



Economic Transfers and Social Cohesion in a Refugee-Hosting Setting

ELSA VALLI*, AMBER PETERMAN*** & MELISSA HIDROBO†

*Social and Economic Policy Unit, UNICEF Office of Research - Innocenti, Florence, Italy, **Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA, †Poverty, Health and Nutrition Division, International Food Policy Research Institute, Dakar-Almadies, Senegal

ABSTRACT *There is increasing interest in understanding if social protection can foster social cohesion, particularly between refugees and host communities. Using a cluster randomised control trial, this study examines if a short-term transfer programme targeted to Colombian refugees and poor Ecuadorians in urban and peri-urban areas of northern Ecuador led to changes in social cohesion measures. The overall results suggest that the programme contributed to reported improvements in social cohesion among Colombian refugees in the hosting community through enhanced personal agency, attitudes accepting diversity, confidence in institutions, and social participation. However, the programme had no impact on social cohesion among Ecuadorians. The programme had no negative impacts on the indicators or domains analysed. Although it was not possible to identify specific mechanisms, impacts are hypothesised to be driven by the joint targeting of Colombians and Ecuadorians, the interaction between nationalities at monthly nutrition sessions, and the messaging around social inclusion by programme implementers.*

1. Introduction

An estimated 68.5 million individuals were forcibly displaced in 2017, an increase of 16.2 million over the previous year (United Nations High Commissioner for Refugees [UNHCR], 2018). In response, global actors have committed to exploring policies and interventions to mitigate against health, economic, and social consequences among both displaced populations and populations living in fragility in sending countries. Social protection, including the use of social transfers, has been identified as a key intervention among vulnerable populations in these settings, as signalled by the recent high-level commitments at the World Humanitarian Summit, the Grand Bargain, and the High-Level Panel on Humanitarian Cash Transfers (Overseas Development Institute [ODI] & Center for Global Development [CGD], 2015). As the use of social protection schemes among refugee populations of diverse ethnic groups within fragile settings increases, the effects of these policies on social cohesion is being questioned. Social protection has the potential to boost (directly or indirectly) measures of social cohesion by creating good will, feelings of equal treatment (both within and between groups), trust in institutions, and social capital through interaction during programme-related activities (for example, trainings or community meetings) (Leites, Pereira, Rius, Salas, & Vigorito, 2017). However, it is equally possible that the implementation of social protection could generate feelings of resentment and jealousy towards recipients and trigger or exacerbate intracommunity or intra-ethnic tensions (Devereux et al., 2017).

Correspondence Address: Amber Peterman, Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA. Email: amberpeterman@gmail.com

Supplementary Materials are available for this article which can be accessed via the online version of this journal available at <https://doi.org/10.1080/00220388.2019.1687879>

© 2019 UNICEF Office of Research–Innocenti. Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

The concept of social cohesion has been used to describe social relations, including cooperation and solidarity between groups and individuals in a society and the interrelation with broader economic, social, and political outcomes (Babajanian, 2012). Because of the numerous definitions that have been produced, varying by discipline, context, or issues, social cohesion has been described as a quasi-concept (Green, Janmaat, & Han, 2009). Definitions often respond to policy needs and the particular focus of agencies and institutions. For instance, the Council of Europe, among the most active promoters of the concept, including the measurement of social cohesion, has broadly referred to social cohesion as ‘the capacity of a society to ensure the welfare of all its members, minimising disparities and avoiding polarisations’ (Council of Europe, 2004, p. 3). The Organisation for Economic Co-operation and Development considers that social cohesion is associated with three aspects – social inclusion, social capital, and social mobility – and defines a cohesive society as one that ‘works towards the well-being of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust, and offers its members the opportunity of upward social mobility’ (Organisation for Economic Co-operation and Development [OECD], 2012, p. 51). Yet, while common ideas underlay various definitions of social cohesion, there has not been a unified understanding of the specific components or of the measurement of the concept.

A better understanding of the dynamics between social protection and social cohesion is needed given that social protection is viewed as a crucial policy to promote social justice, of which social cohesion and inclusion are integral parts (Devereux, McGregor, & Sabates-Wheeler, 2011). In addition, social cohesion plays a key role in fostering economic and development outcomes through its influence on the quality of institutions and the implementation of pro-growth policies (Easterly, Ritzan, & Woolcock, 2006). Social cohesion is also viewed as crucial in relation to peacebuilding and conflict prevention (King, Samii, & Snilstveit, 2010). While the development impacts of social protection have been widely studied, the contribution of social protection to social cohesion and state-building has been primarily assumed based on theory (Babajanian, 2012).

The evidence of the impact of social protection on various social cohesion outcomes is limited and inconclusive, with only one example in a refugee-hosting setting. In Lebanon, the cash component of a programme targeting Syrian refugees had a positive impact on social relations between beneficiaries and other community members (Lehmann & Masterson, 2014). In particular, increases were observed in the likelihood of being helped, and decreases were observed in the likelihood of being insulted by Lebanese community members. Other examples are provided in nonrefugee settings of government programmes. For instance, Familias en Acción, Colombia’s flagship conditional cash transfer, increased social capital as measured by the willingness of community members to cooperate during a public good game (Attanasio, Polania-Reyes, & Pellerano, 2015). The Peruvian conditional cash transfer, Juntos, had a positive impact on confidence in institutions, but not on membership in social organisations (Camacho, 2014). In Tanzania, a community-managed conditional cash transfer increased trust in local leaders, particularly those who had been elected by citizens to run the programme (Evans, Holtemeyer, & Kosec, 2019). In Lesotho, the Child Grant Programme strengthened informal sharing arrangements in the community, boosting the likelihood of informal support from family members, friends, and neighbours and providing support to the rest of the community (Pellerano, Moratti, Jakobsen, Bajgar, & Barca, 2014).

However, there is also evidence suggesting the potential for adverse effects of social protection on social cohesion. In Indonesia, poor targeting of the Bantuan Lansung Tunai, a national unconditional cash transfer aimed at compensating the poor for the rise in the price of kerosene, led to the inclusion of a large number of more well off households, which resulted in deteriorated social capital, as measured by participation in community groups, as well as higher crime rates (Cameron & Shah, 2013). Qualitative studies also report a number of negative consequences mostly deriving from discontent around targeting. For instance, in Zimbabwe, dissatisfaction linked to the targeting procedures of an emergency pilot programme was found to increase tensions in communities receiving cash transfers, but not in communities receiving food transfers (Kardan, MacAuslan, & Marimo, 2010). In Kenya and Yemen, feelings of jealousy around targeting led to a considerable

degree of tension between beneficiaries and nonbeneficiaries of an unconditional cash transfer (Pavanello, Watson, Onyango-Ouma, & Bukuluki, 2016). Envy, jealousy, and resentment were reported in Nicaragua and the State of Palestine for similar reasons (Adato, Roopnaraine, Alvarado Álvarez, Böttel Peña, & Meléndez Castrillo, 2004; Pavanello et al., 2016). Overall, evidence suggests that context and programme design (for example, targeting, complementary activities, and programme framing) are crucial in explaining the diversity in findings.

Using a cluster randomised control trial, this study examines if a transfer programme targeted to Colombian refugees and poor Ecuadorians in urban and peri-urban areas of northern Ecuador resulted in changes in measures of social cohesion. The programme was a short-term cash, food, and voucher programme paired with nutrition training implemented over six months by the World Food Programme (WFP). The overall results suggest that the programme contributed to reported improvements in social cohesion among Colombians in the hosting community through enhanced personal agency, attitudes accepting diversity, confidence in institutions, and social participation. However, the programme had no impact on reported social cohesion among Ecuadorians. These effects are independent of the type of transfer (cash, food, or voucher) and accrue to all Colombian nationals, regardless of their motivation for migration (for example, economic versus political or personal motives). There were no negative impacts of the programme on the indicators or domains analysed. Although it was not possible to identify specific mechanisms, impacts are hypothesised to be driven by the joint targeting of Colombians and Ecuadorians, the interaction between these national groups at monthly nutrition sessions, and the messaging around social inclusion by programme implementers.

This study contributes to the literature in several ways. First, it adds to the scarce literature on the effects of social transfers on social cohesion in refugee-hosting settings; indeed, it appears to be the first such experimental evidence. Second, the study contributes to discussions on measurement by analysing the most comprehensive operationalisation of social cohesion thus far and suggesting areas where measurement could be improved in future studies. Finally, it discusses potential design and implementation components and mechanisms through which social protection has the potential to affect measures of social cohesion. With an estimated three million Venezuelans currently classified as international migrants or refugees as a result of the ongoing political and economic crisis in Venezuela, the impact of social protection on the social cohesion of refugees and host communities is more relevant than ever in the region (UNHCR, 2019).

2. Framework

Various authors and institutions have suggested approaches to analysing or measuring social cohesion both at the micro and macro levels. For instance, as part of its explicit social justice goal, the Council of Europe is one of the major contributors to the conceptualisation and articulation of the measurement of social cohesion. As part of this effort, a comprehensive methodological guide was developed in 2005 with the aim of providing practical tools for the analysis of social cohesion at different levels and areas (Council of Europe, 2005). Babajanian (2012) reviews social protection and its contribution to social cohesion and state-building. He distinguishes between the distributional and relational dimensions of social cohesion, the former referring to ‘the patterns and the extent of distribution of resources and opportunities in a society’ and the latter to ‘the nature and quality of interpersonal and social relations’ (p. 13). For the purpose of this analysis, the framework is the one most comprehensively related to social protection. The focus is the domains of ‘empowerment, community cooperation and solidarity [and] social participation’ (Babajanian, 2012, p. 8). This definition is complemented with two domains suggested by Green et al. (2009), as follows: (a) tolerance and respect for other individuals and cultures and (b) interpersonal and institutional trust. Because of data availability and the appropriateness of the domain in relation to social protection, all components suggested by the authors are not included, for example, conflict and stability (because of data constraints), as suggested by Babajanian (2012), or shared values and goals (less likely to be changed by social protection), as suggested by Green et al. (2009). As pointed out by Green et al. (2009), the

definitions of social cohesion do not necessarily need to include all these characteristics. The operational definition of social cohesion in this study is therefore based on six aggregated indicators, as follows: (a) trust in individuals and social connectedness, (b) personal agency, (c) attitudes accepting diversity, (d) freedom from discrimination, (e) confidence in institutions, and (f) social participation. These domains are discussed in more detail in the description of the methodology.

Social protection can, on theoretical grounds, influence social cohesion in a number of ways. Different design and implementation features of social protection can have direct or indirect, intended or unintended effects on various components of social cohesion. Key features identified in the literature are briefly summarised, along with the implications for design considerations. These include (a) targeting, (b) communication (for example, messaging and framing around implementation), (c) type of implementer (for instance, government or other actor), (d) the size of the benefits provided, (e) complementary activities or system links, and (f) grievance and complaint mechanisms.

A key consideration in social protection programmes with implications for social cohesion is targeting. The most commonly observed and reported negative effect concerns between-group tensions and feelings of resentment arising because of the exclusion of vulnerable groups from programming (Babajanian, 2012; Leites et al., 2017; Pavanello et al., 2016). This is especially the case in complex targeting that is not completely transparent. For example, particularly in areas of widespread poverty, proxy-means tests may select beneficiaries who are, in practice, not easily distinguishable from excluded populations because of the use of outdated or poor data, infrequent updating, or lack of precision. Other targeting methods, such as categorical targeting, that identify beneficiaries based on demographics are more transparent and less prone to this type of dissatisfaction. However, it has been suggested that, in some cases, the categorical targeting of social groups deemed undeserving of assistance, such as excombatants in postconflict contexts, might result in feelings of resentment among those excluded from the programme, thus impairing the process of peacebuilding (Holmes, 2009). While some researchers highlight the greater acceptance associated with community-based targeting relative to methods such as proxy-means testing, others point to the risks of elite capture, rent-seeking behaviours, and the patronage of local leaders (Alatas, Banerjee, Hanna, Olken, & Tobias, 2012). Clear communication about programme objectives and targeting and the involvement of the community in programme design and beneficiary selection can therefore significantly reduce the risks associated with intracommunity tensions and negative state-society relations (Pavanello et al., 2016). Similarly, mechanisms to address grievances and complaints, particularly around targeting or implementation, can help solve potential issues in transparency, discrimination, and the fairness of the system.

The receipt of resources and services can foster social cohesion through enhancement of self-confidence, agency, and empowerment. The greater availability of resources that allow beneficiaries to participate in ceremonial, cultural, and other social activities can help strengthen social ties and break isolation (Pavanello et al., 2016). Better economic and financial standing can also reduce feelings of shame and stigma related to poverty and decrease social marginalisation (Roelen, 2017). Children able to attend school can feel accepted among their peers and enjoy greater satisfaction with their achievements and more self-worth, contributing to the agency of children and adolescents (Attah et al., 2016). Receiving a regular programme transfer, particularly if it is a benefit provided through a state actor, can improve the confidence of an individual about the future and can strengthen trust in institutions. These impacts can accrue not only from the receipt of financial resources, but also from the complementary services and system links layered onto programmes. For example, participation in training and other group activities or social events has the potential to generate feelings of solidarity, mutual support, and enhanced dignity (Pavanello et al., 2016).

These design and implementation features are critical to social protection programmes targeting minorities or isolated and vulnerable groups, including refugees. For instance, if programmes exclusively select a minority nonnational citizen group, excluded local vulnerable individuals could perceive this as unfair, resulting in greater social fragmentation and tension. On the other hand, social protection could foster solidarity among refugees and national beneficiaries if social interaction is

encouraged through the programme. This was the case in postconflict Nepal and Sierra Leone, where cash transfers were implemented with the rationale of contributing to the peace process and social cohesion by targeting marginalised groups (Holmes, 2009). According to definitions of Narayan (1999) and Putnam (2000), social protection can foster bonding social capital, that is, solidarity among members of a same group, and bridging social capital, that is, links between social groups.

Specific to the case of refugee-hosting settings and as documented by an extensive literature (reviewed by Bauer et al., 2016), individuals who have been exposed to crime or war appear to exhibit more pro-social behaviour and more civic and political engagement, particularly within groups of similarly affected individuals. For example, in Sierra Leone, individuals who had experienced more violence were also more likely to attend community meetings, vote, join social and political groups, and participate in school committees and road brushing (Bellows & Miguel, 2006, 2009). They were also more altruistic and more inequality averse towards in-group members during lab-in-the-field experiments (Bauer, Cassar, Chytilová, & Henrich, 2014). However, Bauer et al. (2016) hypothesise that the substantial within-group cohesion is associated with a lack of social cohesion between groups as a direct consequence of parochial attitudes. This has the potential to promote conflict cycles and a return to violence. A social protection policy focused on refugees therefore has the potential for both positive and negative effects on intra- and intergroup social cohesion.

3. Programme description, evaluation design, and methodology

3.1. Programme and context

Until recently, Ecuador was one of the largest refugee-hosting countries in Latin America, hosting primarily Colombian nationals fleeing from the decades-long conflict initiated by the Revolutionary Armed Forces of Colombia.¹ According to UNHCR (2012), Ecuador was hosting approximately 55,500 refugees, nearly all of whom had originated in Colombia. However, because of increasingly stringent application and approval processes, there were estimated to be approximately 68,300 people in refugee-like status and 14,400 asylum seekers of Colombian nationality; nearly 70 per cent of refugees resided in urban areas. International actors have therefore focused on strengthening the implementation of urban programming and assistance to these groups. There is evidence that Colombian refugees are subject to discrimination and stigma, with implications for economic and health outcomes (Shedlin, Decena, Noboa, & Betancourt, 2014). In some cases, this can be explicitly linked to common perceptions that Colombian refugees are associated with violence and the drug trade, a belief that stakeholders have sought to address through media and other campaigns (UNHCR, 2012).

In response to the vulnerabilities experienced by Colombian refugees, WFP initiated a cash, food, and voucher pilot programme that ran from April 2011 to September 2011. The programme was targeted on Colombian refugees and poor Ecuadorians across urban and peri-urban neighbourhoods in seven urban centres in the northern provinces of Carchi and Sucumbíos. The three objectives of the programme were to (a) improve food consumption by facilitating access to more nutritious foods, (b) enhance the role of women in household decision-making related to food consumption, and (c) reduce tensions between Colombians and host Ecuadorian populations. Neighbourhoods within the seven urban centres were selected for programme implementation based on consultations with UNHCR because the areas included large numbers of refugees and significant poverty. Households qualified for the transfers provided through the programme if they met the poverty threshold as determined by a proxy-means test and if they were not currently receiving benefits through the government flagship cash transfer programme. Transfers equivalent to US\$40 and representing approximately 11 per cent of household preprogramme consumption were targeted to women and delivered monthly. Cash transfers were delivered on prepaid ATM cards. Food transfers consisted of rice, vegetable oil, lentils, and canned sardines. Food vouchers were redeemable for pre-approved nutritious foods at local supermarkets. Programme beneficiaries were required to attend monthly training sessions on nutrition. Previous analysis indicates that the programme successfully increased

the quantity and quality of the food consumed, as well as decreased intimate partner violence (Hidrobo, Hoddinott, Peterman, Margolies, & Moreira, 2014; Hidrobo, Peterman, & Heise, 2016).

Although the programme did not involve the implementation of intensive activities to foster social cohesion, implicit targeting decisions, socialisation, and messaging components may have influenced social cohesion on an interpersonal level, in addition to the benefits of interacting with WFP and receiving economic transfers. For example, by targeting areas with large populations of Colombians and delivering the same benefits to both Colombians and Ecuadorians in these areas, WFP aimed to create a feeling of equal treatment.² In addition, through the nutrition training sessions, the two nationalities interacted in a meaningful way, in some cases for the first time. There was also explicit messaging at the start of the programme, as beneficiaries were being sensitised to the overall programme components and guidelines and the programme was being presented to local administrative and government stakeholders. For example, the first page of a programme guidance booklet explained that Colombians had come to Ecuador after fleeing violence and were in need of assistance as were Ecuadorians, and it described Ecuador as



Ecuador: Un país de acogida

En los últimos años, muchos ciudadanos colombianos, se han visto en la necesidad de buscar refugio en nuestro país, debido a la situación de violencia que se vive en Colombia.

Ecuador y especialmente sus ciudadanas y ciudadanos, pese a sus limitados recursos, les han abierto las puertas para que su estadía en tierra ecuatoriana sea más llevadera.

Sin embargo, existen condiciones económicas y sociales, que hacen que la situación de los refugiados como la de las familias ecuatorianas de acogida, sea delicada.

Algunas cifras reflejan esta situación:

En Sucumbios y Carchi-Imbabura, 80 de cada 100 ecuatorianos son pobres. 1

En el caso de los hermanos colombianos la situación no es diferente:

20 de cada 100 refugiados colombianos en Sucumbios y 14 de cada 100 refugiados en Carchi viven una situación de extrema pobreza.

Esta condición afecta la calidad de la alimentación de las familias tanto ecuatorianas como colombianas, de manera especial, la de los niños y niñas menores de cinco años y de las mujeres embarazadas y en período de lactancia.

- 5 de cada 10 niños y niñas tienen anemia.
- 4 de cada 10 embarazadas tienen anemia.

Superar esta situación y lograr la seguridad alimentaria y nutricional es responsabilidad de TODAS Y TODOS.

Figure 1. Programme booklet introducing the motivation behind targeting Colombian nationals: Ecuador, a welcoming country.

Source: WFP programme materials, cash and voucher intervention, 2011.

a welcoming country (Figure 1). The information also included messages indicating that poor nutrition affects all people and that no one should be left behind.

3.2. Evaluation design

The cluster randomised control trial included four arms and 145 clusters randomised to cash, food, food vouchers, and a control. Because of the close geographical proximity between clusters, the randomisation was performed in a two-stage process whereby, first, neighbourhoods were randomised into treatment and control, and, subsequently, clusters within treatment neighbourhoods were randomised to treatment arms (cash, food, and food vouchers) (see the Supplementary Appendix, Map SA.1). The baseline survey was conducted in March and April 2011, before the first transfers, and the end line survey was carried out approximately seven months later, in October–November 2011. The evaluation was implemented by the International Food Policy Research Institute, along with the data collection partner, the Centro de Estudios de Poblacion y Desarrollo Social. The ethics review took place at both research institutes. In total, 2,122 households were surveyed in both waves; the household attrition rate was approximately 10 per cent. For this analysis, the sample is restricted to the panel of individuals who responded to the questionnaire at both baseline and midline (and who were most often also the transfer beneficiaries). The overall attrition rate among individuals was 20 per cent, indicating that, in approximately 10 per cent of the baseline households, different individuals answered the questionnaires at different times. Although the individual attrition rate was slightly higher in the control group (Supplementary Appendix, Table SA.1), the difference is not statistically significant.

Despite the similar overall attrition rates between the treatment and control groups, differential attrition may still threaten the internal validity of the study if the characteristics of the individuals who left the panel are different from those of individuals who stayed, and these characteristics also influence social cohesion. It is therefore important to examine if individuals who left the survey are different between treatment and control groups with respect to background characteristics and the outcomes of social cohesion at baseline. Comparing the p-value of differences from tests of means, only one of 18 background characteristics appears to exhibit a statistical difference between control and treatment attritors at the $p < .10$ level or higher (Supplementary Appendix, Table SA.2, column 8). Specifically, treatment attritors live in smaller households compared with control attritors (3.8 members versus 4.11 members; p-value: .09). Because of these few differences, attrition is unlikely to be a concern for the internal validity of the study, a conclusion also reached by other analysis using these evaluation data (Hidrobo et al., 2014, 2016).

The demonstration of equivalence between treatment and control groups at baseline is also a prerequisite for the internal validity of the study and the estimation of unbiased treatment effects. Table 1 shows that, among the 18 background characteristics, six are statistically different between the treatment and control groups at the $p < .10$ level or higher (Colombian nationality, including those who had resided in the urban centre for more than 20 years, household size, number of children aged 6–15 years, and second and fifth wealth quintiles). These baseline imbalances of background characteristics are larger than expected, given the demonstrated balance of the household panel; they result primarily from the use of the individual panel in this analysis (Hidrobo et al., 2014). A joint orthogonality test is performed by regressing the background characteristics on an indicator of treatment and computing the F-test across background characteristics, which confirms joint imbalance (F-stat = 2.01; $p = .024$). Thus, to address these differences and improve the precision of estimates, baseline measures are explicitly controlled for in the main analysis.

In addition, an examination of the disaggregated social cohesion components reveals that eight of the 33 components are statistically different at the $p < .10$ level or higher, of which one is an aggregate indicator (Table 2). In particular, the standardised sum of the lack of discrimination indicator is lower in the treatment group (−0.16 versus 0.00; p-value: .05). Because of this imbalance, impacts on discrimination, as well as individual disaggregated indicators showing imbalances (which primarily fall into the same discrimination index), are interpreted with caution. This discussion is taken up again in the limitation section.

Table 1. Baseline characteristics of respondents and test of equivalence at baseline

	All	Control	Treatment	p-value of diff.
Colombian	0.34	0.42	0.31	0.06
Colombian: economic motivation for migration	0.09	0.10	0.09	0.72
Colombian: political motivation for migration	0.09	0.10	0.09	0.56
Colombian: personal motivation for migration	0.06	0.06	0.05	0.54
Colombian: resided in urban centre > 20 years	0.10	0.16	0.07	0.00
Female	0.81	0.80	0.81	0.63
Age	39.01	39.27	38.91	0.71
Married	0.27	0.27	0.26	0.87
Secondary education or higher	0.36	0.33	0.38	0.27
Household size	3.75	3.92	3.69	0.06
Number of children aged 0–5 years	0.60	0.56	0.61	0.31
Number of children aged 6–15 years	0.89	0.99	0.86	0.05
Wealth index: 2nd quintile	0.19	0.14	0.21	0.00
Wealth index: 3rd quintile	0.21	0.22	0.21	0.82
Wealth index: 4th quintile	0.21	0.20	0.21	0.73
Wealth index: 5th quintile	0.20	0.26	0.18	0.05
Resident in urban centre ≤ 20 years	0.40	0.40	0.40	0.89
Carchi Province	0.39	0.33	0.40	0.48
<i>N</i>	1,878	505	1,373	

Notes: p-values are reported from Wald tests on the equality of means of treatment and control for each variable. Standard errors are clustered at the cluster level.

3.3. Analysis methodology

Analysis of covariance models (ANCOVA) are used to predict the social cohesion outcome of interest, while controlling for baseline values of the same indicator (Hidrobo et al., 2014, 2016). ANCOVA estimates are preferred over difference in differences estimates in scenarios in which the autocorrelation of outcomes is low over time and provide a more efficient estimation of the effect (McKenzie, 2012). Autocorrelation for the main outcomes are low, ranging from 0.06 to 0.30 for the standardised aggregate indices (Supplementary Appendix, Table SA.3). Simple unadjusted models and models adjusting for covariates and cluster standard errors at the cluster level are run, using equation (1):

$$Y_{hj1} = \alpha + \beta_p \text{Treat}_j + \gamma Y_{hj0} + \delta C_{hj} + \theta P_{hj} + \mu_j + \varepsilon_{hj} \quad (1)$$

where Y_{hj1} is the social cohesion outcome of interest for household h from cluster j at follow-up, and Y_{hj0} is the same at baseline. Treat_j is an indicator of presence in a treatment cluster, which can be further broken down into three indicators, one each for food, cash, and vouchers. B_p is the intent-to-treat estimator for the pooled treatment, or the effect of being assigned to any treatment arm. δC_{hj} represents a set of basic covariates for the adjusted models, including the following: respondent's attainment of secondary education or higher (dummy); age (years), sex (female dummy), marital status (dummy for married), and nationality (Colombian dummy); household size; number of children ages 0–5 years; number of children ages 6–15 years; dummies for wealth quintiles (based on a wealth index constructed using assets and dwelling infrastructure); and an indicator of residence in the current urban centre for less than or equal to 20 years (dummy). The indicator of Colombian nationality is based on a simple question regarding self-reported nationality; however, the findings are robust to an alternative indicator asking about the country of birth (not shown). Refugees and asylum seekers (or refugee-like individuals) or other types of migrants cannot be explicitly distinguished using this definition: thus, the assumption is that Colombian nationals in these areas are likely to be refugees. However, individuals across different official classifications are often similar, and exact statistics are difficult to obtain. In all models (both adjusted and unadjusted), residence in

Table 2. Baseline social cohesion aggregate outcomes, individual indicators and test of equivalence at baseline

	All	Control	Treatment	p-value of diff.
<i>Trust in individuals and social connectedness (standardised index)</i>	-0.03	-0.00	-0.04	0.54
<i>Trust in individuals and social connectedness (sum; range: 3–65)</i>	11.84	12.36	11.65	0.15
(1) I trust most people*	2.46	2.44	2.47	0.77
(2) I can rely on my neighbour for sending mail*	2.56	2.49	2.58	0.37
(3) I can rely on my neighbour to take care of my house if I am away*	2.81	2.79	2.82	0.75
(4) Network size (Number of people who would lend US\$10 in time of need)	2.13	2.33	2.06	0.06
(5) Network size (Number of people who would lend US\$100 in time of need)	1.88	2.30	1.73	0.11
<i>Personal agency (standardised index)</i>	0.05	0.00	0.07	0.50
<i>Personal agency (sum; range: 5–20)</i>	17.73	17.59	17.78	0.45
(1) My life is determined by my own actions*	3.78	3.73	3.80	0.25
(2) I have the power to take important decision to change my life*	3.67	3.60	3.69	0.16
(3) I am satisfied with my life*	3.55	3.53	3.56	0.69
(4) I am capable of protecting my own interests*	3.81	3.80	3.81	0.92
(5) Overall, how do you feel lately? (1 = very unhappy – 4 = very happy)	2.92	2.93	2.92	0.70
<i>Attitudes accepting diversity (standardised index)</i>	0.04	0.00	0.06	0.49
<i>Attitudes accepting diversity (sum; range: 3–12)</i>	9.01	8.91	9.04	0.40
(1) Cultural diversity is good*	3.61	3.61	3.61	0.95
(2) Xenophobia is not an issue*	1.92	1.84	1.96	0.26
(3) In my community people from different nationalities live well together*	3.47	3.47	3.48	0.90
<i>Lack of discrimination (last 6 months, standardised index)</i>	-0.12	-0.00	-0.16	0.05
<i>Lack of discrimination (last 6 months, sum; range: 0–10)</i>	9.07	9.18	9.03	0.15
(1) Freedom from discrimination due to ethnicity (=1)	0.94	0.95	0.93	0.06
(2) Freedom from discrimination due to gender (=1)	0.95	0.97	0.95	0.05
(3) Freedom from discrimination due to social condition (=1)	0.73	0.73	0.73	1.00
(4) Freedom from discrimination due to occupation (=1)	0.86	0.87	0.85	0.25
(5) Freedom from discrimination due to political views (=1)	0.96	0.98	0.95	0.00
(6) Freedom from discrimination due to disability (=1)	0.90	0.91	0.90	0.24
(7) Freedom from discrimination due to nationality (=1)	0.86	0.85	0.87	0.67
(8) Freedom from discrimination due to religious beliefs (=1)	0.94	0.96	0.93	0.09
(9) Freedom from discrimination due to physical appearance (=1)	0.95	0.96	0.94	0.05
(10) Freedom from discrimination due to other reasons (=1)	0.98	0.98	0.98	0.92
<i>Confidence in institutions (standardised index)</i>	0.02	0.00	0.03	0.72
<i>Confidence in institutions (sum; range: 6–24)</i>	18.98	18.94	18.99	0.84
(1) The Government would help my family in an emergency*	3.01	3.02	3.01	0.88
(2) Politicians represent my interests*	2.02	2.01	2.02	0.90
(3) If I am victim of a crime, I can go to the police to get help*	3.54	3.54	3.54	0.97
(4) I have the space to participate in the decisions of my community*	2.98	3.04	2.96	0.44
(5) I have the right to social basic assistance*	3.74	3.69	3.77	0.26
(6) I feel part of the community*	3.68	3.64	3.70	0.42
<i>Social participation (standardised index)</i>	-0.09	0.00	-0.12	0.16
<i>Social participation (sum; range: 0–4)</i>	0.71	0.78	0.68	0.22
(1) Participation in agricultural association or union (=1)	0.06	0.10	0.05	0.07
(2) Participation in religious or spiritual group (=1)	0.28	0.29	0.28	0.86
(3) Participation in community association or political group (=1)	0.24	0.23	0.24	0.88
(4) Participation in other groups (NGOs, cultural) (=1)	0.13	0.16	0.11	0.12
<i>Social cohesion (standardised index)</i>	-0.06	0.00	-0.08	0.31
<i>Social cohesion (sum; range: 35–115)</i>	67.34	67.76	67.18	0.43

Notes: p-values are reported from Wald tests on the equality of means of treatment and control for each variable. Standard errors are clustered at the cluster level. *Values range from 1 (strongly disagree) to 4 (strongly agree).

Carchi Province is included as a control variable, because the randomisation was stratified at the province level θP_{hj} . Finally, μ_j and ε_{hj} are iid errors across clusters and across households within clusters.

The outcome indicators representing social cohesion include six indices that capture various dimensions: (a) interpersonal trust and social connectedness, (b) personal agency, (c) attitudes accepting diversity, (d) lack of discrimination, (e) confidence in institutions, and (f) social participation (see Table 2). An overall social cohesion indicator is also analysed that is an aggregate of all six subindices. Following the procedure set out in Banerjee et al. (2015), the indices are constructed by first equally weighting the average z-scores of each indicator that composes the six dimensions of social cohesion (obtained by subtracting the control group mean for each round and dividing it by the control standard deviation) and then by standardising these again with reference to the control group. The indices are also calculated through principal component analysis, although the scale reliability coefficient for some of the aggregated indices suggests that this methodology performs poorly in summarising these indicators (Supplementary Appendix, Table SA.4).³ Therefore, our primary outcomes relate to the standardised z-score index, however robustness checks are performed using principal component analysis.

All outcome measures are built from responses elicited through a module focused on perceptions and discrimination that was collected at both baseline and end line (see Table 2). To allow aggregation, all questions were converted so higher values equate to higher levels of social cohesion. For instance, questions on the experience of discrimination were transformed into questions about freedom from discrimination. In addition, as different indicators included varying response options (some binary; some on a Likert scale), standardisation ensures that each contributes equally to the overall domain of social cohesion. All measures collected that fit the domain definitions are considered; however, in a few cases, indicators are combined if the incidence is too low to allow inclusion (for example, group participation).

The main analysis seeks to understand if transfers affect reported social cohesion and if these effects differ between Colombians and Ecuadorians. The difference between nationalities is tested by interacting the indicator of baseline Colombian nationality with the treatment indicator. Whether these dynamics differ is then considered based on the type of transfer (cash, food, or voucher) or the history of migration among Colombians, as measured by the self-reported motivation for migrating. In addition, migrants who are motivated by conflict or political reasons are hypothesised to have different profiles, with implications for the impacts on social cohesion relative to those who migrate for economic gain. Self-reported migration information is collected only from those individuals who migrated in the previous 20 years, and is collapsed into three domains: economic, political, and personal or other. Interactions with these three categories or the alternative of residing in the urban centre for more than 20 years are compared with the pooled treatment to assess if transfers affect social cohesion differentially by the type of migrant.

4. Results

Table 1 shows that 34 per cent of the sample identify as Colombian nationals, while 9 per cent reported they were Colombian and migrating for economic or political reasons; 6 per cent reported they were Colombian and migrating for personal or other reasons, and 10 per cent reported they were Colombian and resident in the urban centre for over 20 years. Approximately 80 per cent of the sample are female, and the average age of the sample is 39 years. Around 36 per cent have some secondary education or higher, and, on average, households contain nearly four members. Table 2 supplies detailed domain and indicator information as well as baseline values for the 33 social cohesion indicators aggregated into seven domains. Although the standardised indices are analysed, the raw values of indicators are reported here for ease of interpretation and to contextualise levels of social cohesion. The majority of indicators are either reported as binary or on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). For example, most individuals believe that people

from different nationalities live together well in their communities (score 3.5 of 4.0, indicator 3 in attitudes accepting diversity), and 86 per cent of the sample reports they have not been discriminated against because of their nationality in the previous six months (binary indicator, indicator 7 in freedom from discrimination). In total, the raw aggregate social cohesion indicator ranges from 35 to 115, with an average score of 67.3 among the full sample.

The main regression results are reported in [Table 3](#) as adjusted models whereby the impact of the transfers on social cohesion (odd columns) is assessed and whether the treatment had differential effects on Colombians and Ecuadorians (even columns) is explored. Transfers have a positive effect on agency, confidence in institutions, and overall social cohesion, on average. The size of the effects are similar across domains, ranging from 0.15 to 0.18 standard deviations. The coefficient for Colombian national is negative in relation to confidence in institutions and lack of discrimination, but positive regarding attitudes accepting diversity. When the treatment is interacted with the indicator of Colombian nationality, there is a differential impact by nationality for personal agency (0.46 standard deviations higher), attitudes accepting diversity (0.22 standard deviations higher), and social participation (0.21 standard deviations higher). The absolute treatment effect among Colombians is also computed and reported in the bottom row of the table, which indicates that transfers improved four domains of social cohesion among Colombians (agency, attitudes accepting diversity, confidence in institutions, and social participation), as well as the overall social cohesion outcome.⁴ These net impacts are sizeable, ranging from 0.23 to 0.46 standard deviation increases. These results indicate that overall positive treatment effects across domains are driven primarily by the effects on treated Colombians.

The same regressions are run using the social cohesion indices constructed through principal component analysis for robustness. This reveals that, where indicators performed reliably, the results are in line with [Table 3](#) (Supplementary Appendix, Table SA.5). In addition, [Table 3](#) is replicated using unadjusted models (Supplementary Appendix, Table SA.6). The unadjusted results are similar to the main models, suggesting that observable differences in covariates are not biasing the estimates. The main models are also run while excluding the variables on discrimination from the aggregate social cohesion indicator, as this aggregate is unbalanced at baseline. The results are in line with those presented in [Table 3](#), although they are smaller in magnitude.

Because the treatment was implemented in three forms (food, cash, and food vouchers), whether the treatment results differed by arm is investigated. As the results reported in [Table 4](#) indicate, there is no clear pattern showing that one arm differentially increased social cohesion. As shown by tests of equivalency at the bottom of the table, there are statistical differences in only two cases. On trust in individuals, food transfers are statistically larger than cash and voucher transfers, and, on attitudes accepting diversity, cash impacts are larger than vouchers. While the significance of coefficients varies across outcome domains, the F-tests indicating statistically significant differences cannot be rejected in any other case. Similar to the result using the pooled treatment, each transfer arm (cash, food, and food voucher) shows significant effects on overall social cohesion, ranging from 0.14 to 0.19 standard deviations. The three treatment arms are interacted with the dummy for Colombian national, and no clear pattern emerges regarding differential treatment by modality and nationality (results not reported). However, the study is not powered to examine these heterogeneities; it thus cannot be excluded that this lack of significance arises because of insufficient power.

To explore possible differential effects by type of Colombian migrant, interactions between the motivation for migration and the pooled treatment are examined. The results reported in [Table 5](#) show few differential effects by migration motivation, with the exception of differences by economic migration. First, economic migrants exhibit a statistically higher treatment effect on agency and confidence in institutions, but a lower treatment effect on social participation compared with political migrants. Economic migrants also show a higher treatment effect on confidence in institutions compared with migrants for personal reasons. Colombians who migrated for economic reasons have a lower treatment effect on trust in individuals compared with Colombians who are long-term

Table 3. ANCOVA models of impact of transfers on social cohesion measures (standardised indices)

	Trust in individuals		Agency		Attitudes accepting diversity		Lack of discrimination		Confidence in institutions		Social participation		Social cohesion	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Pooled treatment	0.05 (0.07)	0.10 (0.08)	0.18 (0.09)**	-0.00 (0.05)	0.11 (0.07)	0.02 (0.06)	0.05 (0.07)	0.06 (0.10)	0.15 (0.08)*	0.06 (0.07)	0.10 (0.07)	0.02 (0.08)	0.17 (0.07)**	0.08 (0.07)
Colombian	0.01 (0.07)	0.09 (0.11)	-0.02 (0.07)	-0.35 (0.16)**	0.20 (0.06)***	0.04 (0.12)	-0.17 (0.07)**	-0.14 (0.14)	-0.12 (0.06)*	-0.27 (0.14)**	0.00 (0.05)	-0.15 (0.08)*	-0.09 (0.06)	-0.26 (0.14)*
Pooled treatment X Colombian		-0.11 (0.13)		0.46 (0.16)***	0.22 (0.13)*	0.22 (0.13)*	-0.03 (0.14)		0.22 (0.15)			0.21 (0.10)**		0.24 (0.15)
R ²	0.07	0.07	0.05	0.07	0.02	0.02	0.09	0.09	0.07	0.07	0.07	0.07	0.12	0.12
N	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878
Net treatment Colombian		-0.01 (0.10)		0.46 (0.17)***	0.25 (0.13)*	0.25 (0.13)*	0.03 (0.11)		0.28 (0.14)**			0.24 (0.08)***		0.32 (0.14)**

Notes: Standard errors in parenthesis clustered at the cluster level. Aggregate outcomes are compiled using standardised indicators. All regressions include the following covariates at baseline: respondent attainment of secondary education or higher (dummy); age of respondent; female (dummy); married (dummy); household size; number of children aged 0–5 years; number of children aged 6–15 years; dummies for wealth quintiles (based on wealth index); resident in urban centre ≤ 20 years (dummy); residing in Carchi Province (dummy); dependent variables at baseline. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table 4. ANCOVA models of impact of transfers by treatment modalities on social cohesion measures (standardised indices)

	Trust in individuals	Agency	Attitudes accepting diversity	Lack of discrimination	Confidence in institutions	Social participation	Social cohesion
Treatment = food	0.21 (0.10)**	0.14 (0.12)	0.13 (0.10)	-0.01 (0.10)	0.15 (0.09)	0.13 (0.11)	0.19 (0.10)*
Treatment = cash	-0.03 (0.08)	0.22 (0.09)**	0.05 (0.08)	0.06 (0.08)	0.17 (0.08)**	0.03 (0.08)	0.14 (0.08)*
Treatment = voucher	0.02 (0.08)	0.16 (0.10)*	0.15 (0.08)*	0.08 (0.08)	0.13 (0.09)	0.16 (0.08)**	0.19 (0.08)**
R ²	0.07	0.05	0.02	0.09	0.07	0.07	0.12
N	1,878	1,878	1,878	1,878	1,878	1,878	1,878
F test: food = voucher	3.14	0.04	0.07	1.14	0.06	0.08	0.01
p-value	0.08	0.84	0.79	0.29	0.81	0.78	0.91
F test: cash = voucher	0.33	0.71	2.90	0.12	0.30	2.43	0.76
p-value	0.57	0.40	0.09	0.73	0.58	0.12	0.38
F test: food = cash	5.06	0.63	0.87	0.55	0.05	0.82	0.29
p-value	0.03	0.43	0.35	0.46	0.82	0.37	0.59

Notes: Standard errors in parenthesis clustered at the cluster level. Aggregate outcomes are compiled using standardised indicators. All regressions include the following covariates at baseline: respondent attainment of secondary education or higher (dummy); age of respondent; female (dummy); married (dummy); household size; number of children aged 0–5 years; number of children aged 6–15 years; dummies for wealth quintiles (based on wealth index); resident in urban centre ≤ 20 years (dummy); residing in Carchi Province (dummy); dependent variables at baseline. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table 5. ANCOVA models of differential impact of transfers on social cohesion measures (standardised indices) with respect to Colombian migration reasons

	Trust in individuals	Agency	Attitudes accepting diversity	Lack of discrimination	Confidence in institution	Social participation	Social cohesion
Pooled treatment	0.10 (0.08)	-0.00 (0.06)	0.02 (0.06)	0.06 (0.10)	0.06 (0.07)	0.02 (0.08)	0.08 (0.07)
Colombian: economic motivation for migration	0.41 (0.20)**	-0.52 (0.27)*	-0.08 (0.18)	-0.10 (0.17)	-0.47 (0.23)**	0.03 (0.13)	-0.26 (0.20)
Colombian: political motivation for migration	0.03 (0.14)	-0.35 (0.22)	0.13 (0.18)	-0.37 (0.24)	-0.18 (0.22)	-0.15 (0.11)	-0.34 (0.26)
Colombian: personal motivation for migration	0.13 (0.21)	-0.33 (0.19)*	0.09 (0.15)	0.03 (0.29)	0.01 (0.20)	-0.18 (0.16)	-0.07 (0.22)
Colombian: resided in urban centre > 20 years	-0.06 (0.14)	-0.25 (0.14)*	0.03 (0.13)	-0.12 (0.16)	-0.30 (0.14)**	-0.19 (0.12)	-0.28 (0.13)**
Treatment X Colombian: economic motivation for migration	-0.34 (0.22)	0.69 (0.27)**	0.35 (0.21)*	0.03 (0.18)	0.48 (0.24)**	0.05 (0.15)	0.37 (0.20)*
Treatment X Colombian: political motivation for migration	-0.11 (0.15)	0.40 (0.23)*	0.06 (0.21)	-0.04 (0.25)	0.07 (0.23)	0.45 (0.14)**	0.19 (0.27)
Treatment X Colombian: personal motivation for migration	-0.16 (0.23)	0.49 (0.20)**	0.14 (0.18)	-0.10 (0.29)	-0.02 (0.20)	0.17 (0.19)	0.10 (0.22)
Treatment X Colombian: resided in urban centre > 20 years	0.07 (0.16)	0.30 (0.15)**	0.31 (0.16)*	-0.02 (0.21)	0.24 (0.16)	0.12 (0.16)	0.24 (0.16)
R^2	0.07	0.07	0.03	0.09	0.08	0.08	0.13
N	1,878	1,878	1,878	1,878	1,878	1,878	1,878
F test: economic = political	1.53	3.58	2.15	0.04	5.62	4.94	1.04
p-value	0.22	0.06	0.14	0.84	0.02	0.03	0.31
F test: economic = personal	0.37	0.70	0.84	0.24	4.49	0.33	1.06
p-value	0.54	0.40	0.36	0.63	0.04	0.57	0.30
F test: personal = political	0.04	0.18	0.11	0.02	0.10	2.03	0.08
p-value	0.84	0.68	0.74	0.87	0.75	0.16	0.78
F test: Colombian long resided = political	1.03	0.15	1.25	0.00	0.44	2.82	0.04
p-value	0.31	0.70	0.27	0.95	0.51	0.10	0.85
F test: Colombian long resided = economic	3.31	1.98	0.04	0.04	0.83	0.11	0.40
p-value	0.07	0.16	0.85	0.83	0.36	0.75	0.53
F test: Colombian long resided = personal	0.82	0.72	0.65	0.06	1.19	0.04	0.35
p-value	0.37	0.40	0.42	0.81	0.28	0.84	0.56

Notes: Standard errors in parenthesis clustered at the cluster level. Aggregate outcomes are compiled using standardised indicators. All regressions include the following covariates at baseline: respondent attainment of secondary education or higher (dummy); age of respondent; female (dummy); married (dummy); household size; number of children ages 0-5; number of children ages 6-15; dummies for wealth quintiles (based on wealth index); resident in urban centre ≤ 20 years (dummy); residing in Carchi Province (dummy); dependent variables at baseline. * $p < .1$; ** $p < .05$; *** $p < .01$.

residents. Economic migrants therefore show some differential attributes and treatment outcomes with respect to other groups; however, few other patterns emerge.

To understand how migrant types differ, descriptive profiles are provided of the Colombian sample by migration status (Supplementary Appendix, Table SA.7). Colombians who moved for economic, political, or personal reasons appear similar in most background characteristics; however, those who migrated for personal reasons exhibit some demographic differences in relation to economic and politically motivated migrants (larger household size and more young children). Those who migrate for personal reasons appear to have moved, on average, more often (2.2 times, not counting the most recent move), while a smaller share moved with the entire household the first time they moved (32 per cent) relative to political migrants. In addition, migrants motivated by personal reasons are more likely to be female and to have suffered more adverse experiences, including a greater incidence of verbal threats (37 per cent) and kidnapping (7 per cent) relative to other migrants. Samples in general report high levels of adverse violent events since migrating, including verbal threats (24–37 per cent), physical threats or attacks with a knife or gun (8–20 per cent), and robbery or property damage (17–23 per cent).

Disaggregated indicators that were used to construct the six dimensions of social cohesion are analysed to investigate the indicators that drive the results on aggregate indicators, while adjusting for issues of multiple testing. As suggested by Anderson (2008), the p-values of each indicator are adjusted to reflect the multiple-inference problem by controlling the familywise error rate through Sidak-Bonferroni corrections.⁵ These are reported by domain in the Supplementary Appendix, Tables SA.8–SA.13. Overall, few specific indicators are found to be significant, which may not be surprising given the gains in power from aggregating into domains. For example, among the aggregates that are identified as significant in Table 3, three of the five indicators capturing personal agency are significant for the treated Colombians: ‘My life is determined by my own actions’, ‘I have the power to take important decisions to change my life’, and ‘I am satisfied with my life.’ (See the Supplementary Appendix for an exploration of individual impacts by domain).

Because the evaluation was not designed explicitly to examine the mechanisms through which the programme improved social cohesion, any additional analysis possible to examine mechanisms explicitly is limited. The economic transfers, targeting, messaging, and nutrition training that facilitated interaction among nationalities were components of every treatment arm; thus, it is impossible to disentangle specific contributions. However, descriptive analysis can help understand if transfers allowed resource sharing (thus potentially leading to increased network size and trust in individuals) and if control and treatment households were differentially affected by adverse shocks at end line (indicating potential targeted attacks because of jealousy or adverse effects associated with the programme). There is evidence of greater sharing of resources in the number of meals with nonhousehold members, suggesting a potential mechanism, but not in total household cash and in-kind transfers in and out of the households. Furthermore, no differential experience is found of adverse shocks at end line between treatment and control groups, including theft of money, food, or other goods from home, destruction of property, physical attacks, or loss of job (not shown).

5. Discussion and conclusions

Using an experimental evaluation of cash, food, and food vouchers targeted to Colombian refugees and poor Ecuadorians in urban and peri-urban areas, this study examines whether the programme resulted in short-term changes in measures of social cohesion. The overall results suggest that the programme contributed to the increase in the reported social cohesion of beneficiaries, particularly in the dimensions of agency and confidence in institutions and in the reported attitudes of Colombians towards diversity and social participation. The size of the impacts on the domains of social cohesion among Colombians is substantial; net increases range from 0.24 to 0.46 standard deviations. However, there were no measurable impacts on social cohesion among Ecuadorian participants. In addition, two of the six dimensions of social cohesion are not affected by the treatment among either

group, namely, trust in individuals and freedom from discrimination. There were no negative impacts of the programme on the indicators or domains analysed, although qualitative or other methodologies may be more well suited to the identification of such effects.

The results are in line with those of Lehmann and Masterson (2014), who found that cash transfers to Syrian refugees resulted in a 5 percentage point increase in the likelihood of receiving help from Lebanese community members (26 per cent in controls versus 31 per cent in treatment, including looking after children when the respondent was sick, helping with housework, or giving money). Recipients were also 4 percentage points less likely to be insulted by Lebanese community members (10 per cent in control versus 6 per cent in treatment). Lehmann and Masterson (2014) hypothesise that transfers were shared among community members, thus creating goodwill and facilitating social networks. The increased financial support was hypothesised to relax time and mental constraints; thus, the time previously spent on income generation could now be used to build social ties. This example is somewhat comparable with the current study because the cash transfer was also implemented by a nongovernmental actor (UNHCR and partners) and for a relatively short time (US\$575 in total over six months). Although different in programme design, the results here are also in line with the results of a number of other studies in development settings that have been implemented by government actors over longer periods and show positive impacts across measures of social capital and trust in institutions or community leaders (Attanasio et al., 2015; Camacho, 2014; Evans et al., 2019).

There are several limitations to the study. For instance, although gender differences in the outcomes are undoubtedly interesting, it has not been possible to determine if impacts varied by the gender of the target recipient because the sample consisted primarily of women and was not randomised by sex. Similarly, the perspective of only one adult household member is analysed. Thus, it has not possible to say if, there are diverse (positive or negative) social cohesion experiences among other household members, including children. Finally, because the programme was assessed after six months of implementation, the impacts are likely only initial indications of any changes in social cohesion. It is not possible to determine if impacts after a longer time would increase in magnitude, or conversely, if impacts might fade out after programme implementation.

Although there is little consensus on the exact domains and indicators necessary to measure social cohesion comprehensively, a more unified framework and consensus on the relevant components would facilitate future research. In the analysis here, because of data limitations, several relevant dimensions theorised by some to be critical to social cohesion, including crime, conflict, and stability, are excluded. In some contexts, such as the case of cash transfer recipients in the State of Palestine, increased marginalisation and stigma have been reported, which may also be relevant in assessing the impact of transfers on social cohesion (Pavanello et al., 2016; Roelen, 2017; Roelen et al., 2017). These dimensions are quite nuanced and may require qualitative work to unpack the concepts. Others have proposed that behavioural approaches (field experiments and lab experiments) are more suitable for capturing unbiased measures of social cohesion, including trust, cooperation, and social capital (Glaeser, Laibson, Scheinkman, & Soutter, 2000). For many of these indicators, it would be important to collect information on overall community dynamics, including spillover effects on nonrecipient households in treatment communities, to assess potential negative effects on those not eligible for benefits. Overall, additional investment is needed in the rigorous testing of indicators, domains, and indices to capture locally relevant and contextual measures of social cohesion confidently.

This study demonstrates that even short-term social protection schemes hold promise for positively affecting social cohesion between refugees and host populations. As programming is scaled up in diverse settings, including communities hosting Venezuelan refugees in Latin America and Syrian refugees in the Middle East, Europe, and elsewhere, there is a need for more programme-specific evidence. For example, dynamics may be different in settings where there are greater proportions of refugees and starker differences across ethnicity, culture, and the social standing of refugee and hosting communities. Impacts may differ between men and women, by rural or urban setting, or by programme design components, particularly related to messaging, complementary programming, and the transparency and inclusiveness of targeting. More mixed-methods evaluations in diverse settings

should be encouraged, as well as methodological innovation to identify the most promising and contextually relevant outcome indicators of social cohesion and the mechanisms through which impacts may be realised.

Acknowledgements

The authors are grateful to the Centro de Estudios de Poblacion y Desarrollo Social for data collection and management and to the World Food Programme (WFP) (Quito and Rome) for collaboration and programme implementation. They thank colleagues at the International Food Policy Research Institute (IFPRI) for support during the design and implementation of the impact evaluation, including John Hoddinott, Amy Margolies, and Vanessa Moreira, and participants at the 2017 International Conference on Social Protection in Contexts of Fragility and Forced Displacement in Brussels, the 2018 Centre for the Study of African Economies Conference in Oxford, the 2018 Conference on Rigorous Evaluation in Europe in Turin, and Tilman Brück, Jose Cuesta, Jacobus de Hoop, and Ugo Gentilini for helpful comments and feedback. Labour time for Elsa Valli and Amber Peterman for analysis and writing was provided by the Swedish International Development Cooperation Agency (Sida) received through the UNICEF Office of Research - Innocenti. The data used for this analysis are publicly available via the IFPRI dataverse site, and replication files are available upon request to the corresponding author.

Disclosure statement

No potential conflict of interest was reported by the authors. The views expressed in this publication are those of the authors and do not necessarily reflect the views or policies of funders or affiliated organizations.

Notes

1. While Colombians still migrate to Ecuador, a much larger number of refugees from Venezuela have settled in the country since 2017. According to the latest estimates, Ecuador is the fourth largest hosting country of Venezuelan refugees (after Colombia, Peru, and Chile), hosting approximately 250,000 Venezuelans (UNHCR, 2019).
2. Originally, WFP had planned that the programme would be targeted exclusively on Colombians. However, this was viewed as problematic because it might create social tensions. Thus, the scope was expanded to include both nationalities, but excluding Ecuadorians already receiving the government flagship cash transfer, the *Bono Desarrollo Humano*.
3. To assess whether the combination of individual indicators are a proxy for the underlying conceptual variable, Cronbach's alpha is used, according to which indicators with alpha levels lower than 0.5 are unacceptable (Boermans & Kattenberg, 2011). Among the set of aggregate indicators, two perform as unacceptable; three between poor and questionable, and two as acceptable (see Supplementary Appendix, Table SA.4).
4. The overall (or net) effect is obtained as a linear combination of the parameters on treatment and the treatment for Colombians.
5. $adjusted\ \alpha = 1 - (1 - unadjusted\ \alpha)^C$, where C is the number of indicators in the domain.

References

- Adato, M., Roopnaraine, T., Alvarado Álvarez, F., Böttel Peña, L., & Meléndez Castrillo, G. (2004, December). *A social analysis of the red de protección social (RPS) in Nicaragua*. Washington, DC: International Food Policy Research Institute.
- Alatas, V., Banerjee, A., Hanna, R., Olken, B. A., & Tobias, J. (2012). Targeting the poor: Evidence from a field experiment in Indonesia. *American Economic Review*, *102*, 1206–1240.
- Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. *Journal of the American Statistical Association*, *103*, 1481–1495.
- Attah, R., Barca, V., Kardan, A., MacAuslan, I., Mertens, F., & Pellerano, L. (2016). Can social protection affect psychosocial wellbeing and why does this matter? Lessons from cash transfers in sub-Saharan Africa. *Journal of Development Studies*, *52*, 1115–1131.

- Attanasio, O., Polania-Reyes, S., & Pellerano, L. (2015). Building social capital: Conditional cash transfers and cooperation. *Journal of Economic Behavior and Organization*, 118, 22–39.
- Babajanian, B. (2012). *Social protection and its contribution to social cohesion and state-building*. Eschborn, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit.
- Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., ... Udry, C. (2015). A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science*, 348, 772–789.
- Bauer, M., Blattman, C., Chytlová, J., Henrich, J., Miguel, E., & Mitts, T. (2016). Can war foster cooperation? *Journal of Economic Perspectives*, 30(3), 249–274.
- Bauer, M., Cassar, A., Chytlová, J., & Henrich, J. (2014). War's enduring effects on the development of egalitarian motivations and in-group biases. *Psychological Science*, 25, 47–57.
- Bellows, J., & Miguel, E. (2006). War and institutions: New evidence from Sierra Leone. *American Economic Review*, 96(2), 394–399.
- Bellows, J., & Miguel, E. (2009). War and local collective action in Sierra Leone. *Journal of Public Economics*, 93(11–12), 1144–1157.
- Boermans, M. A., & Kattenberg, M. A. (2011). *Estimating reliability coefficients with heterogeneous item weightings using Stata: A factor based approach* (Discussion Paper No. 11[19]). Utrecht, the Netherlands: Utrecht University, Utrecht School of Economics, Tjalling C. Koopmans Research Institute.
- Camacho, L. (2014). *The effects of conditional cash transfers on social engagement and trust in institutions: Evidence from Peru's Juntos Programme* (Discussion Paper No. 24/2014). Bonn: German Development Institute.
- Cameron, L., & Shah, M. (2013). Can mistargeting destroy social capital and stimulate crime? Evidence from a cash transfer program in Indonesia. *Economic Development and Cultural Change*, 62, 381–415.
- Council of Europe. (2004, October). *A new strategy for social cohesion*. Strasbourg, France: Author.
- Council of Europe. (2005, August). *Concerted development of social cohesion indicators: Methodological guide*. Strasbourg, France: Author.
- Devereux, S., Masset, E., Sabates-Wheeler, R., Samson, M., Rivas, A. M., & Te Lintelo, D. (2017). The targeting effectiveness of social transfers. *Journal of Development Effectiveness*, 9, 162–211.
- Devereux, S., McGregor, J. A., & Sabates-Wheeler, R. (2011). Introduction: Social protection for social justice. *IDS Bulletin*, 42(6), 1–9.
- Easterly, W., Ritzan, J., & Woolcock, M. (2006). Social cohesion, institutions, and growth. *Economics and Politics*, 18, 103–120.
- Evans, D. K., Holtemeyer, B., & Kosec, K. (2019). Cash transfers increase trust in local government. *World Development*, 114, 138–155.
- Glaeser, E. L., Laibson, D. I., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring trust. *Quarterly Journal of Economics*, 115, 811–846.
- Green, A., Jammaat, G., & Han, C. (2009). *Regimes of social cohesion*. London: University of London, Institute of Education, Centre for Learning and Life Chances in Knowledge Economies and Societies.
- Hidrobo, M., Hoddinott, J. F., Peterman, A., Margolies, A., & Moreira, V. (2014). Cash, food, or vouchers? Evidence from a randomized experiment in Northern Ecuador. *Journal of Development Economics*, 107, 144–156.
- Hidrobo, M., Peterman, A., & Heise, L. (2016). The effect of cash, vouchers and food transfers on intimate partner violence: Evidence from a randomized experiment in Northern Ecuador. *American Economic Journal: Applied Economics*, 8(3), 284–303.
- Holmes, R. (2009). *Cash transfers in post-conflict contexts* (Project Briefing No. 32). London: Overseas Development Institute.
- Kardan, A., MacAuslan, I., & Marimo, N. (2010). *Evaluation of Zimbabwe's Emergency Cash Transfer (ZECT) programme*. Oxford: Oxford Policy Management.
- King, E., Samii, C., & Snilstveit, B. (2010). Interventions to promote social cohesion in Sub-Saharan Africa. *Journal of Development Effectiveness*, 2, 336–370.
- Lehmann, C., & Masterson, D. (2014, August). *Emergency economies: The impact of cash assistance in Lebanon; An impact evaluation of the 2013–2014 winter cash assistance program for Syrian refugees in Lebanon*. Beirut: International Rescue Committee.
- Leites, M., Pereira, G., Rius, A., Salas, G., & Vigorito, A. (2017). *Protocol: The effect of cash transfers on social solidarity; A systematic review*. Oslo: Campbell Collaboration.
- McKenzie, D. (2012). Beyond baseline and follow-up: The case for more T in experiments. *Journal of Development Economics*, 99, 210–221.
- Narayan, D. (1999). *Bonds and bridges: Social capital and poverty* (Policy Research Working Paper No. 2167). Washington, DC: World Bank.
- Organisation for Economic Co-operation and Development (OECD). (2012). *Perspectives on global development 2012: Social cohesion in a shifting world*. Paris: Author.
- Overseas Development Institute (ODI) & Center for Global Development (CGD). (2015, September). *Doing cash differently: How cash transfers can transform humanitarian aid; Report of the High-Level Panel on Humanitarian Cash Transfers*. London: ODI.

- Pavanello, S., Watson, C., Onyango-Ouma, W., & Bukuluki, P. (2016). Effects of cash transfers on community interactions: Emerging evidence. *Journal of Development Studies*, 52, 1147–1161.
- Pellerano, L., Moratti, M., Jakobsen, M., Bajgar, M., & Barca, V. (2014). *The Child Grants Programme impact evaluation: Follow-up report*. Oxford: Oxford Policy Management.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.
- Roelen, K. (2017). *Shame, poverty and social protection* (IDS Working Paper No. 489). Brighton, UK: Institute of Development Studies.
- Roelen, K., Devereux, S., Abdulai, A., Martorano, B., Palermo, T., & Ragno, L. (2017). *How to make 'cash plus' work: Linking cash transfers to services and sectors* (Innocenti Working Paper 2017–10). Florence: UNICEF Office of Research - Innocenti.
- Shedlin, M. G., Decena, C. U., Noboa, H., & Betancourt, Ó. (2014). Sending-country violence and receiving-country discrimination: Effects on the health of Colombian refugees in Ecuador. *Journal of Immigrant and Minority Health*, 16, 119–124.
- United Nations High Commissioner for Refugees (UNHCR). (2012). *2012 global report: Ecuador*. Geneva: Author.
- United Nations High Commissioner for Refugees (UNHCR). (2018, June 25). *Global trends: Forced displacement in 2017*. Geneva: Author.
- United Nations High Commissioner for Refugees (UNHCR). (2019). Venezuela situation. Retrieved from <https://www.unhcr.org/venezuela-emergency.html>