actual wages and remuneration, especially compared with the promised ones; occupational safety and health conditions; and access to social security. We also include the fundamental principles and rights at work, such as freedom of association and the effective recognition of the right to collective bargaining, as well as discrimination issues, in the light of which all other working conditions should be seen.

In the framework of the investment decision models outlined in figure 1, the conditions of work can represent the costs and benefits of migration. Whether the conditions will become benefits or costs depends on how they compare relative to the conditions of work that migrants had at home, but also on the expectations that migrants have from their migration experience, and the extent to which these costs can be foreseen in advance. Thus, the relativity aspect is important: it is not simply the conditions

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Likewise, the literature on immigrants' assimilation and integration into the labor market is vast, and concerns many aspects, including assimilation in wages and returns to education (see Chiswick (1978) and Borjas (1994) as pioneering studies), employment in general (Wheatley 1998), or occupational matching (Green 1999; Amuedo-Dorantes and De la Rica 2007; Barrett and Duffy 2008).
of work per se that matter, but how they compare with those the migrants have previously encountered, or expected to encounter. This same relativity aspect, but referring to the conditions of work of the native-born, may in turn affect the way the migration experience develops, and whether it will result in migrants’ integration into the local labor market and society at large. In principle, migrants should receive the same rights at work as the native-born. This includes economic rights (equal wages and social benefits for work of equal value, freedom to change jobs, and rights to join trade unions), along with social and cultural rights. The extent to which these rights are not the same may determine not only migrants’ current outcomes, but also their future prospects to move to better jobs or enjoy various types of protection to which they may be entitled.

**Figure 3. Various Migration Costs in the Labor Migration Cycle**

![Diagram of various migration costs](image)

**Source:** Authors’ elaboration based on the literature discussed in sections 2.1 and 2.2 and background work for the World Bank–ILO KNOMAD questionnaire on costs of labor migration.

The conditions of work can be seen as monetary and nonmonetary, direct and indirect costs and benefits. For example, wages at the destination—the only conditions of work aspect that represents a key systematic component of existing studies on labor migration—clearly constitute direct monetary benefits from migration, while various deductions unrelated to social security contributions and taxes but imposed by employers in an ad hoc, unpredictable manner can safely be considered as costs. The amount of such deductions relative to wages, frequency of deductions, and degree of uncertainty associated with them can increase or decrease the attractiveness of the migration project. The extent to which wages turn into a “benefit” depends on whether they correspond to the promised, expected wages, and whether they are paid on time.

If wages and deductions are easy to categorize and quantify into monetary or nonmonetary, other conditions of work are not. For example, working hours, especially excessive working hours, may allow migrant workers to earn more and accumulate savings faster. However, excessive working hours may also lead to higher levels of fatigue, stress, work-related injuries, and poor work-life balance. With rare compensation for overtime work, the accumulation of such negative aspects may compromise the contemporaneous and future benefits of working longer hours. Poor conditions of work that lead to poor health outcomes, such as injuries or work-related illnesses, would clearly contain nonmonetary moral costs, but would also involve the monetary costs of losing days of work and having to pay for
medication. The existence of social security coverage and the realization of the right to health insurance can help to mitigate such costs, although rarely to eliminate them completely. Some work-related injuries may also lead to permanent work incapacity, thus not only elevating migration costs to levels endangering the migration project, but also impairing return and reintegration (figure 3). Among the worst forms of poor working conditions, violence, harassment, and physical abuse by employers can be particularly devastating, and cause not only work-related costs (Lin, Babbitt, and Brown 2014), but also long-term scars and consequences going much beyond work issues (Chappell and Di Martino 2006; Cruz and Klinger 2011). Because of the lack of language skills and freedom of movement, and dependence on one employer, and sometimes withheld documents, migrant workers are particularly prone to situations of abuse at the workplace (Truskinovsky, Rubin, and Brown 2014).

In turn, the fundamental principles and rights at work, including freedom of association and collective bargaining and nondiscrimination, would contain monetary and nonmonetary, direct and indirect aspects. Importantly, the possibility of their realization can determine, to a large extent, whether other conditions of work are decent, in other words, whether they result in benefits.

In the framework of the studies summarized in figure 2, good conditions of work can be seen as largely micro “pull” determinants of migration. To the extent that host country labor market institutions create enabling environments for the realization of “good” conditions of work, some aspects of the conditions of work abroad can also broadly be viewed as macro “pull” determinants of migration, helping to determine migrants’ selection and the timing of migration. The migration costs and benefits associated with the conditions of work may also vary between migration corridors, reflecting different institutions and degrees of migrants’ labor market protection at the destination, as well as different degrees of discrimination against certain origin groups.

The existing literature acknowledges that immigrants usually have lower bargaining power compared with the native-born. This is due to many reasons, including language barriers, poor knowledge of the destination country’s environment and institutions, and poor ties with their communities, all of which lead to migrants having poor awareness of their rights. Moreover, migrants may be led to believe that they do not have certain rights, such as, for example, the right to voice concerns or join a trade union of the native-born, directly-hired workers (Ruckelshaus and Smith 2014). Often seen as “outsiders,” migrants may also be reluctant to voice their concerns, let alone join a trade union, because they fear being sent back home or abused by their employer (Ghosh 2009; ILO 2015b, 2016a), or may simply not be able to afford union membership because of their unstable or insufficient income (Xhafa 2015).

Lower bargaining power, in turn, is one of the key preconditions of worse working conditions for any worker, and for migrant workers in particular, because they may additionally face outright discrimination (Bertrand and Mullainathan 2004; see also Valfort (2015) for the case of French Muslims and an extensive list of references). Moreover, there may be an asymmetry of information because the abilities of migrant workers are not perfectly observed by employers in a destination country (Katz and Stark 1987). For example, employers usually have very imperfect information on what overseas credentials mean, and what these credentials signal (Chiswick and Miller 2009); thus, employers may systematically offer temporary rather than permanent contracts to migrant workers, as well as lower wages. As the true productivity levels of workers are progressively revealed through

10 See the references to the assimilation literature outlined in section 2.1.
signaling or observation, migrants’ bargaining power and conditions of work may improve with longer time spent with an employer.

The level of bargaining power, and hence the extent to which the conditions of work may turn into advantages rather than costs, also depends on migrants’ individual characteristics, notably age, gender, religion, and skill. Female migrant workers risk having particularly lower bargaining power in negotiating better conditions of work compared with men (Fleury 2016). Once at the destination, women migrants are at substantially higher risk of discrimination, violence, exploitation, and abuse compared with male migrants. This situation is exacerbated by social expectations to send remittances, irregular status (whenever it occurs), and the particularities of women’s occupations (Fleury 2016). For example, the domestic work sector is dominated by women. The specificity of domestic work is that it is generally not covered by labor laws. Moreover, as domestic workers perform their work within households where they may also be lodged, they are often invisible to others and have few opportunities to communicate and associate with other workers. This situation also limits women’s awareness of their rights, and renders voicing their concerns particularly difficult (Tayah, 2016).

Given these conditions, compared with men, women risk working longer hours, have lower pay, and face other work dis-amenities due to their gender and the specificities of their occupations. Indeed, some surveys indicate that female domestic workers suffer from exorbitant fees paid to recruitment agencies, irregular payment, very long hours and insufficient rest hours, poor living conditions, absent social security, forced labor, and mistreatment (Afsar 2011; Neetha 2004; Weeramunda 2004). These factors force some the domestic workers to escape from their employers at the peril of their lives (Moreno-Fontes Chammartin 2005). In the Gulf countries, labor migration, especially in the domestic sector, is mostly governed by the kafala system, which ties migrant workers to sponsors, and which may be particularly conducive to forced labor and discrimination (ILO 2012; Ruhs 2013).

High-skilled migrants would most probably have stronger bargaining power. They may be able to find better jobs prior to migration, go through a more professional recruitment agency, and secure better conditions of work prior to departure, compared with low-skilled migrants. Similarly, immigrants who speak the language of the destination country may be in a better position to obtain full information about labor market opportunities abroad and their rights, communicate with the employer, understand the various rules and conditions attached to the contract, and voice concerns in the destination country if such need arises (for a thorough review of the role of language, see Chiswick and Miller (2015)).

The specificity of the conditions of work abroad is such that not only do the conditions constitute part of the total costs and benefits of migration, but they may also be affected by other costs and benefits associated with a migration project. For example, in the light of figure 3, the type of the recruitment agency the migrant uses and the visa and work permit that she obtains (the first node of the figure) may affect the type of contract that the migrant will obtain in terms of the rights it would guarantee. Some temporary work agencies that recruit abroad, as well as temporary work permits and visas, would only allow working for one employer or oblige migrants to leave host countries if they lose their jobs. This again considerably lowers migrants’ bargaining power from the onset of migration, and

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11 Such restrictions are often governed by the government’s policy rather than the recruitment agency’s decision. In many destination countries (e.g., Thailand, Malaysia, and Singapore), government policy is that migrants cannot change employers, or can only do so under limited circumstances (e.g., abusive conditions, employer going bankrupt), and will have to return home upon the end of their contract or upon losing their job.
hence may lead to harsher conditions of work abroad (still, having such visas and work permits is better than not having any papers). The situation would be even more serious for irregular migrants and for those who enter into arrangements in which the transportation and recruitment costs are paid by means of wage deductions (Friebel and Guriev 2006). Other types of arrangements and work permits or visas may, by contrast, offer freedom to choose employers, or at least have recourse to better types of protection. However, such arrangements are often reserved for higher-skilled migrants and permanent settlers.

These theoretical reflections can be tested directly, and hence lead us to setting up the first of the empirical hypotheses that we verify in subsequent sections:

**Hypothesis 1.** The costs associated with the conditions of work vary with individuals’ characteristics, such as age, gender, occupations and skills at home, ability to speak the language of the destination country, types of visas/permits, and migration corridors.

Importantly, the costs and benefits of the conditions of work abroad can be revealed only once a candidate for migration is already abroad. Although any potential migrant can find out the costs of tickets and paperwork with a relatively high degree of precision, migrants may be unaware of the existence of some of the work aspects that they will encounter abroad, and unable to quantify them. Often, the costs associated with the working environment at the destination come as additional, and oftentimes unforeseen and hidden costs to migration. In terms of Todaro’s (1969) model, outlined in the previous section and figure 1, the costs can be viewed in a way that is similar to the probability of finding good employment (rather than any employment). In terms of Burda’s (1995) model, the costs of changing working conditions can also affect when and where the migration project will take place.

Among the worst forms of working conditions, some employers may deliberately misinform potential migrants about the conditions of work, to exploit the migrants at the destination (see, for example, Vlieger (2012), who shows that in Saudi Arabia and the United Arab Emirates, migrant domestic workers have particular risks of becoming victims of trafficking, caused by misinformation provided to domestic workers prior to departure, as well as by confinement and exploitation at the destination). McKenzie and Yang (2015) suggest that the hidden costs of migration linked to trafficking and human rights abuses may result in low effectiveness of remittances and loss of externalities from skilled workers. Migrant networks do not necessarily help to improve the provision of information on working conditions abroad, because the strong pressure to send remittances may lead migrants to misreport how much money they earn (McKenzie, Gibson, and Stillman 2013).

These aspects make it difficult to include the conditions of work abroad in the migration decision-making process, compared with other costs. At the same time, if the conditions of work abroad are not included (or included inappropriately), such costs can give rise to inaccuracy in migration decisions, or simply false hopes. Their extent can be so large that they can outweigh the possible gains from migration (although, of course, candidates for migration may still decide to migrate, even if the actual costs are high).

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12 Social networks can also provide a reliable measure of expected costs, although the actual costs are perceived only by the migrant once at the destination.

13 McKenzie and Yang (2015) also review various policies at different stages (pre-departure, during migration, and directed to return), which aim at reducing these costs and increasing the welfare impact of migration. They argue that bilateral agreements protecting migrants’ rights (see also Beam, McKenzie, and Yang 2016) and financial education have been quite successful in this respect.
benefits of migration, net of all the costs associated with poor conditions of work, are lower than the promised wage but still higher than their reservation wage). On a personal level, this situation can result in suboptimal development outcomes from migration, such as the amount and periodicity of remittances. As women usually remit more in relative terms compared with men (UNFPA 2006; UNDP 2009; Afsar 2011, for Bangladesh), and are often viewed as more reliable in sending remittances compared with men (Mulaiaina 2005), their poorer working conditions abroad, compared with those of men, may be especially detrimental to remittances. Poor working conditions may also delay and overburden debt repayment, with these situations again being particularly drastic for women compared with men, because of women’s generally lower wages (Ghosh 2009).

Given this context, two more testable empirical hypotheses can be set as follows:

**Hypothesis 2.** The conditions of work may feature a high degree of unpredictability, and the associated costs may be sizeable in comparison with other costs incurred in the process of migration.

**Hypothesis 3.** The higher are the costs brought about by the conditions of work, the lower are the amount and periodicity of remittances.

The conditions of work abroad may also impact migrants’ return and reintegration plans, as well as the costs associated with them (last node of figure 3). Revealed only once at the destination, the conditions of work may lead to a considerable reconsideration of the migration project. Indeed, there is a vast literature on return migration in general, which provides a useful framework for understanding how the conditions of work can alter the duration of migration, return plans, and even the choice of activity after migration. This literature stresses that participation in a temporary migration program can be part of a life-long plan to earn money abroad, to be able to accumulate capital for starting a business upon return or for leisure. In this case, the type of activity abroad, duration of stay, and return plans are likely to be jointly co-determined (Borjas and Bratsberg 1996; Dustmann and Kirchcamp 2002; see also Dustmann and Goerlach (2015) and Wahba (2015) for extensive reviews).

In such context, the optimal duration of migration may be affected by the various costs encountered abroad. For example, revealed higher wages in a destination country may increase the duration of migration, if an individual wants to benefit from such wages for a longer period. Alternatively, revealed higher wages may shorten the duration of migration, as they allow for faster accumulation of the necessary capital. Likewise, unemployment spells—their frequency and duration, and the possibility of getting unemployment benefits—nontrivially affect the probability of return migration, while reemployment spells delay returns (Kirdar 2009; Bijwaard and Wahba 2014). It is possible to hypothesize that other conditions of work, such as longer hours, could have similarly ambiguous, although not necessarily neutral, effects on the duration of migration. In turn, suboptimal duration of migration may also have repercussions on the suboptimality of remittances, decisions to bring in migrants’ families, and investment in learning the destination country’s language and local skills (Dustmann and Goerlach 2015).

**Hypothesis 4.** The conditions of work abroad may affect the duration of migration in a nontrivial way.

However, hypothesis 4 can be severely restrained by the rules of temporary migration programs and visas that are binding and do not allow for extensions. When this is the case, the conditions of work
may only reduce the optimal duration, while increases in the optimal duration, even if desired, may simply be an unavailable option. Moreover, the extent to which increasing the duration of stay may be an option can again be gender specific, because many countries impose various legal restrictions on the mobility of women (see World Bank Group (2015) and Fleury (2016) for reviews), or may influence the migration outcomes of women through discrimination and cultural norms (Zachariah, Mathew, and Rajan 2001; Ruysen and Salomone 2015).

The rest of the paper provides empirical evidence and formally tests the four hypotheses outlined in this section.

3. Data Description

3.1. Description of the KNOMAD Migrant Cost Survey Data

The analysis in this paper builds on pilot survey data on various costs incurred by low-skilled migrants, collected in the framework of the KNOMAD project. The survey was conducted in 2014–15, targeting regular migrants along seven migration corridors linking six origin countries—Ethiopia, India, Nepal, Pakistan, the Philippines, and Vietnam—and four destination countries—Saudi Arabia, Qatar, Malaysia, and the United Arab Emirates (figure 4).

Figure 4. Sample Description: Number of Observations per Corridor

<table>
<thead>
<tr>
<th>ORIGIN COUNTRIES</th>
<th>DESTINATION COUNTRIES</th>
<th>Saudi Arabia</th>
<th>Qatar</th>
<th>Malaysia</th>
<th>United Arab Emirates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td></td>
<td>499</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>499</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>0</td>
<td>401</td>
<td>0</td>
<td>0</td>
<td>401</td>
</tr>
<tr>
<td>Nepal</td>
<td></td>
<td>0</td>
<td>355</td>
<td>0</td>
<td>0</td>
<td>355</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td>375</td>
<td>0</td>
<td>0</td>
<td>259</td>
<td>634</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td>0</td>
<td>366</td>
<td>0</td>
<td>0</td>
<td>366</td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td>0</td>
<td>0</td>
<td>401</td>
<td>0</td>
<td>401</td>
</tr>
<tr>
<td><strong>Total Obs.</strong></td>
<td></td>
<td><strong>874</strong></td>
<td><strong>1,122</strong></td>
<td><strong>401</strong></td>
<td><strong>259</strong></td>
<td><strong>2,656</strong></td>
</tr>
</tbody>
</table>

Source: Authors’ computations based on KNOMAD pilot survey data.

The selection of countries was motivated by the importance of migration flows within these corridors, as well as from and to the selected countries. For example, in 2013, Saudi Arabia occupied the second place in the world according to the absolute number of immigrants that it hosts, and the United Arab Emirates was in the fifth position. Qatar is the top world destination in relative terms, with over 90 percent of its population being international migrants, and the United Arab Emirates occupies the second place among immigration countries in relative terms (World Bank 2016). India, Pakistan, and the Philippines feature among the top 10 emigration countries in absolute terms (World Bank 2016). Moreover, immigrants from Nepal and India represent the largest groups of low-skilled immigrants in Qatar (Gardner et al. 2013), while Saudi Arabia is a top destination for Ethiopian migrants, especially women mainly going to work in the domestic service sector (Fernandez 2010). The Philippines has been known for a while for its governmental strategy to promote temporary work for its nationals in
other countries, with the aim to develop the country, and many countries seek to follow its emigration management strategy (McKenzie, Theoharides, and Yang 2014). In addition, pilot surveys in the region conducted in 2014 indicated that the gains from policy reforms related to migration costs would be high in the South Asia–Middle East corridor, motivating further need to collect data for better understanding of the various costs related to migration, and to fill the general relative void of data in the region. Thus, the selected corridors are meaningful from the policy stance and representative of migration flows between these countries.

All the surveys were conducted through face-to-face interviews with return migrants in their countries of origin, except for the Vietnam-Malaysia corridor, where the survey was conducted in the destination country (Malaysia). The majority of surveyed migrants were recruited by a specialized recruitment agency, a staffing agency, or a government employment service center, for migrants performing work abroad temporarily. Although this constitutes a certain limitation of the survey, as it raises the issue of self-selection of migrants into these specific migration modes, migration by means of specialized agencies also reflects the principal labor migration pattern in these countries. In addition, such self-selection, coupled with the often formal aspect of this type of migration experience, allows us to qualify the findings reported in this paper as a lower bound of migration costs for low-skilled workers. Moreover, the self-selection into return problem is also mitigated by the fact that most of the migrants in the surveyed corridors in general (and not specifically for the KNOMAD survey) view their migration as temporary rather than permanent (see, for example, Gardner et al. 2013, based on the survey data for Qatari immigrants).

The sampling methodology was a mixture of random and “snow-balling” techniques. For the Nepal-Qatar and India-Qatar corridors, migrants were surveyed at the airports on arrival. For the Philippines-Pakistan corridor, nationwide representative sampling was ensured. And for the Vietnam-Malaysia corridor, snow-balling techniques were employed. These different techniques raise questions of representativeness, which, however, are mitigated by the surveys being conducted in areas with high concentrations of migrant workers.

The surveys were limited to workers in low-skilled jobs at the destination, and mainly limited to the construction, agriculture, and domestic work sectors. In addition, manufacturing workers were surveyed in Malaysia, to reflect the high concentration of migrant workers in that sector. The empirical results obtained in this paper can thus only be interpreted as occurring for low-skilled workers.

The total sample size, after data cleaning, is 2,659 observations. The data are equally spread across the migration corridors, with the largest sample obtained for the Ethiopia–Saudi Arabia corridor, and the smallest for the Pakistan–United Arab Emirates corridor.

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14 Some of these migrants might have been “returning” to visit families, and then going back to the destination country, on the same or a new contract. Unfortunately, the data do not allow understanding the proportion of migrants in this situation.

15 See also ILO (2016a) for a detailed description of the sampling of migrants from Pakistan to Saudi Arabia and the United Arab Emirates.
3.2. Description of Respondents’ Individual Characteristics

Before delving into the analysis of the costs and benefits associated with labor migration, it is important to understand the individual characteristics of the sampled migrants. Figure 5 highlights the sample distribution, by corridor, of migrants’ gender and education level (skills at home). Information on education is measured at four levels: no education, primary schooling, secondary and technical education, and university education. Although the regression analysis in section 6 controls for each education level separately, here, for visualization, we combine individuals with no education and primary schooling into the low-skill group, and individuals with secondary, technical, and university education into the high(er)-skill group. Moreover, if we want to understand the degree of bargaining power that a migrant may have—being able to read and write, clearly understand the proposed conditions of work, and able to seek supplementary information—having a secondary or technical degree may be as sufficient as having a university degree, while having only primary schooling would be as insufficient as having no schooling at all, thus justifying the chosen divide. Figure 6, which shows the sample distribution by gender and occupation, almost mimics figure 5.

Figures 5 and 6 reveal that there is a high degree of variation in gender and skill composition across the corridors. The Ethiopia–Saudi Arabia corridor sample is represented equally well for men and women, and low- and high-skilled, but this is not the case for the other corridors. The India-Qatar corridor sample is especially striking, because the vast majority of migrants are highly-skilled men (more or less equally split between university and technical schooling). There are also relatively many higher-skilled Filipino migrants. In the Nepal-Qatar, India-Qatar, Pakistan–Saudi Arabia, and Pakistan–United Arab Emirates samples, although there is variation in schooling, there is virtually no variation in gender, as all the sampled migrants are men. The absence of women in the four corridors may be due to deliberate sampling; it may also reflect some broader issues, such as restrictions on women’s mobility imposed by origin countries, such as age bans. The restrictions could be formal administrative or informal cultural restrictions. In our sample, two origin countries—Pakistan (no women in the sample) and the Philippines—impose certain formal restrictions, such as applying for an international passport or obtaining a national identity card (Fleury 2016). Another country—Nepal—has practiced age bans, whereby women younger than age 30 years were banned from migrating to the Arab states for domestic work (ILO 2015c). This restriction might have affected the costs of migration and return decisions for women from these countries, up to an extreme case of no migration in the Pakistan–Saudi Arabia corridor, although from the obtained data we cannot gauge the extent of this possibility. Strikingly, a considerable proportion of migrants, irrespective of gender, are relatively well-educated. As all the sampled migrants performed low-skilled work at the destination, this finding hints at an important skill mismatch.

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16 See also appendix A for descriptions of the variables.

17 In addition, Filipino migrants are also generally known to have English language proficiency and be trained with an overseas market in mind, so their skills are more transferable abroad (McKenzie, Theoharides, and Yang 2014).
This initial finding of high variation in gender and skill composition suggests not only that the sample is not necessarily representative, but that in the analysis it will be very difficult, if not impossible, to separate the gender effect from the corridor effect and the sector effect, since migrants are very likely to be segregated into sector by gender. Moreover, the conclusions drawn for each corridor would only
apply to migrants in that corridor, such as only male migrants in the Pakistan–Saudi Arabia corridor, rendering such corridor also incomparable with corridors in which information on female migrants is present. Therefore, the analysis that follows needs to be performed separately for each corridor, and interpreted for each corridor separately.

Looking at occupations at destination (figure 7), the majority of sampled migrants abroad were found in three occupations: semi-skilled work in construction, manual labor, and domestic work (we retain the original wording of the survey). A quarter of the sampled migrants performed other low- or semi-skilled types of jobs, including mainly driving or mechanical work. The majority of these jobs were in the construction sector, followed by industry and private households. Moreover, we checked and saw that most of the “manual labor” occupations were performed in the construction sector, while “drivers” were overwhelmingly not in the domestic sector, but predominantly in industry.

**Figure 7. Distribution of Occupations and Sectors Abroad**

Given this situation, and aiming to focus on the most prominent sector engagements, figure 8 shows the distribution of migrants by gender and sector in the seven corridors. Women are predominantly found in domestic work in the Ethiopia–Saudi Arabia and Philippines-Qatar corridors, although not in the Vietnam-Malaysia corridor, where they are all in agriculture or services. Few men are found in domestic work, and those are mainly in the Ethiopia–Saudi Arabia corridor and Qatar. The majority of men across all corridors are in construction. Figure 8 further reinforces the observation that the sample is not representative, and hence policy conclusions from this analysis should be drawn with great caution. As we proceed, we keep these particularities in mind.

**Source:** Authors’ computations based on KNOMAD data.
Lastly, looking at the descriptive statistics on migration duration, we note that the average duration is 26 months, with a median of 24 months and a maximum of 120 months. Across the corridors, the longest average duration is found in the India-Qatar corridor (35 months), and the shortest is in the Pakistan–United Arab Emirates and Vietnam-Malaysia corridors (18 months).

**Figure 8. Distribution of Sampled Migrants by Gender and Sector at Destination**

Source: Authors’ computations based on KNOMAD data.

Note: ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.

### 3.3. Descriptive Evidence of the Costs Incurred Prior to Departure

Migrant workers incur a variety of costs in the migration process. The KNOMAD data can be used to assess the types and extent of various costs incurred in preparation for the migration project. Although other papers focus specifically on such costs (see Abella, Martin, and Yi (2015), based on KNOMAD), we also briefly present them here, and later use them as a benchmark for comparing the extent of the costs associated with poor conditions of work.

**Figure 9. Total Formal Gross Expenditures Incurred Prior to Departure (2014 US$)**

Source: Authors’ computations based on KNOMAD data.

Note: ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.
Once they decide to look for work abroad, migrants spend on average two and a half months organizing their travel, and in some instances up to 30 months from application to departure. Half the individuals in the sample found out about the jobs from relatives or friends, which points to the importance of the social network in learning about migration opportunities. Most applications took place through recruitment or staffing agencies.

In this process, future migrants need to pay various types of costs. The total self-reported costs, converted to comparable U.S. dollars in 2014 price level analogue, constitute on average US$1,643 per migrant worker. The largest such costs are observed in the Pakistan–Saudi Arabia and Pakistan–United Arab Emirates corridors (figure 9). These large costs are mainly driven by visa costs, which represent up to 80 percent of total expenditures. The average reported visa costs are US$3,500 for Saudi Arabia, and US$1,880 for the United Arab Emirates. The lowest costs are incurred for migrants from all three origin countries of the sample going to Qatar, where most of the expenditures take the form of recruitment fees. Over all the corridors, there does not seem to be much difference across gender or sector.

As figure 10 shows, most migrants pay fees to a recruitment broker, for medical exams, insurance, passport, and visa, but also for contract approval by the national authority, as well as inland transportation. On reimbursement of these costs, only 4 percent of migrants in the sample were promised that the agent, employer, or government would reimburse part of these costs. Moreover, 23 percent of the migrants reported having to make some sort of informal payments for smugglers (15 percent), subagents (70 percent), or bribes (15 percent). Those who made these extra payments spent on average US$215, with migrants from Ethiopia to Saudi Arabia having to pay on average an extra of US$583. Overall, such costs also result in large discrepancies across corridors in migration costs prior to departure.

**Figure 10. Percentage of Migrants Who Incurred Various Costs before Departure, by Type of Cost**

![Percentage of Migrants Who Incurred Various Costs before Departure, by Type of Cost](image)

*Source: Authors’ computations based on KNOMAD data.*

4. Descriptive Evidence on the Costs and Benefits Associated with the Conditions of Work Abroad

This section examines, in a descriptive way, migrants’ responses to the questions on the key areas of conditions work: contractual status, working time, wages and remuneration net of various deductions,
occupational safety and health conditions, and access to social security. To the extent the data allow, the section also addresses the issue of fundamental principles and rights at work, such as freedom of association and effective recognition of the right to collective bargaining. Based on the information in the previous section, the descriptive statistics for these issues are presented by corridor, gender, and sector.

4.1 Contractual Status

We begin by looking at the percentage of individuals in the sample who signed their work contract prior to departure. Having a work contract, especially a written one, is a key precondition for effective realization and enforcement of other labor rights. First and foremost, a work contract helps to establish (for labor and other authorities, if necessary) the existence of an employment relationship. It also outlines the agreed conditions of work, including the nature of the tasks to be performed, hours of work, and pay. In international recruitment that involves work performed for an employer who is likely to speak a language different from that of the worker, having a contract signed prior to departure also helps to ensure that the worker understands his or her conditions of work—provided there is no deliberate misinformation on the part of the employer. A work contract that is signed prior to departure also means that the migrant does not need to spend time abroad looking for a job (although he or she may still have to wait for the work to start upon arrival), thus also reducing the costs associated with the job search.

Figure 11. Percentage of Migrants Who Signed a Contract before Departure, by Corridor, Gender, and Sector

Source: Authors’ computations based on KNOMAD data.

Note: ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.

22
As figure 11 shows, it is far from obvious that all migrants sign contracts prior to departure, despite the overwhelming majority of sampled immigrants are recruited through various government or private agencies. Nearly 30 percent of all migrant workers in the sample did not have a signed contract prior to departure. The most problematic is the Ethiopia–Saudi Arabia corridor, in which on average less than a quarter of migrants signed a contract before departure. Interestingly, a higher proportion of contracts were signed among women in this corridor. Except for the India-Qatar corridor, where almost all the surveyed migrants had a contract before departure (possibly reflecting that this corridor had the highest proportion of well-educated migrants), some problems exist everywhere. These disadvantages set the scene for other disadvantages in working conditions. At the same time, they may be explained by (and linked to) the finding that some immigrants had a different propensity to change employers during their stay (for example, when their stay took place in the framework of a *kafala*, or sponsorship, regime), compared with others (figure 12).

### 4.2. Remuneration

As shown in section 2, wages in the destination country constitute the main benefit and key reason for labor migration. Wages precondition whether the migration project will take place, and they precondition the amount of remittances and duration of stay. However, the beneficial potential of wages can only be realized if they are paid regularly, correspond to what has been promised or agreed upon prior to departure, and are not subject to any unexpected ad hoc deductions (hidden costs). These three aspects are examined in figures 13 to 15.

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18 In the Vietnam-Malaysia corridor, although 94 percent of the migrants had signed a contract before departing, 26 percent were working on a different contract, although for the same employer, suggesting that contract substitution was quite common. However, across these groups, no major differences in monthly wages, deductions, or overtime are observed.
Among the migrant workers in the sample, 14.7 percent reported that their wages were not paid on time. Figure 13 shows that the patterns are somewhat similar to those for contractual status: more problems arise in the Ethiopia–Saudi Arabia and Pakistan–United Arab Emirates corridors. Except for male construction workers in the India-Qatar and Vietnam-Malaysia corridors, as well as female workers in the Philippines-Qatar corridor, the worst situation is largely observed for male construction workers—as many as 45 percent were not paid regularly. These migrants are followed by male workers in agriculture and services and female domestic workers. It is important to benchmark these findings appropriately, and contrast the payment delays for migrants with payment delays for the native-born in destination countries or nonmigrants in origin countries, but we do not have such data at hand. But even if migrants face the same wage payment irregularities as the native-born or stay-behind members of their community face, for migrants, the burden of wage arrears may be heavier. Migrants do not have a safety net for support, and payment delays lead to delays in sending remittances.

Source: Authors’ computations based on KNOMAD data.

Note: ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.
To assess whether wages abroad correspond to those promised, we constructed a ratio of answers to the following questions: “How much is the wage you agreed upon?” and “How much do you actually earn on average?” When actual wages perfectly correspond to those that were promised, the ratio between the two is one. Values less than one indicate that the actual wage is higher than the one promised; in other words, revealed gains from this working condition are higher than expected. In contrast, values greater than one indicate a clear revealed disadvantage. In our sample, 23.1 percent of migrants received lower wages compared with those that were promised; 34.6 percent received exactly what they expected; and 42.4 percent received higher wages than promised.

From figure 14, the majority of India-Qatar migrants (who are also the ones with the highest education outcomes, highest rate of contracts signed abroad, and most regularly paid wages) received the promised wage, which is certainly good news. For many Nepal-Qatar workers, the situation is advantageous: a significant fraction of these workers receives wages abroad above those promised. In contrast, other corridors’ distributions are quite flat (figures are available upon request), suggesting that the received wage is similar to a lottery: many immigrants receive more than what they were promised, but many receive less, and few receive the wages that were agreed.

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19 Average gross wages in the sample are slightly higher than promised wages (see Appendix 2).

20 This may reflect a measurement issue, if actual wages are overstated due to the inclusion of overtime pay, the hours worked are greater than what was originally intended.

21 Relatedly, McKenzie, Gibson, and Stillman (2013) find that men underestimate employment probability and expected earnings abroad, while women make more precise estimates in the Tonga–New Zealand corridor. Our evidence is more mixed.
variable, by gender and sector. The figure confirms that the “lottery” works “best” in favor of male construction workers from Nepal to Qatar, and works worst for the same type of workers from Pakistan to the United Arab Emirates.

**Figure 15. Do Actual Wages Correspond to Those Promised before Departure? Evidence by Gender and Occupation**

![Graph showing wage comparison by gender and occupation](image)

*Source: Authors’ computations based on KNOMAD data.*

*Note: Means of the ratio of promised to actual wages. ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.*

### 4.3 Working Hours

The next question of relevance is the number of hours worked per week (figure 16), and the availability of at least one paid rest day per week. The majority of migrants, in all corridors, work a high number of weekly hours, with a mean close to 70 hours per week. This is not simply high in itself, it is also greater than the working hours that are considered normal by international labor standards and the labor laws of the majority of countries. Moreover, as many as 23 percent of all the sampled migrants never had at least one rest day in the week. Female domestic workers work substantially more hours than other workers, and their working hours are even more disproportionately beyond the range of working hours considered normal by international labor standards. Figure 16 presents averages, but does not show how the hours are distributed. For example, the density function for the Ethiopia–Saudi Arabia corridor shows disparities in working hours between men and women (figure 17). Some women report very high working hours (up to 168, which is the total number of hours in a week). Although it is of course impossible that all 168 hours are worked, most of such reporting is made by live-in domestic workers, who are expected to be available at any point in time. We thus do not consider such observations as outliers in the descriptive statistics (but we do adjust this variable for computation of excessive hours of work in the next section).
In principle, the average gross wages that immigrants receive should include overtime payments. However, it is not clear to what extent overtime payments are effectively disbursed. And even if overtime payments are included, additional hidden costs include work-life balance, fatigue, stress, and other health-related issues due to long working hours. These costs are spread unevenly across migrant groups, as differences among men and women in working hours are striking.

Figure 16. Means of Working Hours, by Corridor, Gender, and Sector

Source: Authors’ computations based on KNOMAD data.

Note: ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.

4.4 Occupational Safety and Health

This brings us to the question of occupational safety and health issues, as well as social security coverage in case of illness. Approximately 30 percent of all the migrants in the sample reported that they had been sick or injured during their stay abroad. All these migrants also reported the nature of their sickness or injury in an open-ended question. We analyzed each of these cases and categorized them in four broad groups: work-related traumatic injuries, stress and fatigue, poor health conditions due to the change of climate zone, and other issues (figure 18). This classification is somewhat ad hoc and driven by the types of survey responses, but is useful for the purposes of the current paper. The classification is consistent with the official Classification according to type of injury, provided by Resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the Sixteenth International Conference of Labour Statisticians in 1998 in distinguishing work-related traumatic injuries from other injuries, notably non-traumatic effects of heat and light and incidences of hypothermia linked to exposure to a different climate. More recently, there has also been more emphasis on the recognition of work-related stress as one of the leading factors of lost working days (ILO 2016b), thus justifying our separate treatment of this category of health problems. Mental and behavioral disorders, including post-traumatic stress disorders, have also been recently included in the ILO’s List of Occupational Diseases (2010), the annex to the Recommendation on the List of Occupational Diseases, 2002 (No. 194).

22 This classification is somewhat ad hoc and driven by the types of survey responses, but is useful for the purposes of the current paper. The classification is consistent with the official Classification according to type of injury, provided by Resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the Sixteenth International Conference of Labour Statisticians in 1998 in distinguishing work-related traumatic injuries from other injuries, notably non-traumatic effects of heat and light and incidences of hypothermia linked to exposure to a different climate. More recently, there has also been more emphasis on the recognition of work-related stress as one of the leading factors of lost working days (ILO 2016b), thus justifying our separate treatment of this category of health problems. Mental and behavioral disorders, including post-traumatic stress disorders, have also been recently included in the ILO’s List of Occupational Diseases (2010), the annex to the Recommendation on the List of Occupational Diseases, 2002 (No. 194).
The group of work-related traumatic injuries includes self-reported problems, such as accidents, leg broken/fractured during construction (reported at least seven times), fall from roof during construction (reported at least six times), head fracture, hand broken/damaged/cut because of machine (reported at least 14 times in various versions), finger damaged/cut at work (reported at least eight times), metal material fell on eyes, injury by machine, injury by electrical equipment, burns (reported at least three times), fever due to paint smells, and many others. Clearly, these reported damages are very serious, and they have not only prevented individuals from working, but some of them must have resulted in longer-term loss of working or productive capacity. Unfortunately, the survey does not report the number of days during which the person was incapacitated following such injuries, but we can glean this information from some answers, such as fell from roof during construction and was unable to work for 25 days. Moreover, two individuals reported “physical abuse by employer” and “she tortured me and I have scars all over my body and there is also a high workload in the house, which make me prone to heart case.” These abuses must not only result in the loss of contemporaneous productivity, but leave long-term, life-long scars from physical and emotional strain.

Figure 17. Distribution of Working Hours, Ethiopia–Saudi Arabia Corridor, Male vs. Female

Source: Authors’ computations based on KNOMAD data.

Work-related traumatic injuries represent about 15 percent of all reported problems; in other words, about 6 percent of the migrants in our sample reported having such problems. This number is huge compared with the work-related traumatic injuries of the native-born. For example, according to the national statistics of Malaysia, one of the destination countries, the total rate of nonfatal work-related injuries was 932 to 1,023 per 100,000 workers (about 1 percent) in 1999–2002. This finding confirms the notion that migrant workers are more likely to be employed in sectors with higher risks of occupational safety and health problems, but also, probably, within such sectors, in more hazardous activities.

The second largest category of health problems is related to non-traumatic stress and fatigue. These issues were reported by 6.2 percent of those who reported any health issues during their stay abroad. Reported stress and fatigue are particularly high in the Ethiopia–Saudi Arabia corridor and among women, exacerbating the finding on extremely long hours of work reported in figures 16 and 17. Cases in this category include self-reported tiredness as working without rest (reported at least nine times), workload, fever tiredness, and stress (reported at least eight times). Most of these cases can also be classified as work related, and the only reason why they are flagged separately is to distinguish them from work-related physical injuries.

*Figure 18. Causes of Injury or Sickness, by Corridor*

<table>
<thead>
<tr>
<th>ETH - SAU</th>
<th>IND - QAT</th>
<th>NPL - QAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Related Injury</td>
<td>Stress or Fatigue</td>
<td>Climate Change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAK - SAU</th>
<th>PAK - UAE</th>
<th>PHL - QAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Related Injury</td>
<td>Stress or Fatigue</td>
<td>Climate Change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VNM - MLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Related Injury</td>
</tr>
</tbody>
</table>

*Source:* Authors’ computations based on KNOMAD data.

*Note:* ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.

Problems caused by the change of climate zone are among the most often reported. These problems include sick/fever due to hot weather (reported nearly 30 times), fever due to climate change (reported at least nine times), overheat, and not familiar with such type of climate condition. About 10.5 percent of those who reported any health issues during their stay abroad declared suffering from climate-related health problems. These issues can also be seen as somewhat work-related. Obviously,
they would not have been experienced had migration not taken place, or had it taken place in good conditions, such as working indoors or outside extreme heat hours.

The category “other” contains all other cases, including cold, common sickness, fever, and headaches, but also dengue, allergies, food poisoning, and gastric problems due to poor food or lack of food (reported at least 15 times). There was one case of pregnancy.

Of all the migrants who were injured or sick, about two in five did not receive any payment for the days when they were not able to work because of sickness. The differences are again stark across destinations and origins, showing that the highest proportion of nonremunerated migrants was observed in the Pakistan–Saudi Arabia and Pakistan–United Arab Emirates corridors (figure 19). More generally, male construction workers seem to be the most penalized. These are the workers who, arguably, also suffered some of the longest pauses in their work, as the majority of their health problems were due to incapacitating physical injuries.

**Figure 19. Percentage of Migrants Who Were Not Paid for the Days When They Were Not Able to Work Because of Injury or Illness**

![Figure 19. Percentage of Migrants Who Were Not Paid for the Days When They Were Not Able to Work Because of Injury or Illness](image)

Source: Authors’ computations based on KNOMAD data.

Note: The graph was constructed after dropping categories with fewer than 10 migrants. ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.

**4.5. Fundamental Principles and Rights at Work**

Finally, a question of utmost importance is the extent to which immigrants face challenges in effective implementation and exercise of fundamental principles and rights at work. The survey data can be used to shed light on the exercise of freedom of association and effective recognition of the right to collective bargaining. Figure 20 shows the percentage of immigrants who reported that they were allowed, or not, to join a union or workers’ association. What is most striking about this figure is not only the very low number of individuals across all corridors who were allowed to join a union, but the nonresponse rate to this question. It is indeed well-known that workers in vulnerable situations, but especially immigrants and workers in temporary jobs, may be afraid not only to join a union, but even

30
to evoke the question of unions. And many of those workers may not be aware of what is meant by unions and what they can offer, which means the workers most probably will not refer to unions for help.

Importantly, in the destination countries in the sample—Qatar, Saudi Arabia, and the United Arab Emirates—trade unions are banned by law, and none of these countries ratified the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) or the Right to Organise and Collective Bargaining Convention, 1949 (No. 98), which may explain the high level of nonresponse to this question. In Malaysia, migrants can join trade unions but not take up official positions, and they cannot form their own unions. This may also impact the bargaining power of migrants and their ability to negotiate their conditions of work. A related question—“Did you join a trade union or a worker association during your stay?—received a nonresponse rate of nearly 99 percent.

**Figure 20. Percentage of Migrants Who Were Allowed to Join a Union or Workers’ Association**

Moreover, 57 percent of the migrants reported that they had been deprived of their rights. Figure 21 shows percentages of migrants, by type of right of which they were deprived. The majority of the migrants—over 70 percent among those reporting any problem—experienced problems with their travel documents (such as their documents being withheld by their employer). Indeed, passport or work permit confiscation is a common practice to tie a worker to his employer and make sure the migrant will comply with the employer’s demands. Over half the migrants experienced problems with the right to speech. Almost half could not change employers and at the same time were not offered sufficient job security. One in two migrants did not receive the same wages as the native-born, pointing to the discriminatory attitudes of their employers. Nearly 50 percent reported having been deprived of the right to unionization. Forty percent of the migrants did not have social security coverage, and 15 percent were prevented from the possibility of sending remittances. A small percentage reported problems in practicing their religion. Importantly, many of these violations go far beyond the world of work, and touch upon the human rights issues of freedom and human dignity.
The violations also exacerbate the risks in all other working conditions reported, preventing migrant workers from the full realization of their rights at work.

**Figure 21. Percentage of Migrants Who Were Deprived of Their Rights**

![Percentage of Migrants Who Were Deprived of Their Rights](image)

*Source: Authors’ computations based on KNOMAD data.*

### 5. Aggregate Assessment of Losses Related to Conditions of Work Abroad

The descriptive evidence in the previous section suggests that the costs of migration associated with poor conditions of work may be nonnegligible. But, given the diversity of costs, how can we summarize these costs, to have a global appreciation of their magnitude?

In this section, we attempt to create an aggregate measure of the costs, or losses, to labor migration associated with the conditions of work in a destination country. This measure is inevitably imperfect, as it is bound by the available survey questions and our subjective assignment of monetary values to some of the nonmonetary costs. However, to the extent that these imperfections can be accepted, this measure is useful for comparing the extent of these costs with other costs, notably those related to the migrant’s organizing the migration project. As the labor conditions costs are revealed only at the destination, their global assessment also represents an attempt to shed light on the magnitude of the hidden, unpredictable aspect of these costs.

To construct the aggregate measure, we operate with the three most “quantifiable” (quantification that arguably can be viewed as the least subjective) aspects of the conditions of work at the destination: discrepancy in promised and actual wages and unexpected salary deductions; excessive working hours; and occupational safety and health issues, including unpaid lost days due to injury or sickness. For each of these aspects, we assess the losses due to deficiencies in these working conditions, which can further be converted into total monetary loss during the migration project. The construction of the aggregate measure consists of three steps (figure 22).
5.1 Losses Due to Wage Shortfall

First, we constructed a measure of losses due to discrepancy between promised and actual wages, as a simple difference between the two. This measure is multiplied by the duration of stay, in months, to obtain total wage loss due to wage shortfall. This computation assumes that any legal deductions, such as those for social security, are expected, and therefore they cancel out when taking the difference between promised and actual gross wages. In contrast, in cases when the respondent expects that costs due to transport and recruitment are covered by the employer, but once arrived at destination discovers that these costs are to be deducted from the gross salary, we include such costs in the computation of the total wage loss due to wage shortfall. The resulting loss measure is positive for 77.3 percent of the respondents. Therefore, only 23.7 percent of the migrants reported a promised monthly wage equal to or greater than the actual monthly wage, and without any further unexpected deductions. For these individuals, we assign a zero value for this variable of loss, considering that they did not experience any.

5.2 Losses Due to Excessive Hours

Second, we assess the losses due to excessive hours of work, which a vast majority of the migrants reported performing. How can these losses be computed, given that migrants received payment for
the number of hours that they worked? According to international labor standards, the maximum recommended workweek should not normally exceed 48 hours, and should contain at least one day of weekly rest.\textsuperscript{24} In some exceptional cases, it may be allowed to work longer hours, although weekly working time should not exceed 56 hours. Measures should be taken to avoid hours in excess of the 48-hour limit; all hours worked in excess of the normal hours should also be deemed to be overtime, with the rate of overtime premium being no lower than 25 percent.\textsuperscript{25}

Guided by these instruments, most of the countries set up the maximum normal or standard hours worked, as well as the maximum authorized total working time, including overtime (ILO 2014b). The labor laws of many countries also prescribe the minimum overtime premium, which in some instances is higher than the one set by the international labor standards. The destination countries in our sample all have statutory provisions regulating standard hours, total hours including overtime, as well as the minimum overtime premium (table 1), although some of them may be modified by collective agreements.

Using the international labor standards and national laws of each destination country as a benchmark, we compute, for each migrant, the losses associated with excessive hours as follows. First, for all migrants, we compute the overtime, defined as the number of hours per week that they report minus 48 (statutory standard hours). Migrant workers who do not have overtime hours are considered to be in a “normal” situation. For them, neither loss nor gain is recorded (in other words, the loss variable is zero).

\textbf{Table 1. Statutory Regulations on Overtime in the Surveyed Destination Countries}

<table>
<thead>
<tr>
<th>Destination country</th>
<th>Statutory standard hours</th>
<th>Statutory overtime</th>
<th>Statutory minimum overtime premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>48 h per week</td>
<td>12 h per week</td>
<td>50%</td>
</tr>
<tr>
<td>Qatar</td>
<td>48 h per week</td>
<td>12 h per week</td>
<td>25%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>48 h per week</td>
<td>12 h per week</td>
<td>25%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>48 h per week</td>
<td>64 h per month; 4 h per day</td>
<td>50%</td>
</tr>
</tbody>
</table>


\textsuperscript{24} Hours of Work (Industry) Convention, 1919 (No. 1) Art. 2 provides that: “The working hours of persons employed in any public or private industrial undertaking or in any branch thereof [...] shall not exceed eight in the day and forty-eight in the week.” Two destination countries, Saudi Arabia and United Arab Emirates, ratified this Convention, while Qatar and Malaysia did not. Hours of Work (Commerce and Offices) Convention, 1930 (No. 30) sets out similar provisions. In addition, there are also the Forty-Hour Week Convention, 1935 (No. 47), and Reduction of Hours of Work Recommendation, 1962 (No. 116). The Weekly Rest (Industry) Convention, 1921 (No. 14) also sets that: “The whole of the staff employed in any industrial undertaking, public or private, or in any branch thereof shall [...] enjoy in every period of seven days a period of rest comprising at least twenty-four consecutive hours” (Art. 2). This convention was ratified by Saudi Arabia and Malaysia.

\textsuperscript{25} Hours of Work (Industry) Convention, 1919 (No. 1); Reduction of Hours of Work Recommendation, 1962 (No. 116).
Second, migrants who report overtime are split into two groups. The first group is migrants who reported overtime hours within the statutory allowed limits of overtime. For example, a migrant who reports 50 hours of work will have 2 hours of overtime per week, which is considered as falling into an acceptable situation. Such migrants do receive payment for these extra hours worked; however, there are strong reasons to believe that they do not receive an overtime premium, due to their low bargaining power and discrimination. Thus, we assume that, for this group of migrants, the loss due to excessive hours worked is equal to the number of overtime hours times the overtime premium that is very likely not received. We compute this loss using the destination country–specific information reported in table 1.

The second group of migrants includes those who not only reported overtime, but for whom this overtime exceeded the statutory limit. For example, this would be a migrant with 70 hours of work. We consider that the “loss” due to excessive hours consists of two parts: the loss of the overtime premium for overtime that is within the time limits (up to 12 hours a week for a country like Qatar, for example), and the loss of a full hourly wage for overtime that is above the time limits. In other words, we consider that any hours in excess of nationally and internationally proscribed total hours represent a full cost associated with poor conditions of work, because, even if remunerated, it inevitably poses challenges to individuals’ health in terms of fatigue, stress, and sometimes lack of sleep, which may increase the risk of work-related injuries and endanger an appropriate work-life balance. Some of these costs can reveal themselves at a later stage in life in poor health outcomes and even shorter years of life.

Summing up, the loss in overtime hours per week is computed according to equation 1:

\[
\text{Loss, in terms of overtime hours per week} = \begin{cases} 
0, & \text{if } H \leq 48 \\
(H - 48) \times p, & \text{if } L \geq H > 48 \\
(L - 48) \times p + (H - L), & \text{if } H > L 
\end{cases} \tag{1}
\]

where

\[ H = \text{reported individual weekly hours of work}; \]
\[ L \in \{60; 64\} = \text{statutory country-specific limit on total work time, including overtime (obtained by adding columns 2 and 3 in table 1)}; \]

\[ 26 \] For example, Lee and Yoo (2008) report that workers in temporary contracts in general are usually excluded from regular bonuses or overtime payment. Evidence from the Indian garment sector shows that while 37.8 percent of directly engaged workers received overtime pay, only 5.3 percent of workers engaged by contractors did (Srivastava 2016). As all migrants in the sample are on temporary contracts, and some are employed through contractors, it is not unreasonable to assume that they are unlikely to receive overtime premiums. Evidence from other countries, such as Moldova (Dayioglu, forthcoming), also shows that migrants very rarely receive overtime pay.

\[ 27 \] For Malaysia, for comparability, we approximate that the weekly limit for overtime is 16 hours; in other words, the total authorized working time is 64 hours per week.
\( p \in \{0.25; 0.5\} = \text{statutory country-specific premium rate for overtime (column 4 in table 1).} \)

Some migrants, especially female live-in domestic workers, report that they work very long hours, sometimes up to 168 hours a week. Possibly, these workers report such high hours because they are expected to be available for work at any point in time, although, of course, it is not possible that they work all these hours. So as not to count at least the hours of sleep as “losses” for any worker reporting more than 119 hours of work per week (slightly over 100 observations), we converted the reported number of hours to 119, where 119 is obtained as 168 total hours in a week minus at least 7 hours of sleep per day in each of the seven days of the week.

We further transform the obtained loss in terms of overtime hours per week into loss in terms of overtime hours per month (by multiplying by 4), and then convert this into the number of months “lost” due to overtime hours, over the full period of migration (by dividing the overtime hours per month by 48 hours per week and by four weeks per month, and multiplying by the number of months that the respondent spent at the destination).\(^\text{28}\) As a last step, the number of months “lost” due to overtime hours is multiplied by the promised monthly wage, to obtain the total wage loss due to hours problems. The resulting loss measure is positive for 85.6 percent of the respondents.

### 5.3 Losses Due to Occupational Safety and Health Issues Not Properly Covered

As a third step, for those migrants who were sick or injured but not paid for the days when they were not able to work, we compute the loss of the months of work due to occupational safety and health and social security issues. Unfortunately, the survey did not include a question about the actual number of days not worked due to injury or sickness. Thus, we assigned a number of days lost to each individual who reported health- and payment-related problems. As it was not possible to assign a specific number of days lost to each individual, we assigned the same number of days lost to all individuals in each category of health-related problems. We broadly categorized all reported injuries and sicknesses into work-related traumatic injuries, stress and fatigue, poor health conditions due to the change of climate zone, and other issues.

To minimize the subjectivity in assigning such a number, we used examples from national statistics on such days lost. One of such example is from Malaysia, a destination country in our sample, for which the official statistics show that, on average, nonfatal work-related injuries result in about 21 days of work lost, in absolute terms.\(^\text{29}\) This is consistent with the sole example from the KNOMAD survey, where a migrant reported 25 days lost, as shown in the previous section. Given both numbers, and that migrants are likely to work in more hazardous conditions than the native-born, we assigned one

\(^{28}\) Stated differently, if we consider that in one month there are 196 hours (48 hours per week times 4 weeks), then the excess hours per week represent a fraction \( x \) of a month; where \( x \) equals excess number of hours divided by 196. Over the whole migration period, the loss, in months, is thus \( x \) multiplied by the number of months spent abroad.

\(^{29}\) According to the data provided by the Social Security Organisation, Labour Department and Ministry of Human Resources, and obtained from the ILO LABORTSA database (available at: http://laborsta.ilo.org), in 2002, there were 80,952 reported nonfatal injuries; they resulted in 1,706,766 total days lost (it is not clear whether these are working or calendar days). Dividing the latter number by the former, we obtain 21.08 days lost.
calendar month of losses, or one month of wages, to individuals in the work-related traumatic injuries category who were not paid for the days of work lost. Our sample is of course censored in the sense that we do not observe migrant workers who experienced fatal injuries.  

To give an idea of magnitude, in Malaysia in 2002, about 1 percent of all work-related injuries resulted in the worker’s death, according to the country’s official statistics. Anecdotal evidence suggests that fatal injuries among migrant workers may be quite high. Even for domestic workers, who are sometimes seen as being in a “cozy and safe” occupation, fatalities are likely to be high. Often, these deaths are unreported because they are caused by violence within the household (IOM, 2013), or because work is performed outside the scope of the agreed responsibilities, such as washing the windows of an employer’s home and falling from a high height (The New York Times 2016). Migrant workers who experienced permanent incapacity as a result of an injury are also likely not to be in the sample. Moreover, we are not quantifying any long-term productivity losses in case of physical injuries, such as permanently damaged body parts, for individuals who continue working. Thus, one month represents a lower bound of losses.  

National data on possible days lost in other categories of health problems are poor, and often limited to developed countries. For example, for “stress and fatigue,” in the United Kingdom, the country with the lowest level of stress reported by workers (Eurofound 2006; EU-OSHA 2009), between 1995 and 2005, survey data show that approximately 31 working days were lost per year per affected case. Thus, stress is one of the largest contributors to the total annual days lost because of work-related health problems (Eurofound 2006; EU-OSHA 2009). Stress and fatigue often result from excessive hours of work, sleep deprivation, and work-related pressures. Even if the majority of migrant workers do not miss any work days because of stress-related factors, stress and fatigue may have detrimental longer-term consequences for their health, causing longer-term workday losses.  

Some stress-related diseases may become chronic, or lead to more complicated situations of prolonged mental disorders, depression, burn-out, increased risk of tobacco and alcohol consumption, or cardiovascular diseases, and even lead to suicide (ILO 2016b). Thus, to those workers who reported having encountered such issues as major health problems, but were not paid for the days lost, we also assign one calendar month of losses, or one month of wages lost. Finally, in the absence of clear statistics, we assume that “climate related” and all “other” health issues result in half a month of losses over the full period of the migration project. This can also be viewed as a lower bound of losses, because in the absence of information on how many times such problems were encountered, we can only assume that it was a one-time event. Moreover, many workers who experience stress and fatigue are likely to have been working nevertheless, which means that they reported being paid while experiencing health problems. Consequently, we do not consider that they encountered any losses, and thus do not include any possible detrimental longer-term health effects in this quantification.  

The resulting variable is total wage loss due to health and social security problems. For those migrants who did not report unremunerated health problems, a zero value is assigned. In other words, as with hours, we do not consider that absence of injuries or injuries that resulted in lost days of work for which the worker was actually paid represent a “gain.” Rather, they represent a normal situation. The resulting loss measure is positive for 12.7 percent of the respondents.
5.4 Aggregate Losses Due to Deficiencies in Conditions of Work Abroad

Once the three steps are accomplished, we simply add the three constructed measures, total wage loss due to wage shortfall, total wage loss due to hours problems, and total wage loss due to health and social security problems, to obtain a summary measure of aggregate losses due to deficiencies in conditions of work abroad. This constructed measure of aggregate losses due to deficiencies in conditions of work abroad is positive for 89.3 percent of the migrants in the sample. Even for those who reported no losses due to misinformation in terms of actual salary, 86 percent of the migrants had positive losses due to excessive hours or unremunerated injuries and sickness, underscoring the importance of considering these issues in addition to pure losses due to wages.

It is instructive to assess these aggregate losses relative to the following: (i) total promised earnings (monthly promised wage multiplied by the duration of stay), (ii) total actual earnings (monthly actual wage times duration of stay), and (iii) total migration costs incurred before departure (described in section 3.3). Our computations show that, on average, after dropping outliers, aggregate losses due to deficiencies in conditions of work abroad represent 29.7 percent of total promised wages, 27.3 percent of total actual wages, and 210 percent of recruitment and travel costs. By component, the losses due to wage shortfall account for about 7 percent of total promised earnings; the losses due to excessive hours problems represent 23.8 percent of total promised wages (36.7 percent in Saudi Arabia, 17.7 percent in Qatar, 25 percent in the United Arab Emirates, and 23.5 percent in Malaysia); and the losses due to health and social security problems represent about 0.6 percent of total promised earnings. The latter loss is the smallest in size, possibly because of quite restricted data and assumptions, which meant that that we could approximate only the lower bound of these costs.

Although some of our computations involve certain subjective judgment, we can also be relatively certain that the obtained numbers are not unreasonable. They include only what can be more or less quantified, and exclude other important working conditions issues, such as respect for the fundamental principles and rights at work, or existence of a contract (and hence of contractual obligations, including, in some cases, indemnities in case of premature contract termination at the initiative of the employer). Moreover, the computations are done as if the migrants were normal workers, although, in fact, they may be assigned to work in more hazardous tasks and experience harsher conditions compared with a normal worker. Further, the costs are estimated mainly for legal migrants. Thus, for many other migrants, it is quite likely that these costs are even higher.

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30 A large ratio means that the loss is large; or the wage, duration of stay, or other costs are low; or both these cases. For example, even if the loss is low in absolute terms, it might be large relative to a low wage or a short duration of stay.

31 We drop loss/wage ratios that are greater than one, and loss/cost ratios above the 90th percentile, or about 300 observations. These include workers with a very high number of hours (thus actually excluding from the computation workers with 119 hours or more, but also some workers with somewhat fewer hours) and workers who report very low wages and very low transportation costs.

32 As an example, consider a migrant worker who works on average 71 hours per week for a wage of US$428 per month for 41 months, and pays, on average, US$1,643 in costs prior to departure. If he or she works in Qatar, where the premium rate for overtime is 0.25, then the computed losses because of prohibitively excessive hours amount to (60-48)*0.25 + (71-60) = 14 hours per week and, therefore, 14 x 4 = 56 hours per month. This means that 56/192*41= 12 months of salary are considered as a loss, which translates into (12*428)/(41*428)=29% of the total wage and 12*428/1643=313% of the costs incurred prior to departure.
Figures 23 and 24 provide descriptive evidence of the aggregate losses by corridor, gender, and occupation. As the results are similar for the aggregate loss relative to the promised wage and the actual wage, we present the results only for the aggregate loss relative to the promised wage and the total migration costs. Figure 23 shows that the total aggregate loss relative to the total promised wage is the largest in the Ethiopia–Saudi Arabia corridor (the mean is 0.551, in contrast to the sample mean of 0.297), Pakistan–United Arab Emirates corridor, and Pakistan–Saudi Arabia corridor. The smallest relative loss is found in the India-Qatar corridor (the mean is 0.062). No specific pattern by gender can be inferred, given that women are not well represented in all the corridors. However, female and male domestic workers from Ethiopia to Saudi Arabia incur quite large relative ratios in comparison with other migrants within this corridor, mainly due to excessively prohibitive hours. In terms of sectors, the largest relative losses are incurred in agriculture and services, as well as in domestic work, although workers in industry may encounter substantial losses too, compared with construction workers. Overall, among the four destination countries, Qatar seems to offer the least poor working conditions in these relative losses, except for domestic workers; Saudi Arabia and the United Arab Emirates seem to offer the worst conditions.

In addition, figure 24 shows the total loss relative to migration costs prior to arrival in the country of destination. The total aggregate loss relative to total recruitment and travel costs has a mean of 2.07 and a median of 1.282, after dropping the outliers (values greater than the 90th percentile). Again, the largest loss ratio is for the Ethiopia–Saudi Arabia corridor (5.19), and the smallest is for the India-Qatar corridor (1.17). Across sectors, the largest losses are incurred by domestic workers, especially in Saudi Arabia and Qatar, with losses due to conditions of work rising to 600 percent for female migrants from Ethiopia to Saudi Arabia. This high percentage is because for this corridor, gender, and sector, migrants seem to incur quite low migration costs prior to arrival.

*Figure 23. Total Aggregate Loss Due to Conditions of Work Relative to Total Promised Wage*

![Figure 23. Total Aggregate Loss Due to Conditions of Work Relative to Total Promised Wage](image)

*Source:* Authors’ computations based on KNOMAD data.

*Note:* ETH = Ethiopia; IND = India; MLY = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates; VNM = Vietnam.
Determinants of Costs Related to Conditions of Work Abroad: Hypothesis Testing

Drawing on the conceptual part, the descriptive statistics section confirmed the pertinence of hypothesis 2. In this section, we formally test the three remaining hypotheses of this paper. Due to the limits imposed by the KNOMAD sample (conducted among return migrants in low-skilled occupations, and not well represented by gender and occupation in all corridors), most of the results presented in this section cannot be interpreted in a causal way. Nevertheless, the results help in understanding whether the hypotheses are pertinent and gauging the importance of conditional correlations between variables.

Hypothesis 1 is that costs associated with conditions of work should vary with individual characteristics, such as age, gender, occupations, skills at home, ability to speak the language of the destination country, as well as the nature of the visas. This hypothesis was already largely confirmed by the descriptive evidence in section 3. To test it formally, we adopt a simple specification:

\[
Costs_{ijk} = \alpha_{ijk} + \beta X_i + \mu_{jk} + \varepsilon_{ijk}
\]  

where \(Costs_{ijk}\) represents costs to migration associated with poor conditions of work of an individual \(i\) in a migration corridor \(jk\). In the regressions, it is measured by one of the following variables: no contract before departure, ratio of promised to actual wage, no regular pay, logarithm of weekly hours worked, no rest day, being injured or sick (and either paid or not during the sickness period), being
unable to join a union (equal to one if the answer is no or missing; zero otherwise), and being deprived of individual rights (equal to one if the individual mentioned at least one right of which he or she is deprived; zero otherwise). In addition, we use the two aggregate measures of costs that were constructed in the previous section—*aggregate losses due to deficiencies in conditions of work abroad*, as a fraction of total promised earnings, and as a fraction of other costs acquired during migration—as alternative dependent variables.\(^{33}\)

These variables are regressed on a set of individual characteristics \(X_i\), including gender (being a female, with male being the comparison group), age, being married (versus all other statuses), skill (being in a low-skill group, with high-skill and medium-skill groups being the omitted categories), sector of work at destination (domestic work and construction, with all other occupations being the comparison group), number of people to support at home, whether the individual learned the language prior to migration, and the duration of stay, in months. Since the duration variable enters the denominator of the aggregate cost variables, we perform regressions with and without the duration variable for the aggregate cost-dependent variables (the omission of the duration variable does not affect the other results). Migration-related documents are captured by three dichotomous variables: whether a migrant had to obtain any official exit approval before departure, whether he or she underwent any pre-departure briefing, and whether he or she currently has a visa for this country.\(^{34}\) All the regressions control for the migration corridor fixed effects (\(\mu_{jk}\)).\(^{35}\)

Table 2 summarizes the results of ordinary least squares (OLS) estimations. Despite the small sample, many of the descriptive results are confirmed through these regressions, and are quite consistent. Notably, the results suggest that women have a lower probability than men to have no contract prior to departure, and a lower probability of being injured and not paid for the lost days of work. In contrast, women work substantially longer hours than men, even conditioned on being in domestic work. For women, the aggregate losses due to poor conditions of work, expressed as a fraction of other costs, are substantially higher than for those of men, although no differences are found across genders if losses are expressed as a fraction of promised wages.

Elder individuals tend to have better outcomes in hours and aggregate losses (in line with the findings in ILO (2016a)), supporting the idea that older individuals have greater experience and may be more at ease in negotiating certain work conditions. In contrast, lower skill aggravates the situation with respect to contractual status, hours worked, exercise of rights, and aggregate losses incurred with respect to promised wages. The number of people to support back home also puts strain on what kind of job is accepted, as it is positively correlated with irregular pay, higher working hours, and inability

\(^{33}\) We also used the measure of aggregate costs associated with poor conditions of work as a fraction of actual wages, and obtained a similar result to the regressions where costs are expressed as a fraction of promised wages.

\(^{34}\) We also explored the question of whether the person has a working visa, rather than any visa, for overall similar results. Both variables are highly correlated. Including both in the regressions renders one of them insignificant throughout, most probably because of the multicollinearity issue. We thus focus only on the first variable.

\(^{35}\) Because some of the variables (such as gender) do not vary in all corridors, the coefficients on them should be interpreted with caution. We also performed all regressions without controls for the corridors. As expected, we found several more significant or stronger results. The vast majority of findings are consistent in the direction of the signs across the regressions with and without these controls. We thus prefer reporting the results that contain controls for the corridors; the results without these controls are available on request.
to exercise own rights. Workers in construction are disadvantaged with respect to contracts, regular pay, and being paid in case of injury or illness, although they have a higher probability than others to get a rest day. In contrast, domestic workers, while having a slightly higher probability to depart with a contract, are severely penalized in hours of work, rest day, and aggregate losses. Consistent with the assimilation literature, longer duration abroad attenuates negative outcomes. The language variable is the only one that does not have the expected effect, but it is also among those that show the lowest variation within the migration corridors, and hence it is difficult to interpret.\textsuperscript{36}

As expected, papers and procedures before departure are found to have a strong association with the conditions of work. Notably, having sought exit approval before departure is negatively correlated with the probability of having a rest day and regular pay, and positively correlated with aggregate losses. These findings support the notion that individuals who experience more constraints at departure may have lower bargaining power to command better conditions of work, and that more information about labor rights is beneficial (Koser 2013). At the same time, having a pre-departure briefing seems to be very beneficial (although we do not know much about selection into such programs), as it attenuates the losses and improves the outcomes across several of the considered dimensions. Having a visa helps to ensure a departure with a contract, although having a visa is positively correlated with longer hours, possibly because visas are expensive and require higher effort to pay them off.

Finally, the corridor-specific effects are significant in all specifications, and notably confirm that the Ethiopia–Saudi Arabia, Pakistan–Saudi Arabia, and Pakistan–United Arab Emirates corridors indeed feature some of the largest problems on nearly every dimension compared with the Vietnam-Malaysia corridor, which is the omitted one.

As a next step, we test the pertinence of the two other hypotheses, which suggest that higher costs brought about by the conditions of work may negatively affect the amount of remittances and the duration of the stay abroad. For this, we estimate the following regression equations:

\begin{equation}
\text{Remittances}_{ijk} = \alpha_{ijk} + \beta_1 \text{Costs}_{ijk} + \beta_2 X_i + \mu_{jk} + \epsilon_{ijk} \tag{3}
\end{equation}

\begin{equation}
\text{Duration}_{ijk} = \alpha_{ijk} + \beta_1 \text{Costs}_{ijk} + \beta_2 X_i + \mu_{jk} + \epsilon_{ijk} \tag{4}
\end{equation}

where Remittances\textsubscript{ijk} measures remittances (in absolute terms, converted to U.S. dollars, and relative to actual wage), and Duration\textsubscript{ijk} is the observed duration of migration (measured with some caveats, as previously discussed). These variables are regressed on the costs associated with the conditions of work, controlling for the same set of individual characteristics \(X_i\) and migration corridors fixed effects \(\mu_{jk}\).

\textsuperscript{36} We also experimented with including several other variables. One of them was whether this is the first time that the migrant came to work in this country. The idea behind it was that repeat migrants may have better information and better choice of employers. The first stay is positively associated with having no contract and no union membership, albeit at 10 percent significance.
The estimation results are presented in table 3. In columns 1 to 3, each area of working conditions is included in the regression separately.\(^{37}\) The results of these estimations confirm that poor conditions of work are strongly and significantly negatively correlated with the amount of remittances, in absolute and relative terms, as well as the duration of migration. These findings suggest that migrants may prefer to work back home, or re-migrate to another country, rather than continue staying and suffering from the deficiencies in the conditions of work.

More specifically, we find that the absence of a contract prior to departure is associated with less remittances—in absolute or relative terms—although not with the duration of the migration project. The higher is the discrepancy between the promised and actual wages, the lower is the absolute amount of remittances, but also the duration of stay in the current destination. Similarly, delays in pay are negatively correlated with remittances and duration. Although hours of work per se do not seem to play a role, it is the absence of a rest day that precipitates departure, as it may be associated with more fatigue or faster accumulation of the desired amount of earnings (although the descriptive evidence privileges the first scenario). Interestingly, injured individuals, who were paid during their injury, tend to prolong their stay in comparison with those who were not injured, although those who were injured also remit less. Individuals facing rights deprivation remit less and stay for shorter periods of time.

Other variables, such as pre-departure briefing, can have a beneficial effect on the absolute and relative amount of remittances, although not on duration of stay, suggesting that a well-informed person might have more correctly planned her stay from the onset of migration. Somewhat counterintuitively, having a visa is associated with less remittances, but longer duration. However, we do not have information on accompanying family members and exact visa duration, which could have helped us to understand the effect. Lastly, other individual-level variables go mostly in the expected direction. Notably, women are found to remit a larger fraction of their earnings compared with men (consistent with findings reported by UNFPA (2006), UNDP (2009), and Afsar (2011)), and stay longer, as do migrants with more people to support back home. Corridor controls point to the same systematic problems reported earlier.

In table 3, columns 4 to 6, the key independent variable of interest is the aggregate measure of loss due to poor conditions of work, which is constructed in section 5. As it is used to determine the amount of remittances, and migration duration, in this table, we work with the loss as a fraction of earnings. In these columns, we drop the variables that contributed to the construction of these aggregate measures, such as wages, hours worked per week, or having been injured. The results show that the aggregate losses with respect to promised wages and costs prior to departure do not have a significant impact on remittances or duration of stay abroad, when controlling for the other variables. For duration, in addition to endogeneity issues due to omitted variables and possible measurement errors, part of the explanation may be related to reverse causality, which could bias the OLS estimation results. Indeed, shorter duration of stay might explain the poor conditions of work abroad, since very short temporary contracts provide, in general, lower protection of workers' rights, but also immigrants with a longer stay can bargain for better working conditions. This is less of an issue in the case of remittances, since remittances cannot directly affect working conditions abroad.

\(^{37}\) For the binary independent variable “injured/sick and not paid,” which is used as a dependent variable in table 1, we now include a complementary binary variable, “injured/sick and paid.” The omitted category is “not injured/sick.”
7. Discussion and Policy Recommendations

This paper aimed to provide a conceptual framework to highlight the importance of migration costs associated with deficiencies in the conditions of work abroad in the existing literature on migration decision making. A novel data set—the KNOMAD migration surveys—was used to gain understanding of the extent of the losses that deficiencies in working conditions may represent to migrant workers, as well as to test the implications of these losses for remittances and migration duration. The conceptual framework offered in this paper was based on a thorough literature overview, which provided the context for seeing poor working conditions as part of the uncertainty that migrants face over the success of their migration project. A potential candidate for migration will always have uncertainty over migration outcomes in earnings and better life prospects. Thus, the true question is not whether there will be any uncertainty, but how much uncertainty is out there. The better this uncertainty can be predicted, the better it can be integrated into the decision-making process. Greater understanding can also open space for better dealing with uncertainty, including through policy instruments. When policy makers become aware of these hidden costs, they may design better intervention policies to correct market failures and raise efficiency associated with migration, such as improving outcomes for workers, their families, and communities left behind.

The empirical analysis lands several conclusions. First, even with somewhat imperfect data at hand, we show that working conditions, such as contractual status, level of wages and periodicity of wage payments, hours worked, occupational safety and health issues, as well as trade union activities and discrimination, are all areas in which migrant workers report substantial deficits. In the KNOMAD sample of workers who migrated through legal channels, nearly 30 percent of migrant workers did not have a contract signed prior to departure, reaffirming the necessity of ongoing dialogues (such as the Colombo process) to improve the protection of migrant workers and promote fair recruitment through the provision of a standard contract. Nearly 14.7 percent did not receive wages on time, and, when remunerated, 23.1 percent reported they received wages that were lower than those promised before the departure. Over half of the migrant workers reported hours of work that were greater than the authorized total hours of work, including overtime, as per national and international standards. The average number of reported hours per week is 71, and a quarter of the migrants reported systematically not having any rest day per week. One-third of the migrants experienced health-related problems, of which about 15 percent had serious work-related injuries, which is far above national averages. Two individuals in the sample reported physical abuse by employers. Two immigrants in five were not paid for days lost due to health problems. Moreover, over half of the migrant workers also reported being deprived of at least some rights, including speech, union, involuntary change of employers, or not having the same wage as the native-born. The overwhelming majority did not answer the question about the possibility of joining a trade union—most likely because joining a trade union is not an option in some of the countries included in the analysis.

We attempted to aggregate this information and transform it into monetary losses, with the purpose of comparing it with other losses incurred during migration. Our back-of-the-envelope calculations show that, on very modest accounts, aggregate losses due to deficiencies in the conditions of work abroad represent at least 30 percent of total promised wages or 27 percent of total actual wages, and are twice as high as the recruitment and travel costs incurred to effectuate the migration. These results are consistent with those of a series of papers on Asian migration, highlighting the alarmingly high costs of migration for low-skilled workers in this region (ILO 2016a). The findings show that, in some corridors, such costs can be higher than the monetary costs related to various fees linked to
assistance in obtaining a work visa and payments to agents to secure a job. The sheer extent of such costs warrants policy attention. That the costs are revealed only at the destination pinpoints the degree of uncertainty that migrant workers are facing. Given that the sampled individuals migrated through legal migration channels, it can only be imagined what costs other, less fortunate migrants can experience. These costs clearly reduce the return on a migrant’s investment. This matters not only for migrant households and policy makers in home countries who wish to capitalize on large labor emigration, but also for policy makers in host countries, if the poor working conditions of migrants undermine the working conditions of the native-born or create unfair competition.

Second, the descriptive statistics and more formal econometric analysis confirm that the costs associated with the conditions of work vary with individual characteristics, especially age, gender, occupations and skills, as well as the nature of the visas. For women, the aggregate losses due to poor conditions of work, expressed as a fraction of other costs, are substantially higher than for those for men. Although female domestic workers usually have a higher probability of signing a contract before departure, they also have some of the highest costs associated with deficiencies in labor conditions, and especially with prohibitively excessive hours. Lower skills and more people to support back home aggravate the situation with respect to contractual status, regularity of pay, hours worked, and exercise of rights.

Some of the findings also confirm general “common sense.” For example, pre-departure briefings aimed at raising awareness about labor rights are found to be significantly positively correlated with better conditions of work outcomes and lower losses. Having papers and procedures before departure is found to have a strong association with the conditions of work. Notably, having sought exit approval before departure is negatively correlated with the probabilities of have a rest day and regular pay—highlighting that individuals having more constraints at departure may have lower bargaining power to command better conditions of work, and that more information about labor rights is beneficial. Pre-departure briefing decreases and exit approval increases the aggregate losses associated with the conditions of work.

Importantly, corridors matter too: rather than being disconnected from each other, many problems go hand in hand in certain corridors. “Problematic” corridors are those in which migrant workers cumulate problems from the very start. Problematic corridors feature a higher proportion of low-skilled (low-education) migrants, and an important fraction of them do not have work contracts signed before departure. They are also the migrants who have highest wage arrears and discrepancies between promised and paid wages. Conversely, in corridors where the highest-educated migrants are recruited with contracts signed before departure, the observed outcomes correspond to those expected, and can sometimes be even better. Thus, from the policy perspective, there is a clear scope for action in some specific destination countries, as well as origin-destination corridors. Ensuring that contracts are signed prior to departure, and that transparency of working conditions is stated in contracts and well understood by workers are clearly policy actions that should be encouraged. When recruitment in these channels is done through private recruitment agencies, there may be scope for better monitoring of these agencies (Koser 2013). Moreover, policies that are meant to curb irregular

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This logic is also a driving force behind some existing ILO programs. For example, the ILO Fair Recruitment and Decent Work for Women Migrant Workers in South Asia and the Middle East initiative, known as the Work in Freedom project, provides these kinds of trainings in the spirit of “informed migration being a safe migration.” For details, see http://www.ilo.org/dhaka/Whatwedo/WCMS_376165/lang--en/index.htm.
migration (identity verification, enforcement of wage and tax payments by employers, and minimum wages for the native-born and migrants) should complement those aimed at protecting migrants’ rights. In addition, policies allowing for the freedom of changing employers, prolongation of visas in case of job loss, as well as easier and readily available trade union participation can act as important bargaining tools against potentially abusive employers.

Third, the paper has shown not only that the costs associated with deficiencies in the conditions of work are high, but also that they may have nonnegligible implications for other migration-related outcomes. Higher costs due to poor conditions of work are strongly and significantly negatively correlated with the amount of remittances, in absolute and relative terms, as well as the duration of migration. These findings suggest that migrants may prefer to work back home or re-migrate to another country, rather than continue to stay and suffer from the deficiencies in the conditions of work. More specifically, greater discrepancy between the promised and actual wages, as well as delays in payment, are associated with a lower absolute amount of remittances and shorter stays. Although hours of work per se do not seem to play a role, the absence of a rest day precipitates departure, as it may be associated with more fatigue and stress. Interestingly, injured individuals, who were paid during their injury, tend to prolong their stay, and individuals facing rights deprivation remit less and stay for a shorter period.

The aggregate findings of this paper are relatively novel. Additional research is welcome to improve our knowledge on the magnitude of conditions of work problems. As KNOMAD and ILO continue conducting migration cost surveys in other migration corridors, including Italy, the Russian Federation, South Africa, Thailand, and Singapore, there may be scope for replicating the analysis in these countries. Moreover, subsequent surveys can clearly benefit from including questions such as the number of days lost due to sickness, and the number of weekly hours for which overtime was not paid as well as its amount, since these questions could be extremely helpful for quantifying the losses due to poor conditions of work in a more objective way. Questions regarding the conditions of work at home prior to departure, the conditions of work of the native-born in the same jobs, and the conditions of work of the compatriots who stayed behind could also help to relativize the findings and benchmark the results for various reference groups. Additional questions on the choice of migration corridors, and the reasons for return if return was before the due date could also help to foster understanding on the roles of information, social networks, and (in)voluntary aspects of migration decisions, as well as nuanced the findings on the conditions of work.

Efforts should be made to render the samples more representative and more diverse, to include both genders, and as many as possible occupations in each corridor—so that the analysis can dissociate effects due to gender, occupation, and corridor. With the current data, much of this analysis remains preliminary. Future efforts could enlarge the sample to include permanent migrants, to analyze whether migrant integration and assimilation, as well as policies aimed at better integration outcomes, can help to improve working conditions.
References


———. 2010b. *Walls at Every Turn: Exploitation of Migrant Domestic Workers through Kuwait’s Sponsorship System*. New York: HRW.


## Appendix 1. Tables

### Table 2. Individual Determinants of Poor Conditions of Work Outcomes

<table>
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<th>(3)</th>
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<td><strong>Wage (promised/actual)</strong></td>
<td><strong>No regular pay</strong></td>
<td><strong>Log of hours per week</strong></td>
<td><strong>No rest day</strong></td>
<td><strong>Injured not paid</strong></td>
<td><strong>Unions: no or missing</strong></td>
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<td><strong>CW loss over other costs</strong></td>
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<td>0.029**</td>
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<td>0.089***</td>
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<td>(0.011)</td>
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<tr>
<td>ETH - SAU</td>
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<td>NPL - QAT</td>
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<td>0.292***</td>
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<td>0.450**</td>
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<td>(1.279)</td>
<td>(0.040)</td>
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<td>(0.038)</td>
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<td>(0.043)</td>
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<td>PAK - SAU</td>
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<td>0.098***</td>
<td>0.108***</td>
<td>0.352***</td>
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<td>(1.183)</td>
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<td>(0.024)</td>
<td>(0.034)</td>
<td>(0.067)</td>
<td>(0.018)</td>
<td>(0.039)</td>
<td>(0.025)</td>
<td>(0.207)</td>
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<td>PAK - UAE</td>
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<td>2.825**</td>
<td>0.289***</td>
<td>0.104***</td>
<td>0.123***</td>
<td>0.345***</td>
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<td>0.052</td>
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<td>(1.192)</td>
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<td>(0.035)</td>
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<td>PHL - QAT</td>
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<td>0.636</td>
<td>0.099***</td>
<td>-0.056**</td>
<td>0.030</td>
<td>-0.011</td>
<td>0.018</td>
<td>0.673***</td>
<td>0.133***</td>
<td>-0.432**</td>
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<td>(0.036)</td>
<td>(1.150)</td>
<td>(0.036)</td>
<td>(0.024)</td>
<td>(0.034)</td>
<td>(0.091)</td>
<td>(0.018)</td>
<td>(0.039)</td>
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<th>Observations</th>
<th>2,432</th>
<th>2,240</th>
<th>2,425</th>
<th>2,420</th>
<th>2,425</th>
<th>670</th>
<th>2,432</th>
<th>2,397</th>
<th>1,896</th>
<th>1,978</th>
<th>1,981</th>
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<tr>
<td>R-squared</td>
<td>0.455</td>
<td>0.012</td>
<td>0.172</td>
<td>0.423</td>
<td>0.449</td>
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<td>0.056</td>
<td>0.489</td>
<td>0.367</td>
<td>0.434</td>
<td>0.373</td>
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</table>

**Note:** Estimation method: OLS. Robust standard errors in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%. All regressions include the survey year. CW = conditions of work; ETH = Ethiopia; IND = India; N = number; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates.
Table 3. Conditions of Work Abroad and Remittances

<table>
<thead>
<tr>
<th></th>
<th>(1) Monthly remittances, absolute amount</th>
<th>(2) Monthly remittances, relative to monthly wage</th>
<th>(3) Months spent at destination</th>
<th>(4) Monthly remittances, absolute amount</th>
<th>(5) Monthly remittances, relative to monthly wage</th>
<th>(6) Months spent at destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>CW loss over total promised earnings</td>
<td>0.018*</td>
<td>0.001</td>
<td>0.001</td>
<td>0.018*</td>
<td>0.001</td>
<td>0.001</td>
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<tr>
<td></td>
<td>(0.012)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.012)</td>
<td>(0.000)</td>
<td>(0.000)</td>
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<tr>
<td>No contract prior to departure</td>
<td>-20.036**</td>
<td>-0.067***</td>
<td>0.058</td>
<td>-25.306***</td>
<td>-0.066***</td>
<td>0.050</td>
</tr>
<tr>
<td></td>
<td>(9.431)</td>
<td>(0.017)</td>
<td>(0.039)</td>
<td>(9.491)</td>
<td>(0.017)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>Wage (promised/actual)</td>
<td>-90.353***</td>
<td>0.033</td>
<td>-0.004***</td>
<td>-55.151***</td>
<td>-0.067***</td>
<td>-0.113***</td>
</tr>
<tr>
<td></td>
<td>(11.228)</td>
<td>(0.021)</td>
<td>(0.001)</td>
<td>(10.255)</td>
<td>(0.019)</td>
<td>(0.041)</td>
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<tr>
<td>No regular pay</td>
<td>-40.560***</td>
<td>-0.074***</td>
<td>-0.103**</td>
<td>-55.151***</td>
<td>-0.067***</td>
<td>-0.113***</td>
</tr>
<tr>
<td></td>
<td>(10.274)</td>
<td>(0.019)</td>
<td>(0.041)</td>
<td>(10.599)</td>
<td>(0.019)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Log of hours per week</td>
<td>-1.871</td>
<td>0.037</td>
<td>-0.039</td>
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</tr>
<tr>
<td></td>
<td>(15.870)</td>
<td>(0.029)</td>
<td>(0.066)</td>
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<td></td>
</tr>
<tr>
<td>No rest day</td>
<td>-1.697</td>
<td>0.027</td>
<td>-0.122***</td>
<td>-6.576</td>
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<td>-0.129***</td>
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<tr>
<td></td>
<td>(11.182)</td>
<td>(0.021)</td>
<td>(0.046)</td>
<td>(10.599)</td>
<td>(0.019)</td>
<td>(0.043)</td>
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<tr>
<td>Injured, but not paid</td>
<td>-0.203</td>
<td>-0.008</td>
<td>0.080*</td>
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<tr>
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<td>(10.795)</td>
<td>(0.020)</td>
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<tr>
<td>Injured and paid</td>
<td>-17.161*</td>
<td>0.022</td>
<td>0.167***</td>
<td>-16.500*</td>
<td>0.023</td>
<td>0.152***</td>
</tr>
<tr>
<td></td>
<td>(10.081)</td>
<td>(0.019)</td>
<td>(0.042)</td>
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<td>(0.041)</td>
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<td>Unions: no or missing</td>
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<td>0.062*</td>
<td>0.057</td>
<td>19.891</td>
<td>0.064*</td>
<td>0.036</td>
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<tr>
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<td>(0.037)</td>
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<td>(20.107)</td>
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<td>Deprived of rights</td>
<td>-15.908*</td>
<td>0.035**</td>
<td>-0.152***</td>
<td>-19.910**</td>
<td>0.039**</td>
<td>-0.151***</td>
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<td></td>
<td>(8.955)</td>
<td>(0.017)</td>
<td>(0.037)</td>
<td>(8.991)</td>
<td>(0.016)</td>
<td>(0.037)</td>
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<td>Exit approved</td>
<td>0.521</td>
<td>0.001</td>
<td>0.018***</td>
<td>0.839</td>
<td>0.001</td>
<td>0.018***</td>
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<tr>
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<td>(1.461)</td>
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<td>(0.006)</td>
<td>(1.482)</td>
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<td>(0.006)</td>
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<td>Pre-departure briefing</td>
<td>16.121*</td>
<td>0.031*</td>
<td>0.015</td>
<td>18.431*</td>
<td>0.030*</td>
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<td>(9.438)</td>
<td>(0.017)</td>
<td>(0.039)</td>
<td>(9.554)</td>
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<td>(0.039)</td>
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<td>Visa</td>
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<td>0.220***</td>
<td>-36.688**</td>
<td>0.012</td>
<td>0.212***</td>
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<td>(16.281)</td>
<td>(0.030)</td>
<td>(0.066)</td>
<td>(16.409)</td>
<td>(0.030)</td>
<td>(0.065)</td>
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<td>0.093***</td>
<td>0.204***</td>
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<td>0.194***</td>
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<td>(14.133)</td>
<td>(0.026)</td>
<td>(0.058)</td>
<td>(14.296)</td>
<td>(0.026)</td>
<td>(0.057)</td>
</tr>
<tr>
<td>Age</td>
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<td>0.000</td>
<td>0.014***</td>
<td>1.532***</td>
<td>0.000</td>
<td>0.015***</td>
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<tr>
<td></td>
<td>Coefficient</td>
<td>Std. Error</td>
<td>Coefficient</td>
<td>Std. Error</td>
<td>Coefficient</td>
<td>Std. Error</td>
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<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
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<tr>
<td>Low skill</td>
<td>-25.496***</td>
<td>(8.312)</td>
<td>-0.025*</td>
<td>(0.015)</td>
<td>-0.036</td>
<td>(0.001)</td>
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<td>Domestic</td>
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<td>(15.187)</td>
<td>-0.045</td>
<td>(0.028)</td>
<td>-0.008</td>
<td>(0.064)</td>
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<tr>
<td>Construction</td>
<td>-55.789***</td>
<td>(8.152)</td>
<td>-0.011</td>
<td>(0.015)</td>
<td>-0.060*</td>
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<td>(7.942)</td>
<td>0.012</td>
<td>(0.015)</td>
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<td>(0.033)</td>
</tr>
<tr>
<td>N people support</td>
<td>-0.393</td>
<td>(1.238)</td>
<td>0.005**</td>
<td>(0.002)</td>
<td>0.018***</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Learned language</td>
<td>-53.426***</td>
<td>(17.930)</td>
<td>-0.057*</td>
<td>(0.033)</td>
<td>0.177**</td>
<td>(0.075)</td>
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<tr>
<td>N months abroad</td>
<td>7.819</td>
<td>(5.712)</td>
<td>0.002</td>
<td>(0.011)</td>
<td>-0.011</td>
<td>(0.010)</td>
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<tr>
<td>ETH - SAU</td>
<td>16.863</td>
<td>(19.075)</td>
<td>-0.042</td>
<td>(0.035)</td>
<td>0.690***</td>
<td>(0.076)</td>
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<tr>
<td>IND - QAT</td>
<td>173.127***</td>
<td>(19.221)</td>
<td>0.147***</td>
<td>(0.035)</td>
<td>0.962***</td>
<td>(0.074)</td>
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<tr>
<td>NPL - QAT</td>
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<td>(19.679)</td>
<td>0.087**</td>
<td>(0.036)</td>
<td>0.953***</td>
<td>(0.077)</td>
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<td>PAK - SAU</td>
<td>76.854***</td>
<td>(18.531)</td>
<td>0.005</td>
<td>(0.034)</td>
<td>0.685***</td>
<td>(0.071)</td>
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<td>PAK - UAE</td>
<td>63.243***</td>
<td>(18.903)</td>
<td>0.014</td>
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<td>0.289***</td>
<td>(0.073)</td>
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<td>PHL - QAT</td>
<td>135.890***</td>
<td>(18.298)</td>
<td>0.148***</td>
<td>(0.034)</td>
<td>0.308***</td>
<td>(0.074)</td>
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Observations 2,080 2,080 2,212 2,081 2,081 2,213  
R-squared 0.373 0.125 0.261 0.353 0.123 0.256

Note: Estimation method: OLS. Robust standard errors in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%. All regressions include the survey year. CW = conditions of work; ETH = Ethiopia; IND = India; N = number; NPL = Nepal; PAK = Pakistan; PHL = Philippines; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates.
### Appendix 2. Descriptive Statistics

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<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Obs.</th>
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<td><strong>A. Respondent Information</strong></td>
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<td></td>
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<tr>
<td>Female</td>
<td>0.249</td>
<td>0.432</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
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<tr>
<td>Age (years)</td>
<td>30.835</td>
<td>7.243</td>
<td>17</td>
<td>60</td>
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<td>Married</td>
<td>0.640</td>
<td>0.480</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
</tr>
<tr>
<td>Low education (no education or primary)</td>
<td>0.316</td>
<td>0.465</td>
<td>0</td>
<td>1</td>
<td>2,476</td>
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<tr>
<td>High education (secondary, technical or university)</td>
<td>0.684</td>
<td>0.465</td>
<td>0</td>
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<td>Number of people the respondent supports financially</td>
<td>5.223</td>
<td>3.215</td>
<td>0</td>
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<td>First time at destination</td>
<td>0.788</td>
<td>0.409</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
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<tr>
<td>Months lived at destination</td>
<td>26.24</td>
<td>14.293</td>
<td>0</td>
<td>120</td>
<td>2,654</td>
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<tr>
<td><strong>B. Information on Costs Incurred in the Origin Country for Current Job</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total expenditures prior to departure of the respondent and family (US$ 2014)</td>
<td>1,643.377</td>
<td>1,508.806</td>
<td>3.605</td>
<td>9,208.718</td>
<td>2,620</td>
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<td>If the respondent had to make some informal expenditures (subagents, smugglers, bribes)</td>
<td>0.233</td>
<td>0.423</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
</tr>
<tr>
<td>- Total informal expenditures (subagents, smugglers, bribes) (US$ 2014)</td>
<td>50.173</td>
<td>217.868</td>
<td>0</td>
<td>4,072.351</td>
<td>2,659</td>
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<tr>
<td>Months of job deployment procedure (from application to departure)</td>
<td>2.633</td>
<td>2.287</td>
<td>0</td>
<td>30</td>
<td>2,659</td>
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<td>If the respondent was told that the employer will reimburse some of these expenditures</td>
<td>0.042</td>
<td>0.202</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
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<tr>
<td>If the respondent was reimbursed by the employer for some of these expenditures</td>
<td>0.025</td>
<td>0.157</td>
<td>0</td>
<td>1</td>
<td>2,659</td>
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<tr>
<td>- Total expenditures reimbursed (US$ 2014)</td>
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<td>137.641</td>
<td>0</td>
<td>4,945.594</td>
<td>2,659</td>
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### C. Borrowing Money for the Foreign Job

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<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total borrowed amount (US$ 2014)</td>
<td>1,302.014</td>
<td>1,161.714</td>
<td>22.525</td>
<td>8,512.523</td>
<td>1,609</td>
</tr>
<tr>
<td>Total interest paid on the borrowed amount (US$ 2014)</td>
<td>92.550</td>
<td>288.111</td>
<td>0</td>
<td>4,985.906</td>
<td>1,164</td>
</tr>
<tr>
<td>Total reimbursed amount (US$ 2014)</td>
<td>1,133.045</td>
<td>1,141.672</td>
<td>0</td>
<td>11,674.320</td>
<td>1,607</td>
</tr>
<tr>
<td>Total left to be reimbursed amount (US$ 2014)</td>
<td>243.461</td>
<td>591.993</td>
<td>0</td>
<td>5,776.355</td>
<td>1,609</td>
</tr>
</tbody>
</table>

### D. Job Search Efforts and Opportunity Costs

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the respondent worked at home before departure</td>
<td>0.690</td>
<td>0.462</td>
<td>0</td>
<td>1</td>
<td>2,651</td>
</tr>
<tr>
<td>If the respondent was self-employed</td>
<td>0.364</td>
<td>0.481</td>
<td>0</td>
<td>1</td>
<td>1,829</td>
</tr>
<tr>
<td>High-skilled occupation at home (professionals)</td>
<td>0.008</td>
<td>0.092</td>
<td>0</td>
<td>1</td>
<td>1,760</td>
</tr>
<tr>
<td>Medium-skilled occupation at home (clerical, trade, machinery, services)</td>
<td>0.630</td>
<td>0.483</td>
<td>0</td>
<td>1</td>
<td>1,760</td>
</tr>
<tr>
<td>Low-skilled occupation at home (domestic and farming)</td>
<td>0.361</td>
<td>0.481</td>
<td>0</td>
<td>1</td>
<td>1,760</td>
</tr>
<tr>
<td>Monthly wage at home for the given occupation (US$ 2014)</td>
<td>158.611</td>
<td>158.625</td>
<td>0</td>
<td>4,080</td>
<td>1,775</td>
</tr>
<tr>
<td>If the respondent uses his skills at destination</td>
<td>0.342</td>
<td>0.474</td>
<td>0</td>
<td>1</td>
<td>2,647</td>
</tr>
<tr>
<td>If the respondent believes he could find a job where he could use his skills</td>
<td>0.475</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
<td>2,592</td>
</tr>
</tbody>
</table>

### E. Work in Foreign Country

<table>
<thead>
<tr>
<th></th>
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<th>Max.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry sector</td>
<td>0.164</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
<td>2,632</td>
</tr>
<tr>
<td>Construction sector</td>
<td>0.54</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>2,632</td>
</tr>
<tr>
<td>Household services sector</td>
<td>0.207</td>
<td>0.405</td>
<td>0</td>
<td>1</td>
<td>2,632</td>
</tr>
<tr>
<td>Agriculture or services sectors</td>
<td>0.09</td>
<td>0.286</td>
<td>0</td>
<td>1</td>
<td>2,632</td>
</tr>
<tr>
<td>Monthly promised gross wage at destination before departure (US$ 2014)</td>
<td>395.53</td>
<td>202.77</td>
<td>23.36</td>
<td>2,156.57</td>
<td>2,450</td>
</tr>
<tr>
<td>Monthly actual gross wage at destination on average, including overtime payments (US$ 2014)</td>
<td>428.16</td>
<td>215.58</td>
<td>77.86</td>
<td>3,234.85</td>
<td>2,636</td>
</tr>
<tr>
<td>Description</td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Min.</td>
<td>Max.</td>
<td>Obs.</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------</td>
<td>-----------</td>
<td>------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>Total deductions for taxes and social security contributions (US$ 2014)</td>
<td>11,131.1</td>
<td>9,156.87</td>
<td>0</td>
<td>116,454.7</td>
<td>2,636</td>
</tr>
<tr>
<td>If the respondent is paid regularly</td>
<td>0.853</td>
<td>0.355</td>
<td>0</td>
<td>1</td>
<td>2,638</td>
</tr>
<tr>
<td>Monthly total remittances sent home (US$ 2014)</td>
<td>255.682</td>
<td>176.321</td>
<td>3.915</td>
<td>4,082.025</td>
<td>2,443</td>
</tr>
<tr>
<td>If the respondent entered the country with work visa</td>
<td>0.910</td>
<td>0.287</td>
<td>0</td>
<td>1</td>
<td>2,634</td>
</tr>
<tr>
<td>If the employer arranged the work visa</td>
<td>0.687</td>
<td>0.464</td>
<td>0</td>
<td>1</td>
<td>2,647</td>
</tr>
<tr>
<td>If the respondent signed a contract before departure</td>
<td>0.721</td>
<td>0.449</td>
<td>0</td>
<td>1</td>
<td>2,647</td>
</tr>
<tr>
<td>If the respondent works under the same contract signed before departure</td>
<td>0.817</td>
<td>0.387</td>
<td>0</td>
<td>1</td>
<td>1,906</td>
</tr>
<tr>
<td>If the responded changed employer since he arrived at destination</td>
<td>0.204</td>
<td>0.403</td>
<td>0</td>
<td>1</td>
<td>2,639</td>
</tr>
<tr>
<td>If the employer supplies migrant workers to other employers (triangular relationship)</td>
<td>0.163</td>
<td>0.370</td>
<td>0</td>
<td>1</td>
<td>2,638</td>
</tr>
</tbody>
</table>

**F. Job Environment**

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the employer paid any migration costs (recruitment, flight fares, others)</td>
<td>0.296</td>
<td>0.457</td>
<td>0</td>
<td>1</td>
<td>2,472</td>
</tr>
<tr>
<td>If the respondent had to pay back these costs through deductions</td>
<td>0.132</td>
<td>0.339</td>
<td>0</td>
<td>1</td>
<td>2,472</td>
</tr>
<tr>
<td>Months during which these deductions have been paid</td>
<td>27.003</td>
<td>15.302</td>
<td>1</td>
<td>100</td>
<td>325</td>
</tr>
<tr>
<td>Total deductions to reimburse the migration costs (US$ 2014)</td>
<td>110.724</td>
<td>335.071</td>
<td>0</td>
<td>4,752</td>
<td>2,472</td>
</tr>
<tr>
<td>If the employer provided housing</td>
<td>0.818</td>
<td>0.386</td>
<td>0</td>
<td>1</td>
<td>2,639</td>
</tr>
<tr>
<td>If housing was deducted</td>
<td>0.121</td>
<td>0.326</td>
<td>0</td>
<td>1</td>
<td>2,121</td>
</tr>
<tr>
<td>If the employer provided food</td>
<td>0.512</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
<td>2,639</td>
</tr>
<tr>
<td>If food was deducted</td>
<td>0.185</td>
<td>0.389</td>
<td>0</td>
<td>1</td>
<td>1,733</td>
</tr>
<tr>
<td>If there is any workers’ union available at the workplace</td>
<td>0.087</td>
<td>0.282</td>
<td>0</td>
<td>1</td>
<td>2,373</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Min.</td>
<td>Max.</td>
<td>Obs.</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-------</td>
<td>-----------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>If joined the union</td>
<td>0.630</td>
<td>0.486</td>
<td>0</td>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td>If deprived of any rights (speech, union, change employers, not same wage as natives, etc.)</td>
<td>0.572</td>
<td>0.495</td>
<td>0</td>
<td>1</td>
<td>2,610</td>
</tr>
<tr>
<td>Worked hours per week</td>
<td>71.478</td>
<td>22.702</td>
<td>0</td>
<td>168</td>
<td>2,635</td>
</tr>
<tr>
<td>Worked hours per week, adjusted</td>
<td>67.803</td>
<td>15.473</td>
<td>0</td>
<td>108</td>
<td>2,641</td>
</tr>
<tr>
<td>If the respondent receives at least a rest day during the week</td>
<td>0.769</td>
<td>0.421</td>
<td>0</td>
<td>1</td>
<td>2,639</td>
</tr>
<tr>
<td>If the respondent has been injured</td>
<td>0.304</td>
<td>0.460</td>
<td>0</td>
<td>1</td>
<td>2,639</td>
</tr>
<tr>
<td>If the respondent has been injured and he has been paid during the days off</td>
<td>0.544</td>
<td>0.498</td>
<td>0</td>
<td>1</td>
<td>798</td>
</tr>
</tbody>
</table>