

# Should I Stay or Should I Go

## Do Cash Transfers Affect Migration?

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## Abstract

The paper reviews the evidence on a “hot” and yet underexplored question—that is, whether and how social assistance programs (especially cash transfers) affect domestic and international migration. Out of an initial sample of 269 papers, 10 relevant empirical studies examine the question. The programs are classified into three clusters: (i) social assistance that implicitly deters migration centering on place-based programs, (ii) social assistance that implicitly facilitates migration by relaxing liquidity constraints and reducing transaction costs, and (iii) social assistance that is explicitly conditioned on spatial mobility. The paper finds that impacts on migration generally align with the implicit or explicit goals of interventions. Under cluster (i), the likelihood of moving declined between 0.22 and 11 percentage

points; among schemes in clusters (ii) and (iii), the probability to move soared between 0.32–25 and 20–55 percentage points, respectively. The analysis also finds spillover effects within households and communities. While social assistance seems not to determine migration decisions per se, it nonetheless enters the broader calculus of mobility decision making. As such, social protection can be an important part of public policy packages to manage mobility. More research is needed to improve understanding of the role of social protection in structural transformation—a process underpinned by domestic mobility and the performance of which may ultimately affect international migration.

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# **Should I Stay or Should I Go: Do Cash Transfers Affect Migration?**

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## 1. Introduction

Social protection debates are often underpinned by a set of ‘hot topics’. Among the most longstanding ones, five stand out: first, there are lingering concerns that the provision of social assistance transfers, or social safety nets, would reduce people’s efforts to work. Such risks of labor supply disincentives have been largely debunked by recent compilations of evidence (Baird et al. 2018; Banerjee et al. 2017). Second, policy makers are sometimes uncomfortable with the notion of providing ‘handouts’ as opposed to investing in ‘productive’ activities. Yet, evidence shows that social assistance has a range of impacts on critical dimensions for growth<sup>1</sup> (Ralston et al. 2017; Bastagli et al. 2016). Third, debates around universality in general, and on measures like universal basic income and job guarantees in particular, are now ubiquitous in the literature and blogosphere (Ravallion 2018; Gentilini 2017). Fourth, the comparative effects of transfers modalities – whether in cash, in-kind or vouchers – is a lively debate in contexts with large-scale in-kind subsidies (Alderman et al. 2017).

A final quandary relates to whether and how the provision of social assistance would influence mobility decisions of beneficiaries: for example, would the provision of cash transfers incentivize people to move elsewhere? Or perhaps attract others to places where programs are active? Surprisingly, such questions have received relatively little empirical scrutiny, at least compared to the other four thematic areas. This paper helps to start filling this gap.

While much of public attention is devoted to international movements, the paper also investigates the equally relevant dimension of domestic or internal migration. We focus on social assistance as opposed to social protection more widely: because of their contributory nature, programs such as social insurance or contributory pensions may deserve a separate exploration. For the same reason, contexts of forced mobility were not included because of their legislative and humanitarian peculiarities. Among social assistance programs, cash transfers feature in most studies.

Our analysis suggests that social assistance programs tend to fall in three categories: (i) measures that implicitly facilitate migration by relaxing liquidity constraints and reducing transaction costs (e.g., programs with a premier income-support function); (ii) programs that implicitly deter migration via place-based approaches tied to local activities, services or institutions (e.g., like most conditional cash transfers, employment guaranteed schemes like India’s NREGA, and origin-based schemes like China’s Dibao); and (iii) interventions explicitly

conditioned on spatial mobility (e.g., housing vouchers in inner-city neighborhoods in the United States and rural-urban transportation subsidies for the poor in Bangladesh).

Emerging findings suggest that design choices affect the direction of results, with close alignment between those three broad categories and the intended mobility outcomes. There are also second-round effects at the household and community-level – i.e., assistance provided to some helps others to move. This has important implications for informing discussions around the effects of social assistance, the devise of benefit structures, and for program theories of change and results frameworks. The findings, we hope, could help galvanize a long-overdue research and operational agenda around making social assistance more mobility-sensitive.

The remainder of the paper is organized as follows. The next section outlines the paper’s methodology. Section 3 locates our work within the wider literature on migration and development. Section 4 drills into the reviewed impact evaluations and identifies programs’ effects on mobility. Section 5 discusses emerging findings and implications, while section 6 concludes.

## **2. Methodology**

The review was conducted in four stages. First, we explored the word string “social assistance and migration” in five academic databases, ten websites, and search engines.<sup>2</sup> These yielded 269 entries which were examined individually. Second, we considered previous systematic reviews on this topic, which seems limited to the paper by Hagen-Zanker and Himmelstine (2012).

The HZ-H paper was one of the first attempts to systematize the body of knowledge on migration and social protection. Previous contributions were mostly conceptual, including an early framework devised by Sabates-Wheeler and Waite (2003) which also led the basis for a subsequent volume enriched by case studies (Sabates-Wheeler and Feldman 2011). The HZ-H review identified 22 studies examining the impact of social protection programs on migration. We complement and refine their study by focusing on social assistance and by expanding the geographical scope of evaluations.<sup>3</sup>

Third, we received expert guidance and advice on relevant studies from six lead specialists in migration and social assistance. Finally, when studies evaluated the same social assistance program, we only considered the latest and most rigorous study (determined based on evaluation techniques) unless the studies found opposite impacts of the program. Mexico is a case in point where we considered two programs examining *PROGRESA* because of their divergent results. In

the case of South Africa’s Old-Age Pension program, five different studies concluded that the program increased rural-urban migration among members in the beneficiary households. Here we picked the most recent and robust among them.<sup>4</sup> Also, as a general metric we restricted our search criteria to include only studies that were conducted from the mid-2000s onwards. These stages led to a total of ten impact evaluations including survey questions on the effects of social assistance on internal and international mobility (table 1).

**Table 1. Countries, programs and papers included in the review**

Country	Program	Reference
Bangladesh	No Lean Season pilot	Bryan et al (2014)
Brazil	<i>Bolsa Familia</i>	Neto (2008)
China	Rural Pension program (social pension)	Egglestone et al. (2016)
China	Dibao (Guaranteed minimum income program)	Howell (2017)
India	Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA)	Imbert and Papp (2016); Imbert and Papp (2018)
Mexico	Program of Direct Supports to the Farmland ( <i>Procampo</i> )	Cortina (2014)
Mexico	<i>PROGRESA</i> (now <i>Prospera</i> )	Angelucci (2015)
Mexico	<i>PROGRESA</i> (now <i>Prospera</i> )	Stecklov (2005)
South Africa	Old Age Pension (social pension)	Ardington et al (2009)
United States	Moving to Opportunity project	Chetty et al (2017)

### 3. The development-mobility nexus

Roughly one in seven, or close to one billion people around the globe are migrants. About 750 million of them move within national borders, while the remaining 250 million cross international borders for employment, education, or to seek refuge from war and conflict (IOM, 2017). A country of only migrants would thus be the third most populous country in the world, trailing China and India.

Migration can represent a *potential* high-return investment for sending and receiving communities (Munshi and Rosenzweig 2016; McKenzie and Yang 2010). International migrants constitute 3.4 percent of the global population but contribute to 9.4 percent of the global output – or \$6.7 trillion – and \$3 trillion more than they would have contributed had they stayed in their country of origin (McKinsey 2016).

These findings are echoed by country-level studies. For example, Clemens et al (2008) showed that a Peruvian-born, Peruvian-educated, 35-year old urban male formal sector wage-worker with 9 years of schooling earns an average of \$1,714 per month working in the United States. A person with comparable traits working in Peru would only earn \$452. More recently, Pritchett (2018) compared the Net Present Value (NPV) gains between allowing a low-skilled worker to move to a high-productivity country (US) and local ‘graduation’ programs for the ultra-poor.<sup>5</sup> Estimates of gains from the former dwarf those of the latter.

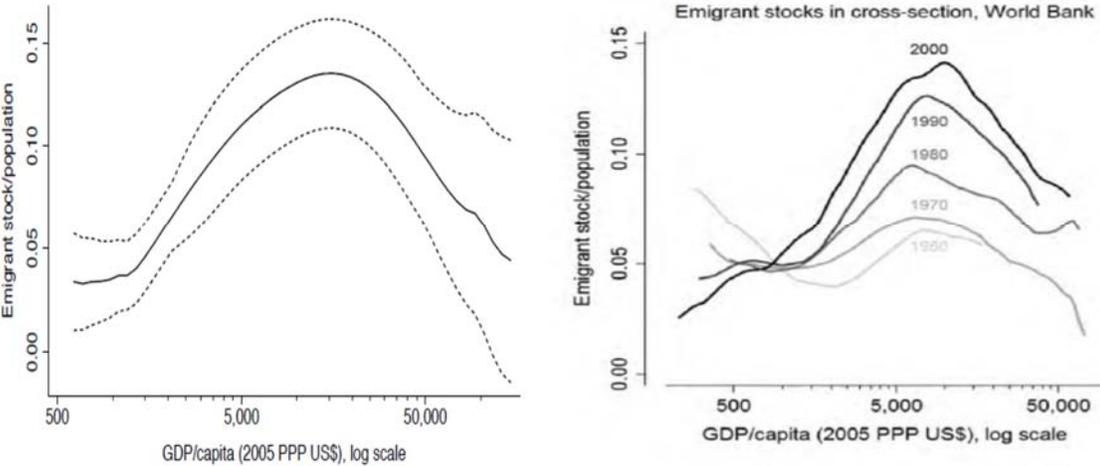
Similarly, domestic migration from low to higher-productivity (urban) areas has been a core engine of development and structural transformation. For example, over 1978-2003 about 26 percent of the aggregate productivity growth in China can be attributed to the reallocation of labor from agriculture to non-agricultural sectors (Dekle and Vandenbroucke 2010).

However, the process is not automatic. For example, Africa presents some unique challenges compared to historical trajectories of transformation elsewhere (e.g., East Asia). The pace of urbanization in the continent is remarkable: in Europe, urbanization accelerated with the advent of the Industrial Revolution, rising from 15 percent in 1800 to 40 percent in 1910; conversely, Africa reached the same rate in about half the time, moving from 15 percent in 1950 to 40 percent in 2010. Yet, many African cities are not becoming magnets for higher-productivity jobs, that is, some countries are experiencing “urbanization without industrialization” (Gollin et al. 2016). Also, most of urban growth is natural (as opposed to migration-induced or fueled by urban expansion) and has not been accompanied by a demographic transition (both urban *and* rural populations are fast-increasing in absolute terms). At the same time, there is growing interest in the role of secondary cities and peri-urban areas as growth poles and drivers of poverty reduction (Christiaensen and Kanbur 2017).

To a considerable extent, development paradigms have prioritized places over people. Consequently, economic development has, at times, been touted as an alternative for people to migrate.<sup>6</sup> For example, the European Union allocated €3 billion in order to “address the root causes of destabilization, displacement and irregular migration” among countries in Africa (EU 2018). Inherent in the approach is that national development will essentially *reduce* the need for people to migrate. However, data seem to suggest a different pattern.

Multiple studies point to an inverted U-shaped relationship, or “migration hump”, between economic development and migration (Clemens and Postel 2018; Clemens 2014; de Haas 2010; Martin and Taylor 1996; Zelinsky 1971). As countries grow richer, international migration tends to first *increase* before eventually declining.<sup>7</sup> The left graph of Figure 1 shows such inverted-U shape relationship between emigrant stock in the population and income for 2013; the right graph reports trends in each decade from 1960-2000. In the latter, the positive association between rising emigrant stock and income before countries reach upper middle-income status (of around US\$ 7,500 in PPP terms) is significant at the 95 percent confidence level. Ganso and Yuldashev (2018) analyze data from 103 developing countries and find that countries that receive larger rural assistance have lower emigration rate; instead, countries that receive larger urban assistance do not show lower emigration rates, suggesting that “... that urban development aid enables better connected and skilled urbanites to move abroad in pursuit of better opportunities while also generating higher levels of urbanization” (*ibid*, p.277).

**Figure 1. Relationship between emigration and GDP per capita, 2013 (left) and over 1960-2000 (right)**



Source: Clemens and Postel (2018); Clemens (2014)

Recent microeconomic literature shows similar trends between migration and income. Migration generally rises in response to positive income shocks among poor households. In Indonesia, for example, positive agricultural income shocks increase international migration in villages with relatively smaller landholders but reduce international migration from developed

rural areas (Bazzi 2017). Similarly, in Nepal an increase in farm income of \$100 due to rainfall bolsters migration to India (Shrestha 2017).<sup>8</sup> In El Salvador, adverse agricultural events that reduce income increase outward migration. However, this is largely due to increased household remittances received after such negative shocks (Halliday 2006).

There is less research, however, on the empirical relationships between non-economic measures of welfare. Dao et al. (2016) analyze the upward slope of the mobility transition curve and find that "... between one-third and one-half of the slope of the increasing segment is due to the changing skill composition of working-age populations, and another third is due to changing network size." However, Clemens and Postel (2018) show that emigration and child survival – the probability that a newborn survives till the age of five – follows a similar inverted U-shaped mobility transition to emigration and income.

There are multiple reasons that prevent people from migrating. Low-income populations may lack information about jobs abroad or may not be aware about potential benefits of migration (Beam et al. 2016). There are psychological costs related to family separation and leaving social networks behind. Restrictions on both international and internal migration in the form of visa quotas and non-portability of benefits also hamper mobility. Yet, one of the key barriers to mobility of poor and low-skilled workers is credit constraints. Migrants need to pay a variety of fees including but not limited to travel and transportation, job search and training, accommodation, and insurance (McKenzie and Yang, 2010). A Pakistani labor migrant to Saudi Arabia or Dubai, or a Bangladeshi migrant heading to Kuwait pays seven or more months of his or her salary abroad for covering migration costs; a Vietnamese migrant going to Malaysia could pay a sum equivalent to four months of salary after migration (Abella et al. 2014). Oftentimes, these fees need to be paid upfront and in lump-sums. Most of the global poor do not have the necessary resources to finance migration, and in absence of collateral and/or formal credit markets, the potential benefits from migration remain untapped.

#### **4. Social assistance and mobility**

This section reviews the empirical literature to assess the relationship between social assistance and migration. The ten evaluations resulting from our selection criteria draw from contexts as diverse as Bangladesh, India, China, Mexico, Brazil, South Africa and the United States. As outlined in section 1, we map the evidence according to programs that implicitly enhance or deter

migration, and those conditioned on mobility itself. Annex 1 summarizes many design features of the schemes.

### ***Social assistance implicitly facilitating migration***

Ardington et al. (2009) examine the impact of a large social pensions program in South Africa on migration decisions. They find that "... prime-aged adults are significantly more likely to be labor migrants after pension receipt begins in the household", and that "... individuals in households that lose pension eligibility between rounds of the survey are significantly less likely to be labor migrants once the pension is lost". Labor migrants from lower socioeconomic conditions whose households lose their pension status are 11 percentage points less likely to remain labor migrants. Similarly, individuals in lower-status occupations are 14 percentage points more likely to not migrate than are those in higher-status occupations. These findings suggest that cash transfers enhanced the ability of poorer households to migrate to urban areas.

In Mexico, Cortina (2014) analyzes the effect of *Procampo* – a cash transfer program for compensating farmers negatively affected by NAFTA – on migration patterns to the United States. The paper finds that participants were significantly more likely to migrate than nonparticipants. However, this effect is driven almost entirely by poorer farmers who have a higher likelihood of migrating than better-off ones. The study finds that participating in *Procampo* is positively correlated with more migration to the United States up to a certain threshold, after which the relationship becomes negative.

In China, Egglestone et al. (2016) analyze a social pension program in Laiwu county in the Shangdong province.<sup>9</sup> They use a regression discontinuity design and find that after the old parent receives a pension, youth are 25 percentage points more likely to be a labor migrant and take off-farm jobs. Furthermore, they find that the effect is larger among youth with parents in poor health conditions. This suggests that the income increase relaxed household credit constraints "... making medical services more affordable and enabling pensioners to substitute purchased services for instrumental support directly provided by the adult children."

In another paper on China, Howell (2017) studies the impact of Dibao on migration. Reaching about 70 million people, the scheme is anchored to the *hukou* system of origins-based assistance (Gentilini 2015). Cash transfers to poor villages seem to stimulate out-migration, a 10 percent increase in program coverage increased the rate of migration of the eligible population by 0.69

percentage points. Also in this case, the result is largely due to beneficiaries lending money to other community members who then migrate, most of whom being minorities and facing credit constraints. However, the program reduces the probability of *direct* beneficiaries to engage in migration by 0.34 percentage points. The positive overall effect described earlier at the community level is largely driven by eligible Dibao households lending to other households in the community who are credit-constrained and cannot finance the migration.

### ***Social assistance implicitly deterring migration***

Imbert and Papp (2016) study the migration impact of another flagship Indian program, the employment guaranteed scheme NREGA. They use a gravity model to predict seasonal migration flows into each urban center and find that NREGA reduces short-term rural to urban migration by 9 percent and has no effect on long-term migration. This is largely attributed to the opportunity cost of urban migration. However, since the authors use village-level instead of household-level migration as their primary outcome indicator, differential impact on households of different socio-economic status remained inconclusive.

In a more recent paper, the authors examine survey data from high out-migration areas at the border of three Indian states<sup>10</sup> (Imbert and Papp 2018). They find that NREGA reduces rural to urban mobility. Migrants who stay in the village to participate in NREGA choose to incur an income loss to avoid the utility cost of migration: "... structural estimates imply that the utility cost of one day away may be as high as 60 percent of migration earnings. Up to half of this cost can be explained by higher living costs and income risk. The other half likely reflects high non-monetary costs from living and working in the city".

In Brazil, Neto (2008) evaluates the impact of *Bolsa Familia*, Brazil's conditional cash transfer program, on differences in internal migration between beneficiary and non-beneficiary households. The paper finds that beneficiaries are 2.6 percentage points less likely to be migrants compared to non-beneficiaries. However, the study does not discuss any mechanism in support of this result.

In Mexico, Angelucci (2015) evaluates the impact of *PROGRESA*, Mexico's antecedent of the flagship *Prospera* conditional cash transfer program. The author finds that, a few months after receiving the first transfers, labor migration to the United States from eligible individuals in treatment villages increases from 0.7 percent to 1.1 percent. She clarifies, however, that new

migration is not financed by the transfers, which are entirely consumed, or by savings. Instead, the entitlement to the program, which was guaranteed for at least two years, increased some households' ability to fund migrations through loans. Therefore, although the cash transfer alleviates liquidity constraints for poor households, these use the cash entitlement to raise their creditworthiness, borrow money<sup>11</sup>, and finance US migration.

Similarly, Stecklov et al. (2005) also evaluate the *PROGRESA* for its impact on domestic and international migration. Their paper finds that after only 20 months of operation, *PROGRESA* reduced the probability of migration to the United States by 58 percent and had no impact on domestic migration. They estimate that the decrease was primarily because of the conditions which required adults in the household to be present for a health checkup at least once a year. This was easier to meet for domestic rather than international migrants.<sup>12</sup>

The results by Stecklov et al. (2005) and Angelucci (2015) point to different directions, but they seem nevertheless compatible. Indeed, the Angelucci study only considers *labor-induced* migration to the United States; instead, Stecklov et al. examine all forms of migration, including for reasons like education and marriage. Hence, it is plausible that while *overall* migration is inhibited because of conditional cash transfers, specific migration for job purposes may still increase because of relaxing liquidity or credit constraints.<sup>13</sup>

### ***Social assistance conditional on migration***

Bryan et. al (2014) study this approach within the context of poor households in Bangladesh. The randomized experiment provided households with transport subsidies (\$8.50) in the form of grants and loans to cover travel costs, and information to help find employment in nearby cities during the lean season. The authors found that both cash and credit subsidies increase the likelihood of households sending migrants to urban areas for temporary work by 22 percent, whereas just providing information on jobs and other information at destination does not have any effect on households' decision to send migrants. Households that were close to subsistence—on whom experimenting with a new activity imposes the biggest risk—start with lower migration rates but are the most responsive to the intervention. This seems consistent with the gradual approach to migration found in Tanzania (Ingelaere et al. 2018). Interestingly, households in the treatment areas continue to migrate at a higher rate in subsequent seasons, even after the incentive is removed. The migration rate is 10 percentage points higher in treatment areas a year later, and

8 percentage points higher after 3 years. Providing initial cash or credit<sup>14</sup> seems to nudge households to overcome the fear of losses if migration does not translate into jobs at destination.

Domestic mobility can also be within-city. Chetty et al (2015) evaluate the impact of the Moving to Opportunity (MTO) project in the United States 4,604 reaching randomly selected families living in high poverty housing projects. Households were spilt into three groups: some received an experimental voucher conditioned on moving to a lower-poverty neighborhood; others getting a standard subsidized housing voucher (with no additional contingencies); while a control group simply retained access to public housing. Children whose families took up the experimental voucher lived, as adults, in areas with 22 percentage point lower poverty rates than those in the control group. Although still positive, the impact declined to 12 percentage points among the “no contingency vouchers” group. Hence, both forms of vouchers influenced the mobility of families. Also, children in experimental voucher households had income, when in their mid-twenties, about \$1,624 higher than the control group; in line with previous results, children in the unconditional voucher had incomes in-between the experimental and control groups.

Overall, the results show the direction of mobility conforms to its intended explicit or implicit objective. Table 2 summarizes the channels and effects of social assistance. The different magnitude in impacts, however, may depend on household profiles, program design, and other factors discussed in the next section.

**Table 2. Summary of evidence on social assistance and migration**

<b>Mechanism</b>	<b>Impact on likelihood of migration</b>	<b>Reference</b>	<b>Timeline</b>	<b>Evaluation method</b>
Implicitly increasing mobility	Increase (4-6 percentage points)	Ardington et al (2009)	2001-2004	Regression with individual fixed-effects from two rounds of panel data
	Increase (13- 25 percentage points)	Egglestone et al. (2016)	2012	Regression Discontinuity (RD) design based on eligibility of pension age (60) (Higher magnitude of impact probably due to smaller sample size)
	Increase (0.32 percentage points)*	Cortina (2014)	1995-1997	Probit regression with instrumental variable approach
	Decrease (0.34 percentage points)	Howell (2017)	2012	Regression with instrumental variable approach, although weak identification could be a problem here
Conditioning on mobility	Increase (20-23 percentage points)	Bryan et al (2014)	July-December 2008	Regression with randomized control trial design
	Increase (40-55 percentage points)	Chetty et al (2017)	1991-2012	Regression with randomized control trial design
Implicitly reducing mobility	Decrease (8-11 percentage points)	Imbert and Papp (2018)	2010	Regression with propensity score matching and identification based on variation in program implementation across states and seasons
	Decrease (2.6 percentage points)	Neto (2008)	2004	Probit regression with propensity score matching
	Increase (0.7 percentage points)*	Angelucci (2015)	1997-1999	Regression with randomization design (depending on timing of Progresa allocation) based on panel data
	Decrease (0.2 percentage points)*	Stecklov (2005)	1997-1999	Difference-in-Differences using two rounds of data and using randomization design (depending on timing of Progresa allocation)

\* International migration

## 5. Discussion

The compilation of impact evaluations sparks several reflections. One, for example, is the importance of diagnosing the motivations for migrating and possible bottlenecks. This is key for designing effective interventions. In Mexico, we observe that reasons for migration include both labor and non-labor factors, such as education and marriage. The latter was also noticed as a factor in India. In Bangladesh, there was no significant increase in migration from households assigned to the ‘information-only’ group – i.e., participants who were given information about jobs in urban areas, but not cash or credit grants. This suggests that lack of information was not the main reason that held back rural households from moving to urban areas. Instead, it was a combination of credit

constraints and risk aversion that shaped decisions, including fears of not finding jobs in urban areas after the upfront investment (transportation costs to cities).

Such start-up costs feature in Mexico's *Procampo*. Under the program, there was no explicit restriction against migration of household members. Cortina (2014) argues that "... small cash transfers may ignite the migratory process by providing individuals with resources just sufficient enough to cover the start-up costs associated with migration. The subsidy reduces a household's 'capacity constraints' related to the material means to migrate."

The profile of recipients also matters for migration. In the case of Dibao, the program is a means-tested minimum guaranteed scheme that tends to reach some of the most destitute populations. These are unlikely to migrate and, as discussed, generated spillover effects at the community level – that is, they lent to others in villages to facilitate their mobility. Barriers to migration can be institutional. For instance, the origins-based residency (*hukou*) is an institutional factor affecting migration: while provinces establish different eligibility rules and there is experimentation in relaxing the *hukou* system<sup>15</sup>, the overall approach somewhat excludes about 167 million rural migrants. Similarly, in the case of social pensions, there is no explicit restriction in migration of household members as long as the pension recipient remains the resident of the county or province. The transfer amount, however, is small compared to pension programs in other contexts.

In South Africa, there is no explicit restriction on migration, but because of its generous amount, it had a greater impact on the ability of the poor households to send migrants to urban areas (Ardington et al. 2009). In other words, higher transfer size combined with no binding conditions can have spillover effects within the household.

The place-based design of the NREGA program is such that it attenuates the likelihood of mobility. Indeed, households need to apply with the local *Gram Panchayat* (village) and are required to provide local residency proof (within 5 km of an applicant's residence). This essentially deters prospective workers from seeking participation in the district apart from their own. Their migration calculus, therefore, is essentially a choice between the wages received as migrants in urban areas versus NREGA wages after considering search and travel costs, as well as associated risks inherent in migration. This happens when programs are designed as an employment guarantee in the place of origin; it is unlikely that other design variants, such as short-term public works in the aftermath of a natural disaster, will affect mobility in an equal measure.

In Brazil, there was no explicit restriction against migration or requirement for all family members to be present for a periodic health check-up. This was partially the case in Mexico: in *PROGRESA*, benefits were generally provided to female beneficiaries while males are the ones most likely to out-migrate. Furthermore, the two papers that assessed *PROGRESA* over the same timeframe – i.e., Stecklov (2005) and Angelucci (2015) – come to different conclusions about the effect of the program on international migration. As discussed, this stems from the reasons for migration assessed in the studies (general versus labor migration only).

One important issue that would require more extensive future discussion is the portability of benefits, or the ability of programs to be interoperable in different places. For instance, Kone et al (2017) show that in India, inter-state internal migration is particularly low. One reason is the lack of portability of social assistance. For example, accessing the Public Distribution Systems (PDS) requires state-based ration cards.<sup>16</sup> In Indian states where the PDS offers high level of coverage, unskilled migrants are relatively less likely to move. Therefore, even if social assistance may not explicitly deter migration through place-based public works, the non-portability of benefits can pose de-facto high transaction costs to migrate. Portability is probably less of a delivery issue for India's massive technological capabilities (*Aadhaar*, direct benefits, etc.); instead, it is likely part of a larger conversation on the economics (and political economy) of structural transformation, the possible haphazard nature of urbanization (including large-scale informal settlements), and how social assistance fits into such debate.

More generally, low and middle-income countries are undergoing significant transformation processes: the vertical integration of supply and value chains, increases in non- and off-farm employment, urbanization, slums, and the emergence of secondary towns are reshaping the livelihood landscape in several contexts (Reardon et al. 2017; Timmer 2017). This process, including the generation and distribution of job opportunities and services, may ultimately have a bearing on international migration. Social protection has been largely peripheral to such conversations: connecting how social protection can influence mobility through the choice of interventions (e.g., type of programs), their design (e.g., benefits structure), and implementation features (e.g., making benefits portable) would help integrate social protection into the migration agenda.<sup>17</sup>

## 6. Concluding remarks

The literature on social assistance has exploded over the past decade. Yet fewer than a dozen papers have examined whether and how cash transfers influence the mobility of beneficiaries. This paper takes stock of the initial evidence on the matter.

We found that social protection policy can play an important role in affecting the likelihood and pace of migration. In particular, “design matters” as impacts on migration are generally in line with the implicit or explicit goal of interventions: where programs could implicitly reduce migration, the likelihood of moving declined between 0.22 and 11 percentage points; among schemes that implicitly increase migration, the probability to move soared between 0.32 and 25 percentage points. Unsurprisingly, the latter effect was amplified in programs conditioned on mobility: under such design, the probability of migration increased between 20 and 55 percentage points. We also observed more complex impact pathways, with interventions that alleviate liquidity constraints acting as collateral for taking up loans for financing migration or generating spillover effects on intra-household risk management. Indeed, beneficiaries take decisions based on real or perceived costs and benefits. Such calculus may also consider how programs affect their interaction with household and community members, including allowing others to migrate.<sup>18</sup>

Our interpretation of the evidence is that transfers may act as an enabler of pre-existing household inclinations toward mobility. In other words, they can affect the degree or likelihood of migration, but may not be the determinant or *raison d’être* in mobility decision-making. This seems consistent with previous research on the effects of public social services on spatial mobility: the rationales for migrating are multiple – e.g., better living standards, brighter prospects for upward mobility, closer proximity to jobs, and in some cases fleeing violence – and these include but go beyond public services provision.<sup>19</sup> It may also be in line with the broader empirical regularity of an inverted U-shaped relationship between migration and development.

The paper scratches the surface of a deeper discussion on the role of social protection in the mobility agenda. For instance, here we only focused on a class of interventions in the social protection family, leaving out many other possible candidate programs that influence migration (e.g., contributory insurance schemes, active labor market policies, etc.). With 875 million people expected to be “on the move” by 2050 (World Bank 2016), there is a need to better understand the role of social protection systems to help manage labor mobility in places of origin and destination – including in movements of permanent and more temporary or seasonal nature. None of the

reviewed papers focused on low-income or fragile countries, nor on Africa (other than South Africa), suggesting a need to further the thematic analysis in those contexts.

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## Annex 1. Eligibility, targeting and benefits structure of social assistance programs

Program	Eligibility/Targeting	Benefits
Bangladesh “No Lean Season”	<ul style="list-style-type: none"> <li>Two districts (Kurigram and Lalmonirhat) in the seasonal-famine prone Rangpur region in Bangladesh</li> <li>Random selection of 100 villages in these two districts</li> <li>Random selection of 19 households in each village from the set of households that reported (a) that they owned less than 50 decimals of land, and (b) that a household member was forced to miss meals during the prior famine season</li> </ul>	\$8.50 cash or credit (non-binding) grants to households in 68 randomly selected villages plus an additional \$3 grant if migrants reported from destination
Brazil Bolsa Familia	<ul style="list-style-type: none"> <li>Two level geographic (federal and municipal) and household level means tested</li> <li>The original income ceilings for eligibility to the BFP program were set at a fixed monthly per capita family income of R\$100 (US\$48) for moderately poor families and R\$50 (US\$25) for extremely poor families. Later increased to R\$120 and R\$60</li> </ul>	The program provides transfers ranging from R\$15 to R\$95 (US\$7-45) per month to poor families based on number of children and poverty levels
China Minimum Income Guarantee Program (Dibao)	<ul style="list-style-type: none"> <li>Minimum income guarantee program providing top-up transfers to close the poverty gap. The method and level of transfers varies by province (e.g., reference could be minimum wage, basic needs, etc.).</li> <li>Eligibility within villages, local officials use a range of information about the household, including income, assets, as well as whether the household includes members that cannot work or have illness or disability</li> </ul>	Average transfer amount increased from 466 yuan (\$70) per recipient in 2007 to 1,344 yuan (\$200) per recipient in 2012 but depends on household income as well as threshold determined by locality
China Social Pension	<ul style="list-style-type: none"> <li>Program began with Beginning with 320 pilot counties in 2007, covered 838 counties by the end of 2010 and virtually all of rural China by the end of 2012.</li> <li>All residents 60 years or older are eligible to receive the pension</li> </ul>	The pension provided 55 RMB (\$8.5) yuan per month to every resident age 60 or older, with funds supplied by the central, provincial, and county governments. In 2012, this pension was raised to 60 RMB (\$9.5) yuan per month.
India National Rural Employment Guarantee Act (NREGA)	<ul style="list-style-type: none"> <li>Entitles every household in rural India to 100 days of work per year at a state-specific minimum wage.</li> <li>The act was gradually introduced throughout India starting with 200 of the poorest districts in February 2006, extending to 130 additional districts in April 2007, and to the rest of rural India in April 2008. Early districts were targeted based on poverty and agricultural profiles as well as share of tribal population.</li> </ul>	<ul style="list-style-type: none"> <li>Minimum wage based on state of residence (range from \$1 in 2006 to \$3.5 in 2011 per day)</li> <li>Guaranteed unemployment allowance if employment not provided 15 days after applying for work</li> <li>Guaranteed payment (in theory) 15 days after work is finished</li> </ul>
Mexico <i>Procampo</i>	<p>Agricultural subsidy in the form of cash transfers awarded to farmers under the following conditions:</p> <ul style="list-style-type: none"> <li>To be eligible for the PROCAMPO subsidy, the producer was required to own, have rights to, or</li> </ul>	It complements farmers’ income with a direct monetary subsidy for each hectare (~\$708 MP around \$70 USD for the year 2000 and ~\$963 MP around \$76

	<p>rent that land, and must grow any legal crop in any of the two agricultural cycles, Spring-Summer or Autumn-Winter</p> <ul style="list-style-type: none"> <li>• The upper limits on land-size to be eligible to receive PROCAMPO were 100 hectares of irrigation land and 200 hectares of rain-fed land</li> </ul>	for the year 2010) or a fraction thereof registered in the program
Mexico <i>Progresa/Oportunidades</i>	<ul style="list-style-type: none"> <li>• In rural areas, means tested with both geographic (first level) and household-level targeting</li> <li>• In urban areas, applicants come forward and fill out a form to determine eligibility</li> </ul>	<p>In 1999, the average annual benefit per household was US\$ 316, which included:</p> <ul style="list-style-type: none"> <li>• Education: US\$9.50 (105 pesos) in the third grade of primary to about US\$53 (580 pesos) for boys and US\$60 (660 pesos) for girls in the third year of senior high school</li> <li>• Nutrition: The nutritional component includes a fixed monthly monetary transfer equal to about US\$14</li> <li>• Variation in grant sizes depend entirely on number, grade, and gender of eligible children</li> </ul>
South African Old Age Pension	<ul style="list-style-type: none"> <li>• Males over 65 and Females over 60</li> <li>• South African Citizen or Permanent Resident</li> <li>• Means tested</li> </ul>	Monthly pension in 2010 was SAR1080 (approximately US\$ 100), nearly twice the median per capita income for the selected population
US Moving to Opportunity Project (MTO)	<ul style="list-style-type: none"> <li>• Experiment enrolled 4,604 low-income families living in five U.S. cities – Baltimore, Boston, Chicago, Los Angeles, and New York – from 1994 to 1998</li> <li>• Families were eligible to participate in MTO if they had children and resided in public housing or project-based assisted housing in high-poverty census tracts (those with a 1990 poverty rate of 40% or more)</li> </ul>	Families in all groups were required to contribute 30% of their annual household income toward rent and utilities. Those assigned to the treatment groups received housing vouchers that covered the difference between their rent and the family's contribution

## Endnotes

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<sup>1</sup> Empirical studies show that transfers can help accumulate human capital, build local infrastructure, enable risk-taking activities, spark local economic multipliers, and foster social cohesion.

<sup>2</sup> Academic databases included the following, with number of entries in brackets: EconLit (26), SSRN (15), ScienceDirect (39), JSTOR (17), and World Bank Open Knowledge Repository (172). Search engines and websites included Google, World Bank Publications, DFID, IFPRI, UNICEF, FAO, Inter-American Development Bank website, Asian Development Bank website, Poverty Action Lab, and NBER.

<sup>3</sup> For instance, more than half of the 22 studies reviewed by Hagen-Zanker and Himmelstine are from Mexico and South Africa.

<sup>4</sup> Inder and Maitra (2004), Posel et al. (2006), Sienaert (2007, 2008) and Ardington et al. (2009)

<sup>5</sup> The “graduation” program from Banerjee et al (2015) is designed to graduate ultra-poor households out of extreme poverty to a more stable state. This 24-month program provides beneficiaries with a holistic set of services including: livelihood trainings, productive asset transfers, consumption support, savings plans, and healthcare.

<sup>6</sup> Böhning and Schloeter-Paredes (1994) review ILO Employment Policy Recommendation guide (1984) that advised member countries where international migration takes place “to create more employment opportunities and better conditions of work in countries of emigration so as to reduce the need to migrate to find employment.” Similarly, one of the objectives of the 1984 Conference on Migration and Development in the Caribbean was to “identify development strategies, policies, and projects that would reduce pressures that have accelerated the rate of international migration [to the US]” (Pastor, 1985).

<sup>7</sup> Clemens (2014) finds that as poor countries get richer, emigration from those countries *increases* until countries reach an income per capita level of \$7,000 - \$8,000 in PPP terms. Only then emigration starts to *decrease* with more economic development.

<sup>8</sup> Migrants from lower wealth quintiles in Nepal are much more likely to travel to India where cost of migration is low whereas migration to the Persian Gulf countries and Malaysia peaks between third and fourth wealth quintile because both cost of migration and return on migration are higher for Gulf/Malaysia compared to India.

<sup>9</sup> While the scheme provided transfers to the elderly in much smaller absolute amount compared to that of South Africa (\$8/month compared to \$68/month in South Africa), it still represented around 10% of the average household income and about 60.2% of the average recipient’s income, making it an important source of earnings, especially for poor and credit-constrained households.

<sup>10</sup> The Imbert-Papp 2017 and 2018 papers use different datasets: one uses a village level dataset, the other a household level one. Also, even though they examine the same program, it is not within the same time-frame or location.

<sup>11</sup> We limit our discussion to social assistance programs only but it is worth mentioning that a number of studies have also tried to estimate the impact of microcredit on migration (Cai, 2017). Loan designated for migration purposes could help migrants from poor households to pay the upfront costs of migration, lower the need to borrow the money informally, and could be tied to other best practice pre-departure programs that help migrants make informed choices about the migration process.

<sup>12</sup> This was a requirement for the PAL food component (\$14), which reflected one-third of the *PROGRESA* grant amount on average. For a broader discussion on PAL, see Alderman et al (2017).

<sup>13</sup> Angelucci, personal communication, July 2018.

<sup>14</sup> No differential impact was noted for cash or credit provision. Note that loans were non-binding and at 0 percent interest rate.

<sup>15</sup> For example, Shanghai excludes those who receive unemployment benefits; Guangdong requires participation in birth control programs where relevant; several provinces exclude households whose economic circumstances arise from drug, alcohol, or gambling addiction. See Gentilini (2015) and World Bank (2013).

<sup>16</sup> The approach is similar to the SNAP program in the United States before 2002, when benefits were not portable across states (Gentilini 2015).

<sup>17</sup> For example, for an overview of bulging experience of safety nets in urban areas, see Gentilini (2015).

<sup>18</sup> As additional and extreme level of second-round effects, Alsan and Yang (2018) show that, though not at personal risk of deportation, Hispanic citizens in the US may fear their participation to safety net programs could expose non-citizens in their network to immigration authorities. They find significant declines in SNAP enrollment, particularly among mixed-citizenship status households and in areas where deportation fear is highest.

<sup>19</sup> See Lall et al. (2008).