An assessment of the impact of targeted interventions in mitigating the adverse drivers of irregular migration and forced displacement.[1]

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Abstract

This paper discusses how targeted interventions, either at the local or sectoral level, may shape migration and forced displacement dynamics. The paper then analyses the empirical evidence on the observed impact of targeted interventions on the propensity to move, either by choice or by force. The literature on the consequences of local and sectoral interventions on the behaviour of individuals in terms of human mobility remains limited, and new approaches are needed to capture more consistently the different channels of transmission. The paper thus offers potential research avenues and methodological options for better understanding of how targeted interventions can contribute to mitigating the adverse drivers of irregular migration and forced displacement.

Keywords: Targeted interventions; Forced displacement; Illegal migration; International migration intentions; Policy evaluation

JEL Codes : F22; C18; H50

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Une évaluation de l'impact des interventions locales sur l'atténuation des conditions défavorables favorisant la migration illégale et le déplacement forcé.

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Résumé

Cet article discute de la manière dont les interventions publiques au nveau local ou sectoriel peuvent affecter la migration et le déplacement humain forcé. Il analyse l'évaluation empirique concernant l'impact des interventions ciblées sur la propension à émigrer, soit par choix, soit de manière forcée. La littérature académique sur les conséquences des interventions publiques locales ou sectorielles sur le comportement des individus en termes de mobilité humaine reste assez éparse et de nouvelles approches s'avèrent nécessaires pour appréhender de manière plus appropriée les différents canaux de transmission. L'article propose dès lors plusieurs pistes de recherche potentielles et d'options méthodologiques afin d'acquérir une meilleure compréhension de la manière dont les interventions publiques spécifiques peuvent atténuer les effets des conditions défavorables favorisant la migration illégale et le déplacement humain forcé.

Mots-clés : Interventions publiques spécifiques ; Déplacement forcé ; Migration illégale ; Intentions de migration internationale ; Evaluation de politiques.

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Introduction

International migration is at the forefront of policy debates in most countries around the world. The global stock of international migrants has increased from 153 million people in 1990 to 281 million in 2020. The number of refugees and asylum seekers increased from 19 million in 1990 to 34 million in 2020 and represents 12 percent of the total migrant stock (UN DESA, 2020).[3] While the share of international migrants in the world population remains relatively low (growing from 2.9 percent in 1990 to 3.6 percent in 2020), the rapid increase in the number of refugees and asylum seekers (+109 percent over the last decade) raises serious concerns for both the populations of concern and their communities of transit and destination. The recent crises in Myanmar, Syria and Venezuela, in addition to many other protracted crises, have contributed to this acceleration of forced displacement, with increasing numbers of people around the world having to move as a consequence of conflicts, violence and disasters.

In parallel, many people decide to leave their countries of origin to find better opportunities in other countries. These migration flows are often considered 'voluntary', even though it is sometimes difficult to make a clear distinction between forced and unforced movements, especially in countries characterized by a lack of employment opportunities, bad governance and high levels of insecurity and violence. The consequences of climate change are also likely to push increasing numbers of people out of their home communities. While economic development often translates into increasing rates of emigration, and highly skilled individuals are more likely to migrate towards high-income destinations, less educated populations are often those who migrate in the worse conditions, especially through irregular channels. Irregular migration is dangerous in most cases and generates numerous casualties. It also leads to lower social and economic integration of immigrants in host societies and often fuels anti-immigration feelings.

Against this background, the international community has adopted international agreements to reduce the risks associated with irregular migration and forced displacement. On 19 December 2018, the UN General Assembly endorsed the Global Compact for Safe, Orderly and Regular Migration (GCM). Ratified by 152 countries, the GCM assigns an important role to public authorities, in migrants' countries of origin and destination alike, to shape the migration process and "facilitate safe and regular cross-border movements of people while preventing irregular migration". Whereas the first objective of the GCM highlights the need to "collect and utilize accurate and disaggregated data as a basis for evidence-based policies", Objective 2 aims to "minimize the adverse drivers and structural factors that compel people to leave their country of origin". The 2018 UN General Assembly also endorsed the Global Compact on Refugees (GCR), which provides a framework for international cooperation to generate sustainable solutions to refugee situations. The main objectives of the GCR are to ease the pressures faced by host

[3] Data on international migrants are based on the foreign-born population, whenever this information is available, and on foreign citizens in other cases. The stock of international migrants, therefore, includes refugees and asylum seekers (UN DESA, 2020).

countries, enhance the self-reliance of refugees, expand access to third-country solutions, and support conditions in countries of origin for safe and dignified return. The last objective, in particular, demonstrates the importance of addressing the root causes of refugee movements and preventing conflict, as spelled out in the GCR.[4]

To achieve the GCM and GCR goals, it is therefore important to have a clear understanding of the different drivers of human mobility, recognized as the conjunction of 'voluntary' migration and forced displacement, as well as the possible role of policy interventions in influencing the propensity of individuals to move internationally, either by choice or by force. This paper addresses this question by focusing on the possible impacts of targeted interventions conducted at the sectoral or local levels in countries of origin of potential migrants and forcibly displaced people.

The social sciences literature extensively addresses the determinants of international migration and covers diverse geographic, demographic, economic, social and environmental contexts of the societies in which individuals live. By contrast, the specific role that public authorities play in origin countries has received limited attention. Yet, the question of how to gauge the potential and effective impacts of different types of policy interventions on human mobility is of primary importance for national and local governments. In the same vein, development actors implement important programmes at the local or sectoral level that can have some direct or indirect effects on the propensity of individuals to move. In some parts of the developing world, intended emigration rates are so high that the consequences of policy actions on the propensity to move, either by choice or by force, can no longer be ignored, even though these policies have other explicit goals.

This paper addresses the issue of the evaluation of targeted interventions, with the aim of identifying future avenues of research and offering relevant methodologies that public authorities and development actors could use to assess the impact of their policies and programmes on human mobility. Section 1 provides a review of the literature devoted to the identification of the main drivers of international mobility and emphasizes the way variations in conditions faced by individuals can generate different effects on the propensity to move. Section 2 then discusses how the literature has addressed the question of the impact of policy interventions on both voluntary and forced international movements. While a limited number of studies have provided interesting results regarding the effects of such interventions, some caution needs to be taken before drawing clear-cut conclusions about their causal impact. Finally, Section 3 suggests a couple of potential research and methodological options to better assess the potential impact of policies and programmes on people's propensity to move.

1. Understanding the drivers of migration and forced displacement

The strand of the literature, along with one concerned by the impact of immigration on host countries' labour markets, is likely the most extensive on international migration. Today, more than 700 papers belonging to different fields of social sciences empirically investigate why people move. It is therefore important to clarify the various types of analysis in the literature in order to better understand the

[4] See: Global Compact on Refugees (2018), paragraph 9.

analysis concerning the local interventions.

The potential drivers of international mobility pertain to almost all dimensions covered by social and human sciences: geographic, economic, social, political and environmental, to list the most important. Determinants can be observed at different phases of the migration cycle, especially at origin and at destination, or can be specific to mobility corridors. At each phase, factors of migration can be local, national, or supra-national. Therefore, there are multiple ways of classifying the determinants of migration.

Different approaches have thus been used within the literature devoted to the determinants of international migration. It is possible to identify two main dimensions of differentiation across contributions.[5] First, one needs to distinguish between papers using mobility outcomes (observed stocks of migrants, magnitude of migration flows or occurrence of a move for a given individual) and studies looking at migration intentions, mostly coming from surveys. Second, while some papers use individual data on mobility (Barsbai et al. (2020), Borowiecki (2012), Buggle et al. (2019)), others rely on data aggregated at the level of an entity (municipality, region, country, etc.).[6] Papers using aggregate data on intentions have been developed to assess the importance of self-selection factors, for instance in the choice of preferred destination.[7] Papers combine intentions and individual data, for instance to capture the role of individual factors in terms of self-selection, such as age, personal income, personal networks or location.[8]

In many cases, human mobility is also a collective decision. If the decision is made at the family level, it is desirable to use data collected at the household level. Individual data, whether they concern real movements or intentions, need to be collected at the household level. This is an important element for the analysis of policy interventions since these can affect the decision to move differently for various members of the household. This type of analysis is part of the 'New Economics of Labour Migration', which recognizes the household as the key migration decisionmaker.[9] For instance, production subsidies can boost the productivity of an economic activity, hence increasing the attractiveness of the domestic location for the recipient, but at the same time can free resources that can be used to cover the costs

[5] Other dimensions can also be used but are disregarded here. For instance, some papers use monodic data, i.e., data that focuses just on the decision/observation of emigration and disregards the specific destination. In contrast, some papers use dyadic data, which enables capturing the impact of conditions specific to both the origin and destination, such as the distance or the linguistic proximity.

[6] See urveys of the literature using gravity models include Beine et al. (2016) and Head and Mayer (forthcoming) that use aggregate data. Papers include Ariu et al. (2016), Beine et al. (2011), Bencek and Schneiderheinze (2020), Bertoli et al. (2020b), Grogger and Hanson (2011) and Marchal et al. (2020).

[7] See, for a survey, Aslany et al. (2021). Papers of this kind include Beine et al. (2020b), Docquier et al. (2014), Manchin et al. (2014), Giulietti et al. (2018), Munshi (2004), McKenzie (2008), Mesnard (2009) and Mueller et al. (2020).

[8] Papers of this kind include Beine (2020), Bertoli and Ruyssen (2018) and Clemens and Mendola (2020).

[9] An important role for migration decisions at the household level is risk diversification. Emigration allows households to reduce their global exposure to shocks at origin and diversify the sources of risk they face (Chen et al., 2003). Dustmann et al. (2020) provide strong empirical evidence of household decisions as opposed to individual ones in the case of the internal mobility of people in China.

associated with the migration of another household member.

While it is sometimes difficult to make a clear distinction, it can be interesting to separately cover the drivers of voluntary migration as opposed to factors that force people to flee from their home countries. In some cases, such distinction is straightforward. Refugees and asylum seekers are forcibly displaced people, even though not all asylum seekers will eventually be granted refugee status. By contrast, most immigrants coming to the US under an H1B visa can be considered voluntary migrants. However, many population movements belong to the grey area in which human mobility is the complex result of incentives and pushing forces.

The reasons why some areas are more prone to emigration and forced displacement than others pertain to a large set of factors. Since human mobility involves mixed movements of individuals between an origin and a destination, these factors can be specific to each type of location. Even though it is not always possible to disaggregate them, the drivers specific to origin countries are referred to as 'push factors', while destination-specific drivers are called 'pull factors'. Given the focus of this paper on the potential effects of targeted interventions in origin countries, one can identify the following categories: (i) migration context; (ii) geography and demography; (iii) economic factors; (iv) human capital and social context; (v) governance; (vi) violence, insecurity and conflict; (vii) environment and climate change; (viii) gender.

The migration context refers to past and current migration dynamics and policies that contribute to shaping the mobility patterns in countries of origin. It includes the weight of networks (Beine et al., 2011, Munshi, 2004; Comola and Mendola, 2015), the costs of moving abroad and information channels (Roca Paz and Uebelmesser, 2021), as well as migration policies in countries of both origin and destination. Related to that, risk aversion of the potential emigrants is a key factor (Jaeger et al. , 2010)

The geographic and demographic environments play a key role in explaining why emigration rates are higher in some countries than in others. The location and the geographic conditions of the area are related to: (i) the situation of the country of origin itself; (ii) the specificities linking the origin and the destination of the movement. Demographic conditions in origin countries play a key role in explaining variations of emigration across countries and regions. For instance, age is a major determinant of observed mobility (McKenzie, 2007) but also of aspirational emigration (Beine, 2020).

Income and, more generally, economic development are by far the most important economic factors in international migration and have been the focus of the pioneer contributions explaining the intensity of migration and the selection of migrants (Sjaastadt, 1962; Borjas, 1987). Income plays a more complex role than expected at first glance, and it is important to distinguish various components of the income dimension. . Lack of convergence between lower-income and higher-income countries or improvement of economic conditions in traditional destinations will boost desired emigration (Borjas, 1987). The wage differential between sending and receiving countries is one of the most robust determinants of international migration, together with the relative employment opportunities (Todaro, 1969). While income differentials among countries embed a structural component, they are also affected by variations in business cycles (Pissarides and McMaster, 1990; Bertoli et al., 2016; Beine et al., 2019), but also

between lower-income and high-income countries (Simpson and Sparber, 2013). Finally, economic developments at origin generate specific effects on emigration patterns (Mayda ,2010, Djajic and Vinogradova, 2014; Dao et al., 2018, Clemens and Mendola, 2020). For instance, an important mechanism, on origin countries' side, is the role that poverty or liquidity constraints play for prospective emigrants. At low levels of income, would-be migrants might be simply too poor to cover migration costs, even if the gains of migration are substantial.

Related to economic factors, labour market institutions and employment are important determinants of emigration patterns. Nevertheless, their impact is complex and is very often context-specific (Bossavie et al. , 2020).

Beyond the geographic, demographic and economic drivers of migration, the education and social context can have a significant impact on human mobility. Education or skill transferability is an important component of the probability of success of a migration project. Education is correlated not only with wage at destination but also with the probability of employment at destination. Positive selection in terms of education is one of the most robust stylized facts regarding voluntary human mobility (Docquier and Rapoport, 2012).

The degree of socio-economic inequality is often considered a crucial factor shaping the intensity, but also the type of movements, between two countries. In his self-selection model, Borjas (1987) analyses the relation between income distribution and migrants' skills. The model predicts that immigrants from countries with a lower level of income inequality tend to be positively selected (i.e., less skilled than the average worker in both destination and origin countries). While relative inequality affects the type of migrants, it is also an important determinant of the intensity of migration flows.

Social protection is likely to be a determinant of desired emigration. If individuals have no access to social protection, their opportunity cost of emigrating is lower. Conversely, if individuals benefit from social protection and have access to affordable health services, this might induce them to stay. For instance, Khoudour-Castéras (2008) brings compelling evidence of a negative effect of social protection on emigration in the context of the implementation of social legislation in Germany during the 1880s.

The quality of institutions in a country is an important factor in the living conditions of individuals. It influences the country's economic development and, in turn, plays a role in explaining emigration flows from developing countries. When citizens do not trust their governments, they will have more incentives to leave their countries. In this regard, political instability and corruption, because they translate into worse and unpredictable economic conditions, more insecurity and a lower quality of life, contribute to increasing migration outflows (Baudassé et al., 2018; Poprawe, 2015).There is some strong evidence that the quality of institutions influences both desired and observed emigration.

Conflicts, civil wars, coups and other political crises are major factors leading to forced displacement. By the end of 2020,[10] there were 26.4 million refugees worldwide and over 4 million asylum seekers, as well

[10] UNHCR, Global trends: forced displacement in 2020 (https://www.unhcr.org/en-us/figures-at-a-glance.html).

as 3.9 million Venezuelans displaced abroad.[11] Syrian refugees currently amount to more than 6 million worldwide. Other major countries of origin of refugees, such as Afghanistan, Myanmar, Somalia and South Sudan, have been equally affected by significant conflicts in the recent past. The current Ukrainian crisis can be seen as a further confirmation of the importance of conflicts in explaining sudden surges of inflows of refugees.

While conflicts and civil wars are events that affect individuals globally and can therefore lead to collective displacements, violence and insecurity exert effects more at the individual level.

A large body of empirical literature has recently been devoted to the assessment of environmental factors and climatic shocks in fostering emigration from affected countries. Environmental factors and climatic shocks include both fast-onset and possibly unexpected factors, such as natural disasters (droughts, floods, earthquakes, storms and hurricanes), and slow-onset climatic factors, such as warming climate and variations in rainfall (as well as the resulting rise in sea level). Fortunately, this body of literature has recently been summarized in numerous surveys (Cattaneo et al., 2019; Berlemann and Steinhardt, 2017; Millock, 2015). The findings and the importance of the methods used have also been analysed and summarized through the lens of meta-analyses (Beine and Jeusette, 2021; Hoffmann et al., 2020).

Women's reasons for moving highlight some differences with respect to their male counterparts (Docquier et al., 2012). In general, in assessing the role of some targeted interventions, it is important to account for the gender dimension.

While useful for exposition purposes, a typology of the drivers of migration and forced displacement into specific categories tends to overlook the fact that it is often the interaction of these factors that explains why people leave their countries of origin, either by choice or by force. As an example, Infosegura (2020) shows that, while they are important drivers of emigration in Central America, the impact of violence and insecurity is very often combined with the role of economic factors, such as income and living conditions.[12]

2. Effects of targeted interventions at origin on emigration

This section tries to analyse the role that international aid and targeted interventions, either at the local or sectoral level, can have in terms of human mobility. It focuses on the evidence concerning the relationship between interventions and programmes implemented in migrants' areas of origin on the one hand and emigration outcomes or intentions on the other. In line with the large diversity of determinants of mobility mentioned previously, the programmes and interventions can exert complex and indirect effects on the propensity to move internationally. These effects call for a careful definition of who could be affected. Economic interventions such as subsidies or training programmes targeted at

[11] 5.6 million in May 2021 (https://r4v.info/es/situations/platform).

[12] In El Salvador, for instance, while 7.5 percent of those expressing a desire to emigrate mention insecurity issues alone as the main reason, 28.2 percent mention a combination of insecurity and income issues.

some individuals can affect decisions at the household level and can, therefore, influence the decisions and actions of other individuals.

The section reviews the literature that addresses the efficiency of international aid in curbing emigration and covers the evidence regarding the potential effects of targeted interventions, especially those with a sectoral or local dimension, on mobility intentions and outcomes in developing countries.

2.1. International aid and migration flows

Before focusing on the role of targeted interventions at the local or sectoral level, it is useful to analyse the literature on the impact of international aid to help better understand the various channels at stake when understanding the role of policies and programmes. The various effects of international aid put forward in the literature illustrate the complexity of the impact of a policy intervention on human mobility.

By increasing the number of available resources in origin countries, international aid can have a direct or indirect effect on beneficiary countries' emigration rates (Dreher et al., 2019; Marchal et al., 2020). First, along the human capital channel (Borjas, 1987), by reducing the wage differential, aid is a self-selection factor aimed at decreasing the incentive to emigrate. If aid is effective, this can lead over time to a reduction in the development gap with the rest of the world. This has been coined the 'development channel' of foreign aid (see Lanati and Thiele, 2018, for migration in general, and Dreher et al., 2019, for refugee flows). However, by reducing the liquidity constraints that prevent individuals from covering migration costs, aid can also act as an out-selection factor and increase emigration in some contexts. This might happen if aid is unconditional. This is the 'credit constraint channel'. An additional channel might be that bilateral aid can boost the relationships between donor and beneficiary countries, which in turn can increase the attractiveness of the donor country as a privileged destination. This is the 'information channel'. Finally, aid can be strategically used by the donor as a way to influence the policies of the receiving countries, for instance, by preventing or restricting undocumented migration. This conditionality is called the 'instrumentation channel'. If this is effective, bilateral aid can exert a negative effect on emigration. Therefore, we see that aid exerts different mechanisms on emigration, with potential effects in opposite directions.

It is, therefore, not surprising that the empirical evidence suggests that the relationship between aid and observed emigration is not straightforward and might be context-dependent (Clist and Restelli, 2020). Clemens and Postel (2018) review part of the literature on the relationship between aid and emigration. Their conclusion is twofold. First, there is little evidence in favour of a development channel. Even if aid were effective, it would take too much time to deter migration incentives, as the speed at which the development gap can be reduced is too slow to produce tangible effects. Second, the existence of the development channel is highly related to the type of relationship between income and emigration. For low-income countries, i.e., countries that are the main recipients of aid, this relationship is likely to be positive, which suggests that the development channel is non-operative (Marchal et al., 2020). Overall, the quantitative impact of aid seems very limited for both regular and irregular migration.

2.2. Assessing the impact of targeted interventions on human mobility

To mitigate the adverse drivers of irregular migration and forced displacement, it is key to understand how specific programmes and interventions can affect, directly or indirectly, mobility intentions and outcomes. Targeted interventions analysed here are based on the following objectives: (i) generating employment opportunities; (ii) alleviating poverty; (iii) protecting against adverse shocks; (iv) providing access to better information; (v) strengthening social cohesion and governance; (vi) preventing insecurity and violence and preventing conflicts; (vii) mitigating the consequences of climate change.

2.2.1. Generating employment opportunities

Conditions in the labour markets (at origin and destination) are intrinsically linked to economic migration. Changes in these conditions can affect the extent to which individuals plan to move internationally and succeed in doing so. Policies that affect these conditions by attempting to create more and better employment opportunities and improve the employability of potential migrants, especially youth, can therefore affect emigration outcomes.

Employment agencies

The creation of employment agencies that provide more information about vacant jobs at home is likely to affect the willingness to move. The degree of mismatch in the labour market is likely to be important in developing countries and can explain the high rate of emigration intentions. The creation of employment agencies that provide information leads to an improvement in the matching between employers' needs and the labour supply emanating from job seekers. The specific impact of employment agencies in origin countries on the propensity to migrate has not, to the best of our knowledge, been addressed in the literature.[13] OECD (2017) finds, nevertheless, that in most countries where employment services were offered, those who found jobs through these agencies were more willing to stay. However, interpreting this result as causal evidence should be done with caution since selection of individuals into these services might drive the results. The low rate of usage of these services suggests that many individuals self-select into other forms of job seeking.

Public employment programmes

Public employment programmes are another way to influence the evolution of the labour market. These programmes take diverse forms. They vary by purpose, duration and the level of income they generate, as well as by the covered population. Depending on the exact features, the use of the additional income of beneficiaries might trigger different effects in terms of emigration. Whether the incentive effect dominates the liquidity constraints effect will determine the net effect on emigration intensity. Results from OECD (2017) vary across countries, but when statistically significant effects emerge, they suggest that the effect of these programmes on emigration is positive in low-income countries such as Haiti and Cambodia. In general, the effect of this type of intervention seems limited. Results should be taken with

[13] The literature addressing the impact of hiring agencies based in the origin countries on the emigration of workers is not covered here.

caution in the absence of clear identification strategies to control for some selection bias. Ahuja et al. (2011) study the impact of the Mahatma Gandhi Rural Employment Guarantee Act (MGNREGA) implemented in rural India in 2008. They find contrasting results on the out-migration intensity of beneficiaries: while the impact on emigration is negative in the less developed district of Mewat, the beneficiaries tend to migrate more in the more economically advanced district of Karnal. Data also confirm an extensive self-selection process of participation in those programmes, with households owning some land tending to refrain from taking part.

The share of informal work is significant in many developing countries. OECD (2017) reports that the proportion of informal jobs can be as high as 70 percent in countries such as Côte d'Ivoire. Given that benefits other than wages come with a formal contract, any intervention that would lead to a conversion of informal jobs to formal ones could translate into a drop in emigration intentions. OECD (2017) reports a negative correlation at the aggregate level between the share of formal contracts for non-agricultural workers and the willingness to emigrate. This relationship is also obtained with individual data in the case of Morocco but not for other developing countries. There is yet a need for a specific causal identification strategy to refine the evidence. Also, interventions leading to a conversion of contracts are in line with interventions increasing social protection for potential emigrants, which can have some impact on emigration (see below).

Vocational training

Vocational training has been implemented in many countries. Like training programmes in agriculture, vocational training increases employability and can exert different effects on the propensity to emigrate. UNDP is involved in projects of this kind. For instance, the SALAM Project, financed by the UN and the Government of Finland, supports technical vocational education and training in Afghanistan. This project was launched in 2017 for a period of four years.

OECD (2017) finds that vocational training tends to increase the willingness to emigrate. This implies that people might participate in these programmes with the explicit goal of emigrating, in line with the incentive effect of emigration on human capital (Beine et al., 2008; Abarcar and Theoharides, 2020). Nevertheless, the net effect on the actual variation in the number of educated people might depend on the degree of matching between the skills accumulated in these programmes and the demand in the local labour market. Another effect of these programmes is that, in the medium run, higher skills usually come with an increase in income, which might lead to the emigration of another household member. Evidence given by OECD (2017) seems to show that the household effect is stronger than the individual effect. There are apparently no specific studies that investigate the impact of vocational training in origin countries on the propensity to move.[14]

Training programmes in agriculture also attempt to lead to an improvement of the productivity of farmers, hence increasing the sustainability of their activities. These interventions can potentially

[14] However, an ongoing research project looks at the effect of easier access to vocational training on the willingness to emigrate in The Gambia using a lab-in-the-field experimental approach (Baj et al*.,* 2021).

generate two effects. On the one hand, they may increase employability, at home and abroad, to the extent agricultural skills are reasonably transferable across borders. This improvement might increase the propensity to emigrate. In economies characterized by a declining agricultural sector, training might be seen as a strategy to develop one's skills and increase the attractiveness of the foreign option. This incentive effect leads to higher emigration, as found in Cambodia or Georgia by OECD (2017). This effect holds at both the individual and household levels. On the other hand, improvement in skills tends to boost productivity and income generated by current agricultural activities, which may increase the attractiveness of the home location and decrease the incentive to emigrate.

2.2.2. Alleviating poverty

As highlighted in the previous section, one key barrier to increased mobility is the financial constraint that prevents poor people from moving abroad. For this reason, economic development does not always translate into less emigration. In fact, an increase in GDP per capita tends to induce more migration movements from developing countries. In this respect, interventions aimed at reducing poverty and alleviating the financial constraints that prevent the investment in, for instance, human or physical capital might have an impact in terms of human mobility. But this impact might be ambivalent. It is therefore important to study in more depth the effects of poverty-alleviation interventions, for instance, through conditional cash transfers or production subsidies, on beneficiaries' propensity to move.

Conditional Cash Transfers (CCTs)

One of the most-used educational programmes in developing countries,[15] CCTs can affect education choices and migration in different ways. CCTs are likely to decrease incentives to leave by subsidizing education. Nevertheless, even if this incentive effect holds, the global effect might vary over time: CCTs might have a negative effect in the short run but a positive effect in the long run, once the targeted education level has been achieved. CCT programmes might nevertheless have a positive effect even in the short run if allocated to households that would have invested in education even in the absence of such support. In that case, the cash transfer might relax liquidity constraints. This really depends, therefore, on the initial income level of the beneficiary household.

The discussion above stresses the importance of the conditionality dimension of the transfer in generating particular effects on migration. Enforcement of the CCT ensures the cash is used primarily for the purpose of the transfer. By contrast, when cash transfers are unconditional or when conditionality is not enforced, this additional source of income may translate into an increase in emigration at the household level.

The diversity of effects of CCT programmes and their variability in the degree of enforcement of the allocation rules explains the mixed evidence reported in the literature. The degree of conditionality of the CCT programmes seems to be of primary importance. Angelucci (2012) reports that in the short run, the CCT programme *Oportunidades* in Mexico might have had no effect on some households but positive effects on low-skilled households. This is consistent with the fact that these monetary transfers relax

[15] Angelucci (2012) reports that, as of 2009, there were 29 CCT programmes in the developing world.

some of the constraints that prevent more people from moving. OECD (2017) thus identifies positive effects on intended emigration in Haiti, where the conditionality dimension of transfers is not enforced. By contrast, in countries with higher levels of development and stronger enforcement of the conditions, effects tend to be negative. This is consistent with the negative effect of subsidized education on emigration. However, the evidence tends to confirm that in the long run, CCTs contribute to increasing emigration (Azuara, 2009; Rubalcava and Teruel, 2006). Scholarships seem to exert similar effects as CCT programmes, with mixed evidence on emigration intentions and outcomes. OECD (2017) finds positive effects in low-income countries, such as Burkina Faso, but negative effects in middle-income countries, like the Philippines. There was also some evidence in favour of no effect of scholarships on the decision to migrate.

Production subsidies

The impact of production subsidies is related in some senses to the effect of international aid. Subsidies are targeted to specific individuals or sectors, of which the agricultural sector is one of the main recipients in developing countries. Subsidies can exert an incentive to stay by increasing the efficiency of the economic activity in the home location; hence it is attractive, in line with the development channel of aid. On the other hand, subsidies might be used to increase the capacity to fund emigration costs, in line with the so-called 'liquidity constraint' channel.

Whether the development channel or the liquidity constraint channel dominates depends on two prominent factors. First, the impact might depend on the context at home and on the initial level of productivity of the subsidized sector. OECD (2017) finds that agricultural subsidies tended to reduce emigration at the household level in lower-middle-income countries like Morocco and the Philippines but tended to increase emigration in low-income countries, such as Cambodia, Burkina Faso and, to a lesser extent, Côte d'Ivoire. The rationale might be that, in the first case, the incentive effect dominates while, in the second case, the liquidity constraint effect dominates. This finding is consistent with the global evidence drawn from more developed economies. Investigating the role of the Common Agricultural Policy in the European Union at the regional level, Olper et al. (2014) find that production subsidies, as well as structural aid to rural regions, contributed to maintaining employment in rural European regions. In particular, Pillar I subsidies (production subsidies) had a negative effect on the out-migration intensity of the farming labour force. A second dimension is, therefore, the conditionality of the subsidies. Subsidies conditional on investment, such as subsidized loans, might trigger a specific development effect, while subsidies for seeds or for fuel in agriculture might be seen as just an additional amount of income and do not increase investment activity to the extent that these costs would have been incurred without the subsidies (the so-called 'dead weight' effect).

2.2.3. Protecting against adverse shocks

Another purpose of targeted interventions with potential effects on the propensity to move is to decrease the vulnerability of the individuals to the occurrence of different shocks. Two main types of adverse shocks are considered here: economic and personal shocks.

Insurance mechanisms

Insurance in the agricultural sector may have mixed effects in terms of human mobility, partly because of the variety of insurance mechanisms. OECD (2017) finds that insurance mechanisms tend to foster emigration in Georgia. In this case, insurance tended to generate stable and guaranteed sources of revenues, which in turn allowed for financing emigration at the household level. This contrasts with the negative effect on emigration observed in Armenia, where insurance takes the form of a programme compensating ex post for losses associated with natural shocks. This suggests that to generate an incentive effect rather than a liquidity constraint effect, insurance in the agriculture sector should take the form of in-kind benefits usable in the future and not cash-based benefits contingent on current agricultural output.

Increasing social protection and better access to health services

Several projects conducted by the UNDP and its partners explicitly include interventions to improve essential local services such as sanitation and access to health, social and education services. An example of such a programme is the Migration and Local Development project in Moldova, which amounted to about US$1 million between 2012 and 2018 (UNDP, 2019).

The evidence drawn from contemporaneous migration patterns is more mixed. OECD (2017) finds, for a sample of developing countries, a negative correlation at the aggregate level between the share of public expenditures in GDP and the rate of desired emigration. Such correlation does not convey a clear causal dimension but reflects that both dimensions are intertwined. The observed impact of social protection depends on the type of individuals benefiting from these programmes and is mixed. Hagen-Zanker and Himmelstine (2013) review 29 studies on the relationship between social protection and emigration. Different types of programmes are covered: conditional cash transfers, unemployment insurance, free medical care, day care for children, old age pensions and employment guarantee schemes. The studies cover international mobility and internal migration and use both individual and aggregate data. Half of the studies find a positive effect, while the other half find a negative effect of social protection on migration.

The results vary by types of programmes, for instance, those regarding the conditionality dimension. Effects depend on the context, especially the level of development at origin. The more fragile the context, the stronger the effect on mobility in the long run. In any case, while social protection and emigration are often complementary, the former cannot systematically curb emigration in isolation. In line with this global evidence, OECD (2017) reports that access to a labour union is associated positively with desired emigration in some countries. Having access to health services through a labour contract is also positively associated with planned emigration in Costa Rica. Denied access to health care leads some individuals to be less willing to emigrate in countries such as Armenia, Costa Rica, the Dominican Republic and Morocco.

2.2.4. Providing access to better information

Improving the quality of information can have an impact on both intentions to migrate and the conditions in which people move. In this respect, several countries, such as India, Nepal, the Philippines and Uganda, have adopted programmes to provide better information to prospective emigrants. These programmes

focus on preparation plans for departure, administrative immigration procedures, advice for settlement, job search, financial management, building a network at destination and maintaining ties with the origin country. Barsbai et al. (2020) study the impact of these kinds of programmes in the form of pre-departure orientation seminars organized by the Filipino authorities for people willing to migrate to the United States. They find little effect on settlement and employment outcomes. Nevertheless, they find that individuals benefiting from these programmes tend to rely less on networks at destination. These results suggest that these information programmes substitute for networks and that networks play an important role in the acquisition of information for immigrants at destination.

The impact of such interventions might strongly depend on the details of the content of these programmes. Depending on the type of information that is provided, but also depending on the cultural distance between the origin and the destination, these information interventions at the origin might be more or less effective. While interesting, the absence of a significant impact on employment found by Barsbai et al. (2020) should be confirmed in other contexts and with other types of information programmes.

Information can also respond to the purpose of curbing undocumented migration and emphasize the dangers of the mobility process. Using an incentivized lab-in-the-field experiment in rural The Gambia, Bah and Batista (2020) find that information that corrects the expectations of potential emigrants can alter their decision to emigrate. In particular, having accurate numbers about the probability of obtaining legal residency status and the probability of dying while crossing the Mediterranean Sea marginally changes the decision to engage in irregular migration.[16]

2.2.5. Strengthening social cohesion and governance

Social cohesion is a complex and multi-dimensional concept that can be defined as "the extent of trust in government and within society and the willingness to participate collectively toward a shared vision of sustainable peace and common development goals" (UNDP, 2020b, p. 16). More cohesive societies imply fewer inequalities, better health and education outcomes and more support for democracy and institutions. In this respect, good governance and rule of law, combined with low levels of corruption, can only contribute to improving social cohesion. Therefore, interventions aimed at strengthening social cohesion and governance are likely to have a significant impact on human mobility.

While the effects of institutions on migration and forced displacement have been frequently assessed in the literature, research on the effects of social cohesion on the decision to move is quite limited, probably due to the methodological challenges in finding the adequate indicators to 'measure' social cohesion. Yet, governance and social cohesion are areas where development actors can play a key role at both the national and local levels. Even though interventions in these areas do not explicitly target a specific outcome in terms of migration or forced displacement, the indirect or unintended effects are potentially important and are worth being evaluated.

[16] Paradoxically, since potential emigrants from The Gambia tend to overestimate the death risk in crossing the sea, the study finds that providing official figures tends to increase the likelihood of irregular emigration.

2.2.6. Preventing insecurity, violence and conflicts

While development actors implement programmes to fight against insecurity, violence and conflicts, destination countries sometimes express the same interest in decreasing the immigration pressures they face. A new component of the United States immigration policy reform proposed by the Biden Administration involves the implementation of programmes to improve security conditions in the Northern Triangle of Central America, from where originate many documented and undocumented immigrants in the United States. Initiatives, such as Infosegura (2020), which aims precisely at formulating better evidence-based and gender-sensitive policies to improve security in Central America, can help assess the impact of such policies on the propensity to move, either by choice or by force.

In the same way, interventions aimed at fostering security at a local level, such as the Lake Chad Stabilization initiative,[17] which provides response mechanisms for local authorities to curtail Boko Haram insurgency at the Nigerian border, can indirectly contribute to curbing irregular migration and forced displacement in the region.

2.2.7. Mitigating the consequences of climate change

With the potential growing impact of climate change and environmental degradation on human mobility, sectoral interventions aimed at creating climate-resilient activities are key to help address the adverse drivers of irregular migration and forced displacement. In this respect, UNDP carries out a number of projects that could contribute to mitigating both climate change and its impact on the propensity to move. The Lake Chad Stabilization initiative, for instance, undertaken in collaboration with the Lake Chad Basin Commission and the Global Environmental Fund for a period of two years (2019–2021), focuses on initiating the implementation of the regional Strategic Action Plan with the overall objective of achieving climate-resilient activities. Likewise, the Disaster Response and Recovery Facility (DRRF) aims to enhance disaster response and recovery functions to address natural disasters and humanitarian crises in Bangladesh. In Honduras, the Systemic Resilience and Reduced Vulnerability of Urban Poor Project aims at increasing resilience to climate change through better management and planning of water resources. These examples illustrate the type of climate-change initiatives with potential impacts on human mobility that would be worth evaluating.

Evidence on the potential effects of these programmes can be drawn from Benonnier et al. (2019), who provide some global evidence about the relationship between irrigation and actual emigration. They show that irrigation reduces the poverty trap associated with higher temperatures. Since climate change and decreasing water resources for agriculture tend to have a negative effect on mobility (the so-called 'trapped-population' phenomenon), improved irrigation tends to increase internal migration in these countries. This illustrates the complex relationships between interventions of this type and the expected outcomes in terms of human mobility.

3. Methodological approaches

[17] https://www.africa.undp.org/content/rba/en/home/presscenter/articles/2021/stabilization-in-the-lake-chad-basin--rebuilding-communities-acr.html

While there is a growing concern among policymakers, especially in high-income destination countries, and development actors about the need to mitigate the adverse drivers of irregular migration and forced displacement, the means to do so are not clear. The fact that economic development tends to translate into more emigration from developing countries rather than less means that investing in development does not automatically lead to a reduction in migration pressures in most vulnerable countries. However, targeted intervention at the local or sectoral level is likely to affect the propensity to move. In this respect, the goal should not be to prevent people from migrating but rather to reduce the worst forms of human mobility, which are often related to irregular migration and forced displacement. The methodological approach developed here aims for a better understanding of the way targeted interventions can have an impact on human mobility intentions and outcomes, with the objective of designing the policy tools that will help people migrate by choice and, to the extent possible, through legal pathways.

3.1. Monitoring migration and forced displacement pressures

A first step towards mitigating the adverse drivers of irregular migration and forced displacement is the design of a tool that can help monitor the different factors that influence people's propensity to move. In this respect, current emigration rates, whether they are drawn from actual movements or from intentions, might be a rather poor predictor of future migration movements. The reason is basically twofold. First, a given individual might not have accurate expectations about the future or may simply be unable to integrate future trends about their current place of location into their decision to move. For instance, individuals located in areas prone to natural disasters can have a biased assessment of the future probability of occurrence of these natural disasters. Furthermore, some natural disasters, such as earthquakes, are to a large extent unpredictable in most of the key dimensions (magnitude, exact location, timing).

A second reason is that fundamental factors of emigration are likely to change. A good example is provided by demographic trends. Young people are more prone to migrate. Women are, in general, less migratory as principal migrants, but tend to rely a good deal on networks when they exist.[18] Large families tend to send emigrants for risk diversification, which also explains the role of fertility on top of a simple proportional relationship between population and migration. In an area in which fertility is high, where the share of young people is high and networks exist, one can expect that future emigration pressures will be as high or even higher than current ones. By contrast, in areas characterized by demographic transition (decreasing fertility), future pressures are expected to be lower than current ones.

This calls for going beyond the simple use of current emigration rates. One solution is to design and operationalize a dashboard of key indicators of emigration and forced displacement pressures. These indicators should integrate past and current emigration rates at the national and sub-national levels, as well as the intentions to move abroad, such as revealed through surveys (see below). In addition, the

[18] For instance, in 2018, while they represent a more or less equal share than men in immigration, female immigrants in the United States were more likely than men to obtain legal permanent resident status based on the family-based preference channel and as immediate relatives of a US citizen. By contrast, male immigrants were more likely than their female counterparts to get the legal permanent resident status based on employment (see American Immigration Council, 2020, for further details).

dashboard could incorporate a series of factors in line with the typology of drivers discussed in Section 1. They should integrate all important dimensions, such as demographic, economic, social and environmental ones. They also should include indicators likely to induce forced displacement, such as natural disasters and conflicts. The exact composition of these indicators and the optimal way to combine them is beyond the scope of this paper but should be developed in future research.

3.2 Assessing the impact of targeted interventions on migration and forced displacement

3.2.1. Intended and unintended effects of targeted interventions

One important dimension of targeted interventions, either at the local or sectoral level, concerns the intentionality of the programmes. The theoretical development channel of international aid suggests that such interventions might be implemented to boost development with the explicit purpose of curbing intended and effective people's movements. This view is in line with Objective 2 of the GCM, which clearly highlights the need to "minimize the adverse drivers and structural factors that compel people to leave their country of origin". Nevertheless, this view has lost some credibility over time among researchers and policymakers, and thus the number of such programmes seems to have significantly decreased over time.

As a matter of fact, most policies aimed at improving the living and working conditions in source countries do not include an explicit purpose related to emigration. Most interventions follow multiple objectives related to welfare as well as living and working conditions. But the implemented policies and the improvement of security may still have an indirect impact on the propensity to move. It is, therefore, important to think about how to evaluate the effect of local or sectoral policies on emigration (both voluntary and forced), even though, in most cases, the potential impact is indirect or unintended. The unintended dimension of targeted interventions indeed has an impact on how to evaluate these initiatives in a consistent way.

3.2.2. Targeting the right population

Because local and/or sectoral interventions are costly and donors and funding institutions have limited resources, it is crucial to design specific tools to evaluate the effect(s) of such interventions. One methodological proposal is to target sub-populations in such a way that evaluation is meaningful. One option is to carry out interventions in territories where potential emigration rates are relatively high. The rationale is that high observed emigration rates usually correspond to high levels of intentions of emigration. As shown by Docquier et al. (2014), while there is a huge discount from intentions to realizations of emigration, high levels of intentions are observed in countries located in regions with high observed emigration rates. Nevertheless, this is not true for low emigration rates.

How can such an approach be operationalized? An interesting source of information is provided by the Gallup World Poll Surveys (GWPSs). Gallup conducts surveys in more than 160 countries (including 99 percent of the world's population aged 15 and over). In most countries, at least 1,000 individuals are surveyed through phone and face-to-face interviews (Gallup, 2018). The sample of individuals interviewed is representative of the resident population older than 15 years. Two relevant questions on migration desires are raised. The most important question for the purpose of this paper is: "Ideally, if

you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?" The idea is to exploit the information related to the first question. An additional appealing feature of the intention data is that GWPSs are carried out in all the various geographical units within one country. It is, therefore, possible to identify the areas that exhibit the highest levels of intended emigration rates. A second important advantage concerns irregular migration. While actual emigration rates might not include accurately undocumented movements, the question in the GWPSs is relevant for intentions of emigration of regular and irregular types.

It might also be relevant to look at the sub-national level to understand whether there is a significant variation of these rates across countries. For each country, we use the GWPSs over all available waves containing a regional breakdown of the location of the respondents over the 2006–2019 period. Since the respondents are not the same across waves, we pool the data and treat this as a cross-section. Table 2 provides descriptive statistics relative to the desired emigration rates for 34 low- and middle-income countries. Columns (1) and (2) provide the maximum and minimum desired emigration rates across the regions of each country, while column (3) gives the range. Column (4) provides the standard deviation as a measure of the degree of heterogeneity within countries. Columns (5) and (6) provide the unweighted and weighted mean of the desired emigration rate. Column (7) provides the number of regions considered by the GWPS for the country and column (8) the number of waves on which these figures are based. Column (9) provides the average number of respondents per wave in the GWPS, while column (10) reports the observed annual emigration rates computed from bilateral migration stocks. These rates are inferred from differences in stocks between two censuses (2015 and 2010) and are subject to measurement errors.

Statistics from Table 2 suggest that for a subsequent number of countries, emigration intentions vary significantly across regions. For some countries, the highest regional rate can be as much as five times the lowest rate in another part of the country. In some countries like Madagascar, Mali and Rwanda, a preliminary analysis at the regional level would be highly relevant, as it would avoid the need to conduct evaluation programmes in regions with a relatively low share of intended emigrants. In many countries, heterogeneity is substantial, with a standard deviation as high as 10 percent. This global evidence argues in favour of using intention data in general and Gallup data in particular as a pre-screening tool before carrying out rigorous evaluations of targeted interventions.[19] The preliminary evaluation based on such a tool could be combined with the other indicators included in the dashboard mentioned above.

[19] This procedure could be applied to measures regarding preparation plans for emigration, as used, for instance, by Clemens and Mendola (2020). However, the samples on which this measure is provided are much more limited compared to the intention data used here.

Table 2: Regional heterogeneity of desired emigration rates in low- and middle-income countries

	Descriptive statistics									
Country	(1) (Max)	(2) (Min)	(3) (Range)	(4) (Std)	(5) (Un. Mean)	(6) (W. Mean)	(7) (Regions)	(8) (Waves)	(9) (Av. Resp.)	(10) (Emig. Rate)
Afghanistan	57.14%	10.00%	47.14%	10.45%	27.05%	27.66%	34	12	1178	13%
Algeria	46.15%	14.89%	31.27%	6.71%	28.11%	26.86%	37	8	1268	4%
Bangladesh	42.68%	25.71%	16.97%	9.13%	24.22%	24.45%	7	14	1308	4%
Burkina Faso	38.57%	15.00%	23.57%	6.12%	29.36%	31.36%	45	10	1001	7%
Burundi	55.92%	10.42%	45.50%	11.40%	19.86%	18.09%	17	5	1000	2%
Centr. Afr. Rep.	46.86%	14.14%	32.72%	10.95%	25.71%	23.14%	9	5	1000	5%
Congo Braz.	44.96%	20.44%	24.51%	8.53%	34.71%	40.26%	12	9	1010	0.6%
Dem. Rep. Congo	68.24%	32.28%	35.96%	12.20%	50.64%	49.35%	11	8	1000	0.3%
Ethiopia	49.49%	16.54%	32.96%	9.20%	30.38%	30.06%	11	8	1278	1%
The Gambia	70.00%	17.65%	52.35%	11.93%	38.97%	40.22%	38	3	1040	4%
Guinea	55.03%	27.92%	27.11%	8.31%	37.46%	38.00%	8	9	1016	0.24%
Haiti	70.00%	47.06%	22.94%	6.66%	57.19%	56.85%	10	9	503	10%
Liberia	72.44%	45.74%	26.71%	6.67%	57.50%	57.53%	15	9	1000	6%
Madagascar	35.00%	3.13%	31.88%	9.42%	13.18%	12.12%	22	10	1002	1%
Malawi	46.43%	7.14%	39.29%	7.25%	28.28%	33.80%	26	6	1000	2%
Mali	35.71%	5.62%	30.10%	6.15%	19.23%	20.07%	29	6	1022	5%
Mexico	29.69%	9.43%	20.26%	4.48%	18.85%	19.55%	33	10	1108	0.45%
Morocco	36.36%	4.88%	31.49%	6.43%	23.75%	24.54%	63	10	1209	8%
Mozambique	24.26%	8.45%	15.81%	4.68%	19.17%	22.05%	11	6	1000	2%
Niger	21.26%	10.36%	10.90%	3.84%	17.22%	18.15%	8	12	1001	2%
Rwanda	25.00%	4.79%	20.21%	4.87%	11.48%	11.45%	30	6	1000	3%
Senegal	49.09%	25.72%	23.37%	6.73%	38.10%	38.79%	15	12	1000	0.23%
Somalia	27.22%	8.05%	19.17%	6.11%	16.42%	17.98%	14	3	1064	3.4%
South Sudan	38.58%	15.58%	23.00%	7.31%	26.49%	28.08%	10	4	1000	4%
Sudan	51.16%	23.32%	27.83%	7.00%	34.91%	35.06%	12	5	1518	4%
Sierra Leone	84.35%	50.00%	34.35%	9.39%	63.08%	64.32%	14	9	1016	2%
Somaliland	39.67%	18.15%	21.52%	7.72%	28.79%	28.08%	6	4	1000	—
Syria	44.82%	34.94%	9.88%	3.16%	40.44%	40.53%	13	7	1635	18%
Tajikistan	22.33%	7.53%	14.79%	5.99%	12.37%	9.96%	5	14	1149	7%
Tunisia	39.66%	12.79%	26.86%	8.73%	26.61%	27.28%	23	11	1299	0.4%
Tchad	31.28%	15.34%	15.94%	4.21%	22.36%	24.45%	15	12	1009	0.1%
Togo	70.45%	30.00%	40.45%	11.07%	50.09%	46.01%	22	4	1032	6%
Yemen	49.28%	15.32%	33.95%	8.46%	26.40%	24.98%	20	11	1376	4%
Uganda	44.56%	31.12%	13.44%	5.62%	39.11%	38.09%	4	12	1000	0.1%

Notes. Outcome variable: Desired emigration (Gallup code WP1325). Number of usable waves refers only to waves including a regional location indicator for respondents. Unweighted mean: mean across regions. Weighted mean: mean across regions weighted by regional weight in the sample. Average respondents: average number of respondents per usable wave. Emigration rate in column (10) gives the actual emigration rate between 2015 and 2010 based on five-year intervals of total emigrants and total populations as provided for by UN DESA.

3.2.3. Evaluation methods

While the identification of the right target population is important, a key question remains regarding how to undertake an evaluation of the effect of local interventions, including gender-responsive initiatives, on migration and forced displacement. This question is not trivial since programme evaluation raises ethical issues and needs to be done carefully. A typical 'naïve' approach would be to measure the difference in the average propensity to move between individuals benefiting from the interventions (the 'treated subjects') and those not exposed to the intervention (the 'non-treated subjects'). Unfortunately, this naïve approach is likely to be misleading. The reason is the existence of a selection bias that confounds the evaluation of the effect.[20]

Selection bias

A major source of bias in policy evaluation is selection (Angrist and Pischke, 2009). In many set-ups of local interventions using observed real data, estimated impacts on the mobility of individuals are affected by self or out-selection bias. Employment agencies represent a good example of that. One expected impact is that making information about job opportunities available will bring an increase in the expected probability of employment and, in turn, a decrease in the probability of moving. Individuals using employment agencies to find a job are more likely to have similar characteristics than those who do not. Yet, individuals will most likely self-select in relying on the services provided by these agencies. More connected and more dynamic individuals might use alternative channels. The issue is that individuals have characteristics that will differently affect their respective probabilities of finding a job and moving abroad. In this example, the naive approach will result in an underestimation of the impact in terms of emigration.

There are three possibilities for solving this issue. One is the use of **instrumental variables**. In this example, an exogenous variation in the probability of using employment agencies' services can be used. Distance between the living place of the individual and the location of the agency could be one option. The idea is that the higher the distance, the more costly the use of these services, but that individuals living farther away are similar to those living close to the location of these services.

A second solution suited mainly for intervention with individuals is to generate data such that participation in the programme is randomly decided. Randomized controlled trials (RCTs) make sure that selection into a programme is random and, therefore, should be uncorrelated ex ante with any individual characteristic that would affect the outcome. Ex post, this might not be the case for all characteristics, but if the unbalanced characteristics are observed, appropriate regressions can account for that. Therefore, if appropriately designed, an RCT could deliver a correct estimation of an intervention on the probability of moving abroad.

While RCTs provide a convenient approach for the evaluation of targeted interventions, they are not

[20] This applies to collective interventions such as climate change mitigation or adaptation. In this case, the interventions can benefit a certain sub-population, e.g., agricultural workers. The distinction between treated and untreated might be more subtle. For instance, all individuals might be treated, but the intensity (i.e., the benefit) of the intervention might vary across individuals.

without drawbacks. A fundamental limitation is that RCTs require an ex-ante design of the programmes, and the exact design of the randomization depends on the effect to be evaluated. Yet, as explained above, most development actors carry out their targeted interventions without a specific goal in terms of emigration. One (second-best) solution would be to (1) conduct some 'naïve' comparisons, (2) estimate the potential size of the selection bias and (3) provide a bias-adjusted causal estimate of the programme.

4. Conclusion

The significant increase in human mobility over the last 50 years reflects the desire of individuals to find better and safer living conditions for themselves and their relatives. In many cases, the choice of moving to another country is a voluntary one and follows legal pathways. This type of mobility is, in general, beneficial for migrants themselves and their families, as well as for their origin and host countries. In other cases, human mobility results from forced displacement, triggered by a set of adverse shocks such as conflicts, insecurity or detrimental consequences of environmental degradation and climate change. This type of movement often turns out to be dangerous for those forcibly displaced and leads to suboptimal outcomes in terms of rights protection and socio-economic integration. To a certain extent, this also holds for irregular voluntary movements. Even when migration is voluntary, the lack of legal pathways can translate into exacerbated irregular flows. These situations contribute to fuelling racism, xenophobia and discrimination among transit and host communities.

For such reasons, mitigating the adverse drivers of irregular migration and forced displacement is at the core of the concerns of many humanitarian, development and peace actors, as reflected in both the Global Compact for Safe, Orderly and Regular Migration (GCM) and the Global Compact on Refugees (GCR). Understanding how public policies and targeted interventions can contribute, either directly or indirectly, to this objective is, therefore, key.

While the literature on the many reasons why people move is quite extensive, studies devoted specifically to the causal impact of targeted interventions on migration and forced displacement are more limited. One methodological explanation is the existence of a selection bias. Interventions at the individual level, for instance, to generate employment opportunities or alleviate poverty, might thus affect specific persons, due in particular to self-selection in terms of participation in the programmes. Collective-type interventions aimed at strengthening social cohesion and governance or mitigating the consequences of climate change affect people in different ways, due, for instance, to their initial professional occupations. The two cases span two different sources of the bias, but the statistical consequences are the same.

This paper offers several possible methodological approaches for better understanding how targeted interventions can affect human mobility. It raises the case for a dashboard of indicators to monitor migration and forced displacement pressures can help summarize the different dynamics affecting the propensity to move. It emphasizes the need to provide an impact evaluation in order to truly assess the ways targeted interventions influence human mobility intentions and outcomes. Depending on the context, these evaluations can take various forms, from randomized control trials to difference in difference approaches. While these approaches are not possible, an assessment of the magnitude of the

selection bias can be seen as a second-best option.

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