RESEARCH ARTICLE / ARAȘTIRMA MAKALESİ

Migrant Remittances and Human Security

Göçmen Havaleleri ve İnsan Güvenliği

Saadet ULAŞOĞLU İMAMOĞLU^{*}

Abstract

The estimated number of people living in a country other than their country of birth has increased over the past five decades. With the rising number of migrants around the world, one of the significant implications of migrant movements is that international remittances have increased over time and exceeded the level of official development aid, which is described as government assistance dedicated to advancing the economic development and prosperity of developing countries. Consistent with the rising level of international remittances, there has been a proliferation of research examining the impact of remittances on development in remittance-recipient countries in recent years. While the effects of remittances and human security in remittance-recipient countries has been insufficiently investigated. In order to fill this gap, this study theoretically discusses and empirically examines the link between migrant remittance-recipients with extra income to meet their socioeconomic needs and increase their personal safety, enabling them to be free from want and free from fear. The findings of quantitative analysis conducted based on a global data set show evidence that migrant remittances improve human security in remittance-recipient countries.

Keywords: Migrant Remittances, Human Security, Migration, Recipient Countries, Quantitative Analysis

Öz

Doğdukları ülkeden başka bir ülkede yaşayan insanların tahmin edilmekte olan sayısı geçtiğimiz elli yıl içerisinde artış göstermiştir. Dünya çapında göçmen sayısının artış göstermesi ile birlikte, göçmen hareketliğinin önemli sonuçlarından biri olarak kabul edilen uluslararası göçmen havalelerinin miktarı da zaman içerisinde yükseliş göstermiş ve gelişmekte olan ülkelerin ekonomik kalkınma ve refahını arttırmaya yönelik hükümet yardımları olarak tanımlanan resmi kalkınma yardımlarınn miktarını geçmiştir. Uluslararası göçmen havalelerinin artan miktarı ile uyumlu olarak bu havalelerin alıcı ülkelerdeki ekonomik kalkınma üzerine etkilerini inceleyen araştırma sayısında yakın zamanda bir yükseliş söz konusu olmuştur. Göçmen havalelerinin bu havaleleri kabul eden ülkelerdeki ekonomik

Dr. Öğr. Üyesi, Kırklareli Üniversitesi, u.saadet@klu.edu.tr, ORCID: 0000-0003-1548-029X

How to cite this article/Atuf için: Ulaşoğlu İmamoğlu S. (2024). Migrant Remittances and Human Security. *Marmara University Journal of Political Science, 12*(2), 201-217. DOI: 10.14782/marmarasbd.1513568

Makale Gönderim Tarihi: 10.07.2024

Yayına Kabul Tarihi: 07.08.2024



Bu eser Creative Commons Atıf-Gayri Ticari 4.0 Uluslararası Lisansı ile lisanslanmıştır. kalkınma üzerine etkileri geniş çaplı bir şekilde çalışmalara konu olmuşken havalelerin alıcı ülkelerdeki insan güvenliği ile arasındaki ilişki yeterince araştırılmamıştır. Sözkonusu boşluğu doldurmak için bu çalışma, göçmen havaleleri ile insan güvenliği arasında var olan ilişkiyi teorik olarak tartışmakta ve ampirik olarak incelemektedir. Çalışmanın savına göre, uluslararası göçmen havaleleri, sosyo ekonomik ihtiyaçlarını karşılamaları ve kişisel güvenliklerini arttırmaları için havale alıcılarına fazladan gelir sağlayarak bu kişilerin yoksulluktan ve korkularından kurtulmalarını sağlamakta ve bu sayede alıcı ülkelerdeki insan güvenliğini arttırmaktadır. Küresel bir veri setine dayalı olarak gerçekleştirilen nicel analizin sonuçları, göçmen havalelerinin bu havalelerin alıcısı olan ülkelerdeki insan güvenliği üzerine iyileştirici etkisi olduğuna dair kanıtları göz önüne sermektedir.

Anahtar Kelimeler: Göçmen Havaleleri, İnsan Güvenliği, Göç, Alıcı Ülkeler, Nicel Analiz

1. Introduction

According to the latest World Migration Report released by the International Organization for Migration (IOM), the stock of international migrants is estimated to be almost 281 million in 2020, compared to 272 million in 2019, reaching 3.6 percent of the world's population (McAuliffe & Triandafyllidou, 2021). When examining the destination countries for international migrant populations, as seen in Figure 1 plotted based on the data coming from United Nations Department of Economic and Social Affairs Population Division (UN DESA), more than fifty countries around the world hosted over 1 million international migrants by the end of 2020. Among these countries, the United States is the leading country with over 50 million migrants (UN DESA, 2021). Following the United States, Germany and Saudi Arabia are the second and the third largest destination countries with over 16 million and 13 million international migrants, respectively (McAuliffe & Triandafyllidou, 2021).

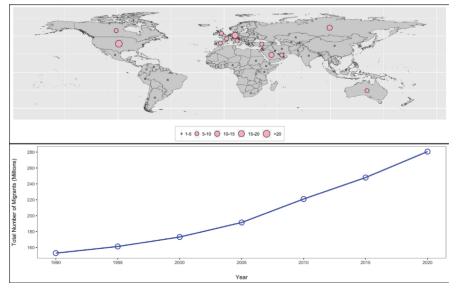


Figure 1. Total Number of Migrants Worldwide **Source:** UN DESA, Population Division, n.d. (Accessed December 2023)

As one of the fundamental results of migrant movements, remittances, defined as monetary or in-kind transfers sent by emigrants to individuals living in their countries of origin (McAuliffe & Triandafyllidou, 2021), provide a vital source of revenue for recipient households and foreign exchange entries in developing countries. International remittance receipts, incorporating both developing and high-income countries, have increased from USD 128 billion in 2000 to USD 702 billion in 2020 (McAuliffe & Triandafyllidou, 2021). As seen in Figure 2, remittances to low – and middle-income countries have exceeded official development assistance since the middle of the 1990s and reached close to the level of foreign direct investment (FDI) flows. Owing to the increasing level of remittances, the World Bank identifies remittances as a significant source of funding for developing countries and a less volatile source of outside funding compared to foreign direct investments (Ratha, Kim, Plaza, Seshan, Riordan & Chandra, 2021).

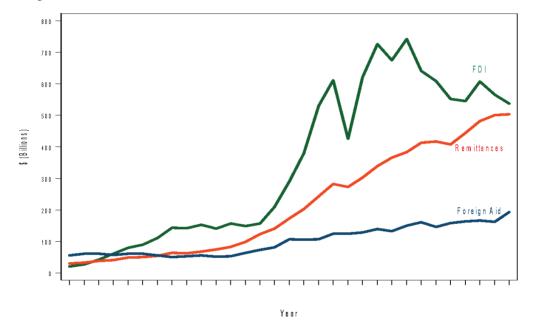


Figure 2. Remittance Flows to Low – and Middle-Income Countries (1990-2020) **Source:** World Bank, n.d. (Accessed December 2023).

With the increasing number of migrants worldwide, recent research has paid substantial attention to the influences of migrant remittances on micro and macro level development in receiving countries. Some studies show that remittances improve recipients' well-being through their effects on poverty, educational attainment, healthcare, and physical security (Adams & Page, 2003; Brito, Corbacho & Osorio, 2014; Chaaban & Mansour, 2012; Doyle & Garcia, 2021; Zhunio, Vishwasrao & Chiang, 2012). Other studies find that migrant remittances improve the macroeconomic conditions of home countries, such as economic growth, balance of payments and interest rates (Bugamelli & Paterno, 2009; Giuliano & Ruiz-Arranz, 2009; Gupta, Pattillo & Wagh, 2007).

While the effects of remittances upon development in recipient states have been broadly studied, less is known about the effect of remittances on human security. The 1994 Human Development Report (HDR) revealed by the United Nations Development Programme (UNDP) identifies human security as individuals' right to live free from fear and free from want by emphasizing the importance of protecting people from threats to their welfare and safety. Following the framework developed by the 1994 HDR, human security has been recently defined by Reinsberg, Shaw and Bujnoch (2024) as the ability of a person to live free from threats to their physical integrity or deliberate harm in addition to the ability to meet their fundamental physical and social desires (p. 3). Suggesting that advancement in one area will affect the progression in the other, human security has been recognized as an essential part of human development (UNDP, 1994). Acknowledging the human development-security nexus, this study aims to advance the research on migration by examining whether remittances sent by migrant populations living abroad have an impact on human security in recipient states.

The main argument in this study is that remittances improve human security in remittance-receiving countries by raising social welfare and personal safety. According to this argument, remittances promote human security by providing extra income to individual households, thereby increasing their ability to meet essential socioeconomic needs, such as education, health and food. In addition to assisting people to meet their fundamental needs, remittances raise human security by enhancing recipients' personal safety through extra income to spend on increased protection such as moving to safer communities, changing to safer transportation forms, and building fences among other measures. Similarly, remittances advance human security by allowing people to avoid threats to their physical security coming from governments, as remittances decrease economic grievances by diminishing the demand for social welfare expenditures. Based on quantitative analysis using a data set including 179 countries over the period between 1980 and 2019, this study finds evidence that remittances promote the level of human security in recipient states.

The remaining parts of the paper are organized as follows: the next section provides a concise summary of the research that links migrant remittances to development in the remittance-receiving countries. The third section presents the main argument about the influence of remittances on human security and derives a hypothesis to be tested. The fourth section introduces the research design, discussing the data as well as the estimation method, while the fifth and sixth sections present the main results and robustness checks respectively. The seventh section provides a discussion on a case illustrating the connection between remittances and human security. The eight and final section presents an overview of the results and an argument on the imminent implications of this study.

2. Background

With the rising level of international migrant remittances, scholars have studied their implications on development. Previous research has found evidence that remittances mitigate poverty in recipient countries (Adams & Page, 2003; Gupta, Pattillo & Wagh, 2009; Yoshino, Taghizadeh-Hesary & Otsuka, 2017). Similarly, remittances promote recipients' living standards through their positive

impact on educational attainment (Chaaban & Mansour, 2012; Ponce, Olivie & Onofa, 2011) and health outcomes such as life expectancy and vaccination (Zhunio, Vishwasrao & Chiang, 2012). Recognized as of great importance in raising the living standards of recipients, remittances also assist to changing traditionally accepted gender roles within households (Lopez-Ekra, Aghazarm, Kotter & Mollard, 2011). Additionally, remittances alleviate citizen access to public goods traditionally provided by governments, such as clean water and drainage (Adida & Girod, 2011), as well as public security (Brito, Corbacho & Osorio, 2014; Doyle & Garcia, 2021).

As remittances improve the economic conditions of recipients through their direct effect on household income, recent research has found that remittances also promote financial development in recipient countries through their indirect effect on macroeconomic indicators such as growth, exchange rates, and interest rates (World Bank, 2006). Providing another way to fund investment and assisting in solving liquidity problems, remittances advance growth in countries with less developed monetary systems (Giuliano & Ruiz-Arranz, 2009). Moreover, migrants can create a steady source of foreign-exchange earnings by increasing the level of exports from country of origin and tourism revenues (Gould 1994; Head & Ries, 1998; Orozco, 2003). Leading to a robust flow of foreign exchange earnings, remittances contribute to higher credibility for foreign debt, thus increasing access to funds and decreasing borrowing costs (World Bank, 2006). Additionally, remittances promote financial stabilization by boosting foreign exchange inflows that provide funds to reduce the deficit of current account of balance of payment (Bugamelli & Paterno, 2009).

While human security has been recognized as essential for development (UNDP 1994), empirical examination of the human security consequences of remittances has been limited. This was partly related to the lack of a comprehensive measure for human security, although there have been several attempts to create an index before. A well-known attempt to provide an index for human security was conducted by Hastings (2009, 2010), but this index has not been publicly available. Another attempt to create a human security index was managed by Werthes, Heaven and Vollnhals (2011), however, their measure is limited to a small number of countries and provides information for a limited time period. Recently, Reinsberg, Shaw and Bujnoch (2024) have introduced a new human security index that offers information for a large set of countries over a long time period. This publicly available index allows researchers to empirically examine the human security implications of international migrant remittances.

As a result, a substantial level of attention has been paid to remittances' influence on development at the micro and macro levels while their impact on human security has been insufficiently investigated. In order to fill this gap, this study examines whether migrant remittances affect human security in remittance-recipient countries.

3. Remittances and Human Security

From the beginning of the United Nations, human security has been emphasized for enduring peace. However, until the end of the Cold War, the concept of human security was equated with the protection of territories from an external threat and absence of a nuclear war. After the Cold War, the attention on traditional security linked to the territorial integrity shifted to a broader notion of security threats targeting individuals. The 1994 UNDP Human Development Report recognizes human security as an essential component of development and stresses that once people feel secure economically, politically, and socially, they will be able to contribute to development. The 1994 Report focuses on two aspects of human security: "freedom from want and freedom from fear" (UNDP, 1994). While the first aspect implies liberation from threats of hunger, disease, and poverty, the second aspect requires security from disturbances in daily life such as losing jobs, homes, or loved ones.

This paper argues that remittances improve human security in recipient states as they generate extra income for individual welfare spending and reduce threats to individuals' security. First, remittances advance human security by decreasing the dependency of people on welfare politics and thus their need for government transfers. When people in foreign countries send money to individuals in their countries of origin, they increase household income in recipient countries that could be spent on food, housing, and transportation (Chimhowu, Piesse & Pinder, 2005). Remittances also enable recipient families to spend more on education and health care services (Yang, 2008; Chami, Fullenkamp & Jahjah, 2003). While remittances positively affect child schooling and decrease the chance of children dropping out of school (Cox Edwards & Ureta, 2003; Yang, 2011; World Bank, 2006), they also have a positive impact on the health of recipient families through increased access to health care services (World Bank, 2006). As a source of extra income for individual households, remittances enable families to afford to pay private healthcare facilities and send their children to private schools (Kapur, 2010). Other than increasing individual levelwelfare, remittances increase communal well-being when they are used to improve governmentdriven public services such as access to cleaner water and better sanitation systems (Adida & Girod, 2011), along with public safety (Doyle & Garcia, 2021).

Although remittances are directly sent to individual households, studies show evidence that they provide an important source of income for home country governments as well. Remittances lead to macroeconomic growth through productive activities (Chami, Fullenkamp & Jahjah, 2003; Rao & Hassan, 2011) or consumption (Glytsos, 2005). They can raise government revenue through spending on goods and services as well as value-added taxes (Singer, 2012). Remittances, as more stable revenue sources than foreign aid or foreign direct and portfolio investments, provide foreign currency to repay foreign debts (Bugamelli and Paterno 2009) and help to reduce interest rates (Gupta, Pattillo & Wagh, 2007). Moreover, remittances contribute to productive activities, as migrants who are well-informed about the market in their home countries, owing to their acquaintance with the culture and language are willing to invest in their home countries (Schuttler, 2007; Schulte, 2008). Migrants who are able to provide information to investors in host countries reduce transaction costs due to their familiarity with language and regulations in their home and host countries (Leblang, 2010).

Second, remittances increase human security by enhancing recipients' personal security. Remittances provide recipient households with extra income to take measures to avoid crime such as moving to

secure neighborhoods, buying safer transportation vehicles, building fences etc. (Doyle & Garcia, 2021). Additionally, remittances sent by international migrants reduce the pressures on governments for public service provision, since recipient families are able to fulfill their fundamental necessities such as food, medicine, clothing and transportation (Singer, 2012). Through their positive effect on individual well-being, remittances reduce economic grievances by substituting social welfare spending (Doyle, 2015). When economic grievances of remittance recipients decrease, they become less likely to punish their governments (Tertytchnaya et al. 2018). As the threat to the government and/or leader survival is smaller, the risk of physical integrity violations will be lower (Davenport, 1995, 2007). Since governments are more inclined to become coercive once they encounter threats (Gurr, 1988; Poe, Tate & Keith, 1999), governments of remittance-recipient countries will not need to abuse physical integrity of citizens to eliminate threats to their survival.

Consequently, this paper argues that remittances improve human security in recipient states. On the one hand, they increase individual households' welfare by giving remittance recipients alternative ways to increase their income and thus provide freedom from want. On the other hand, remittances strengthen personal security by helping remittance recipients access secure neighborhoods and avoid threats to their physical integrity coming from governments. This argument brings the consequent hypothesis: *Remittances improve human security in recipient countries*.

4. Research Design

To test whether remittances improve human security, this study employs a data set that covers 179 countries for a time period spanning from 1980 to 2019. The unit of analysis is country-year.

Since the main argument is about the effect of remittances on human security, the dependent variable in this study is *Human Security*. The data to measure the dependent variable, *Human Security*, come from Reinsberg, Shaw and Bujnoch (2024). They define human security as the potential of governments to fulfill the fundamental socioeconomic and security needs of their citizens (Reinsberg, Shaw & Bujnoch, 2024). In accordance with its definition, the human security index is constructed based on a latent factor analysis, capturing the extent to which people afford to meet their physical and social necessities, such as education, food, health, and water, as well as the extent to which they live free from threats to their physical security, such as homicides, human rights violations, terrorist attacks, and conflicts (Reinsberg, Shaw & Bujnoch, 2024). The human security index is a continuous variable, with higher values indicate greater levels of human security.

In accordance with this study's argument about the improving effect of remittances on human security, the main independent variable in this study is *Remittances*, measured by the amount of remittances received by states annually. Data on this variable are available from the World Bank's World Development Indicators (2019). The World Bank provides the most recent annual data on migrant remittances, comprising workers' remittances, compensation of employees, and migrants' transfers (World Bank, 2019). It is important to note that the World Bank only estimates

the remittance inflows sent through official transmission channels, and remittances sent through unofficial channels are not covered by this data. Natural log transformation for *Remittances* is used to balance out the skewness of the distribution.

In addition to the main independent variable, *Remittances*, several control variables that are likely to impact the association between remittances and human security are added to the main model. First, *GDP per capita*, is added to the analysis because it has been linked to abuses towards physical integrity as well as the living standards of people (Mitchell & McCormick, 1988; Poe & Tate, 1994; UNDP, 1990). The data indicating economic wealth come from the World Bank (2019). To balance out the skewed distribution, natural log transformation for GDP per capita is used.

Second, *Population* is added to the analysis since recent studies have discussed that highly populated countries are more likely to have problem in satisfying their citizens' needs and expectations (Henderson, 1993). *Population* is measured using the data coming from the World Bank (2019). This variable is also logged to balance out the skewed distribution.

Third, *Democracy*, is included in the model to account for its possible effect on the link between remittances and human security because regime type has been discussed as a significant factor affecting physical integrity rights violations (Poe & Tate, 1994; Poe, Tate & Keith, 1999) along with human well-being (Gerring, Thacker & Alfaro, 2012). The data come from Polity IV index, ranging from – 10 (highly autocratic) to +10 (highly democratic), with greater values showing advanced levels of democracy (Marshall, Gurr & Jaggers, 2019). Democracy is coded as 1 for countries having a score of 6 and above, and 0 otherwise.

Fourth, *Civil Conflict*, as another control variable, is added to the analysis since recent research has acknowledged conflicts as important in explaining physical integrity rights abuses (Poe & Tate, 1994; Poe, Tate & Keith, 1999) as well as adverse economic performance (Collier, 1999; Abedie & Gardeazabal, 2003). The data for this variable come from the Uppsala Conflict Data Program/Peace Research Institute Oslo Armed Conflict Data set (Davies, Pettersson & Oberg, 2022; Gleditsch, Wallensteen, Eriksson, Sollenberg & Strand, 2002). This indicator is coded as 1 for years in which civil conflicts are experienced, and 0 otherwise.

Finally, a variable for human rights violations, *PTS_S*, is included in the model in order to account for its effect on the relationship between remittances and human security. The data for this variable come from the Political Terror Scale (Gibney & Dalton, 1996; Wood & Gibney, 2010). PTS data measure physical integrity rights violations within a range from 1 to 5, coded from '1' indicating the highest level of government respect to '5' indicating the lowest level of respect for physical integrity rights.

4.1. Model Specification

The basic structure of the data is time-series cross-sectional. The yearly data extend to a maximum of 179 countries and cover the 1980-2019 time period. In order to test the hypothesis, this study employs linear regression analysis with country-specific fixed-effects. Fixed-effects regression is

an effective way to investigate how changes in remittances affect human security in a given state since it allows for the control of the effect of individual country characteristics. All the righthand side variables are lagged one year to precede the dependent variable. The basic fixed-effects model is the following:

HSIi,t =
$$\beta 0 + \beta 1Xi$$
,t + $\beta 2Zi$,t + ui + ei,t

where HSIi,t represents the dependent variable in this study, human security in a country i at year t, whereas Xi,t indicates the main independent variable, migrant remittances; and Zi,t is a vector involving control variables. Lastly, ui is the country fixed effects and ei,t is a well-behaved error term.

The summary statistics for all the variables that have been discussed in the Research Design section are presented in Table 1. The first and second columns in Table 1 indicate the name and the number of observations for all the variables consecutively. The third and fourth columns of Table 1 demonstrate the mean and standard deviations for all the variables, while the fifth and sixth columns show the minimum and maximum values, respectively.

| Variable | Obs. | Mean | Std.Dev. | Min | Max |
|-----------------------|------|-------|----------|-------|-------|
| Human Security | 7954 | -0.03 | 0.95 | -3.48 | 1.45 |
| Log of Remittances | 5588 | 19.05 | 2.57 | 8.71 | 25.15 |
| Log of GDP Per Capita | 6988 | 7.97 | 1.62 | 3.13 | 12.22 |
| Log of Population | 7599 | 15.34 | 2.17 | 8.95 | 21.07 |
| Democracy | 7758 | 0.55 | 0.50 | 0 | 1 |
| Civil Conflict | 7758 | 0.14 | 0.35 | 0 | 1 |
| PTS_S | 7022 | 2.37 | 1.18 | 1 | 5 |

Table 1. Summary Statistics

5. Results

Model 1 in Table 2 shows the results of fixed effects model for each individual variable included in the main model. First of all, as expected, the main independent variable in this study, Remittances, has a significant positive effect on human security in remittance-receiving countries. This result indicates that the more remittances received in recipient countries, the level of human security will be higher. In addition to the main independent variable, *Remittances*, Model 1 in Table 2 demonstrates the results for control variables. Among them, *GDP Per Capita, Population* and *Democracy* have significant positive effects on human security. These findings indicate that wealthier, more populous, and more democratic countries have higher levels of human security. As reported in Model 1 in Table 2, other control variables, *Civil Conflict* and *PTS_S*, have significant negative effects on human security. According to these results, countries with civil conflicts and higher levels of human rights abuses have lower levels of human security.

| | Table 2. Reinitiances and Human Security, 1960-2019 (Wain Results) | | | | | | |
|-----------------------------|--|--------------------|--------------------|--|--|--|--|
| | (Model 1) | (Model 2) | (Model 3) | | | | |
| | DV: Human Security | DV: Human Security | DV: Human Security | | | | |
| Remittances_(t-1) | 0.034*** | 0.034*** | 0.034*** | | | | |
| _(**/ | (0.009) | (0.009) | (0.009) | | | | |
| Log of GDP Per Capita_(t-1) | 0.135*** | 0.147*** | 0.142*** | | | | |
| | (0.019) | (0.028) | (0.024) | | | | |
| Log of Population_(t-1) | 0.995*** | 1.036*** | 1.017*** | | | | |
| ((-1) | (0.092) | (0.120) | (0.118) | | | | |
| Democracy_(t-1) | 0.052* | 0.069** | 0.052* | | | | |
| | (0.029) | (0.030) | (0.029) | | | | |
| Civil Conflict_(t-1) | -0.227*** | -0.234*** | -0.227*** | | | | |
| _\(1) | (0.037) | (0.038) | (0.037) | | | | |
| PTS_S_(t-1) | -0.090*** | -0.085*** | -0.089*** | | | | |
| _\(1) | (0.012) | (0.012) | (0.012) | | | | |
| Time Trend | | | -0.001 | | | | |
| | | | (0.002) | | | | |
| Constant | -17.029*** | -17.756*** | -15.680*** | | | | |
| | (1.378) | (1.888) | (2.898) | | | | |
| Observations | 5413 | 5413 | 5413 | | | | |
| Number of Groups | 179 | 179 | 179 | | | | |
| Country FE | Yes | Yes | Yes | | | | |
| Year FE | No | Yes | No | | | | |
| Time Trend | No | No | Yes | | | | |
| Wald chi p-value | 0.000 | 0.000 | 0.000 | | | | |

Note: Clustered standard errors are in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Model 2 in Table 2 shows the results after controlling for year fixed effects as well as country fixed effects. As seen in the second model in Table 2, the main independent variable of interest, *Remittances*, still has a significant positive effect on the dependent variable, *Human Security*. This result confirms the main argument that remittances promote human security in remittance recipient countries. Similarly, among the control variables, *GDP Per Capita, Population* and *Democracy* still have significant positive associations with the outcome variable, *Human Security*. These findings suggest that increasing levels of wealth, population and democratic values improve human security in recipient countries. As with other control variables reported in Model 2 in Table 2, *Civil Conflict* and *PTS_S* still have a significant negative relationship with the outcome variable, *Human Security*. Those results indicate that civil conflicts and human rights violations deteriorate human security in countries.

In Model 3 reported in Table 2, a time trend is added to the model instead of year effects. The association between *Remittances* and *Human Security* remains unchanged. It is still positive and significant, showing the enhancing impact of remittances on human security. Additionally, the sign and significance of all the control variables remain the same after adding a time trend to the model. Among them, *GDP Per Capita, Population* and *Democracy* still have a significant positive association with the outcome variable, *Human Security*. These results imply that more prosperous,

populous, and democratic countries have higher levels of human security. On the other hand, as seen in Model 3 reported in Table 2, *Civil Conflicts* and *PTS_S* have a significant negative relationship with the outcome variable, *Human Security*. These findings indicate that countries experiencing civil conflicts and human rights violations have lower levels of human security.

6. Robustness Checks

In the main model presented in Table 2, the results support the main argument in this study that remittances improve human security in remittance recipient countries. Additional tests are run to examine the robustness of these results. The inflow of foreign direct investments (*FDI*) is added to the analysis as another control variable to account for its possible effect on the relationship between human security and remittances. Second, net official development aid and foreign aid, *Net ODA and Aid*, is included in the model in order to address its possible effect on the relationship between human security and remittances. The data for these two variables come from the World Bank (2019). Both variables are logged and lagged for one year.

| Table . | | uman Security, 1980-2 | ``` | , |
|-----------------------|--------------------|-----------------------|--------------------|--------------------|
| | (Model 4) | (Model 5) | (Model 6) | (Model 7) |
| | DV: Human Security | DV: Human Security | DV: Human Security | DV: Human Security |
| Remittances | 0.032*** | 0.032*** | 0.031*** | |
| | (0.009) | (0.010) | (0.010) | |
| Remittances % of GDP | | | | 0.005*** |
| | | | | (0.001) |
| Log of GDP Per Capita | 0.138*** | 0.131*** | 0.120*** | 0.150*** |
| | (0.029) | (0.036) | (0.037) | (0.033) |
| Log of Population | 0.968*** | 0.967*** | 0.895*** | 0.970*** |
| | (0.111) | (0.162) | (0.152) | (0.117) |
| Democracy | 0.070** | 0.047 | 0.049 | 0.086*** |
| · | (0.030) | (0.032) | (0.032) | (0.029) |
| Civil Conflict | -0.232*** | -0.244*** | -0.239*** | -0.235*** |
| | (0.036) | (0.041) | (0.038) | (0.036) |
| PTS_S | -0.075*** | -0.092*** | -0.081*** | -0.086*** |
| | (0.011) | (0.013) | (0.012) | (0.012) |
| FDI | 0.026*** | | 0.032*** | |
| | (0.006) | | (0.007) | |
| Net ODA and Aid | | 0.492** | 0.421** | |
| | | (0.202) | (0.184) | |
| Constant | -17.123*** | -18.019*** | -17.235*** | -16.191*** |
| | (1.763) | (2.651) | (2.450) | (1.863) |
| Observations | 5003 | 4184 | 3878 | 5548 |
| Number of Groups | 179 | 155 | 155 | 180 |
| Country FE | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes |
| Wald chi p-value | 0.000 | 0.000 | 0.000 | 0.000 |

Table 3. Remittances and Human Security, 1980-2019 (Robustness Checks)

Note: Cluestered standard errors are in parenthesis. *** p<0.01, ** p<0.05, * p<0.10

As seen in Model 4 reported in Table 3, after adding *FDI* to the main model, the main independent variable of this study, *Remittances*, still has a positive and significant effect on human security, indicating that an increasing level of remittances will lead to an increased level of human security in countries. According to the findings presented in Model 4 in Table 3, *FDI* has a significant positive relationship with human security, showing that an increasing level of foreign direct investment inflows raises human security in countries. Similarly, *GDP Per Capita, Population* and *Democracy* has significant positive associations with the dependent variable, *Human Security*. These findings indicate that wealthier, more populous, and more democratic countries have higher levels of human security. On the other hand, *Civil Conflict* and *PTS_S* have a significant negative relationship with the dependent variable, *Human Security*. According to these results, countries experiencing civil conflicts and with a higher level of human rights violations have lower levels of human security.

The results remain mostly the same after adding another variable, *Net ODA and Aid*, to the model. As seen in Model 5 in Table 3, *Remittances* still has a significant positive relationship with human security, indicating that higher levels of remittances lead to higher levels of human security in countries. As expected, *Net ODA and Aid* has a significant positive effect on human security, showing that raising levels of net development aid and foreign aid leads to higher levels of human security. All the other variables except *Democracy* keep their sign and significance. The results presented in Model 5 in Table 3 indicate that *GDP Per Capita* and *Population* still significantly enhance human security in countries. While Democracy still has a positive association with the dependent variable, *Human Security*, this effect is no longer significant. As expected, *Civil* Conflict and *PTS_S* still have a negative association with the dependent variable, confirming their deteriorating effects on human security.

Moreover, Model 6 in Table 3 shows the results after including two extra variables, *FDI* and *Net ODA and Aid*, together in the same model. The result for the effect of remittances on human security remains unchanged. *Remittances* still have a positive and significant effect on the dependent variable, *Human Security*. This result confirms the main argument and shows that remittances promote human security in recipient countries. Similarly, *FDI* and *Net ODA and Aid* have a significant positive association with the dependent variable, indicating that foreign direct investments and net official development aid and foreign aid advance human security. Among the control variables reported in Model 6 in Table 3, GDP Per Capita and Population still have significant positive effects on the dependent variable, confirming that more affluent and populous countries have higher levels of human security, while the positive impact of regime type, Democracy, on human security is not significant. *Civil Conflict* and *PTS_S* have a significant negative relationship with the dependent variable, indicating that they diminish human security.

Finally, Model 7 in Table 3 presents the findings after replacing *Remittances % of GDP* with remittance inflows as the main independent variable. The data for this variable come from the World Bank (2019). As seen in Model 7 in Table 3, after changing the main independent variable from remittance inflows to remittances as a percent of GDP, remittances still have a significant

positive relationship with the dependent variable, *Human Security*. This finding supports the main argument that remittances improve human security in recipient countries. After including *Remittances % of GDP* instead of remittance inflows as the main independent variable, among the control variables, *GDP Per Capita, Population*, and *Democracy* have a significant positive association with the dependent variable, *Human Security*. These results display that more populous, democratic, and wealthy countries have higher levels of human security. The other control variables included in Model 7 reported in Table 3, *Civil Conflict* and *PTS_S*, have significant negative impacts on the dependent variable, confirming their worsening effects on human security.

7. Discussion

The findings of the statistical analysis based on the aggregate-level data confirm this study's main argument that remittances improve human security in remittance-recipient countries. While the aggregate-level data provide information that allows researchers to make generalization about the phenomena at hand, they make it hard to identify the mechanism behind the investigated relationship. To clarify the link between remittances and human security, this study relies on the evidence from case studies analyzing implications of remittances in individual countries. Among them, Mexico is a significant illustrative case that presents how remittances promote human security in remittance-recipient countries. With around 11 million emigrants, mostly living in the United States, Mexico is acknowledged as the second-largest origin country in the world in 2020 (McAuliffe & Triandafyllidou, 2021). As a significant implication of having a large emigrant population living abroad, Mexico is one of the important remittance-receiving countries, the third largest in the world, while remittance inflows to the country have risen from around USD 23 billion in 2005 to around USD 43 billion in 2020 (McAuliffe & Triandafyllidou, 2021).

In Mexico, remittances play a significant role in advancing human security by enabling recipients to meet their essential needs, such as food, healthcare, education, and safety. Firstly, remittances sent by Mexicans living abroad enable recipient households to invest more in food (Mora-Rivera & van Gameren, 2021). In addition to increasing household expenditures on food, remittances provide Mexican recipients with extra income, allowing children in recipient households to achieve significantly more years of educational attainment (Hanson & Woodruff, 2003). Similarly, remittance-recipient households in Mexico are able to allocate more resources to healthcare (Valdero-Gil, 2009). Remittances sent by Mexican migrants also help improve access to public goods such as clean water and drainage (Adida & Girod, 2011). Additionally, in Mexico, remittance recipients are less likely to face crime, specifically homicides, because they can afford to take measures to prevent crime (Brito, Corbacho & Osorio, 2014).

Consequently, congruent with the concept of human security, this study argues that remittances improve human security in recipient countries by providing remittance-recipients with extra income to meet their basic necessities and increase their personal security. Through the evidence on the positive effects of remittances on food consumption, schooling, healthcare, and personal safety, Mexico illustrates the main argument in this study.

8. Conclusion

Owing to the rise in international migrants, a substantial amount of research has been undertaken linking remittances to micro and macro-level development. Recent research has found evidence that remittances lead to improved macroeconomic indicators, such as increased level of economic growth, exchange rates, and balance of payments, while another line of research has indicated that remittances are significant predictors of micro-level development in recipient states. However, the effect of remittances on human security has still been waiting to be examined.

With the aim of advancing the research on migration, this study theoretically discusses and empirically examines the link between remittances and human security, arguing that migrant remittances lead to an increased level of human security in remittance-recipient states. According to this argument, in order to have higher levels of human security, people should have economic liberty and personal safety. When international migrants remit money to advance the quality of life of their relatives abroad, they also assist in reducing poverty in the countries of origin. The extra income coming from international migrants reduces the clientelist relationship between governments and the citizens in recipient states, as people with a rise in household income to meet their most fundamental necessities, such as food, education, and health care, become less dependent on governments for welfare spending.

Besides, remittance-receivers spend the extra income coming from abroad to increase their personal safety by taking some measures, including moving to a safer community, buying private cars, or building fences. In addition to the personal measures that remittance-receivers take, people would be free from threats to their physical security coming from governments in recipient countries. Since remittance-receivers will be less dependent on social welfare spending, they will be less opposed to governments, and in turn, governments will be less likely to use coercive mechanisms that would violate citizens' physical integrity.

Based on statistical analysis employing a global data set, including 179 countries between the years 1980 and 2019, this study shows evidence for a significant positive relationship between migrant remittances and human security in remittance-receiving countries. One important implication of this study is that international migration improves individuals' safety and living standards in home countries. International and domestic policy makers should take the implications of remittances for human security into consideration and take measures to ease the inflows of remittances, such as lowering the costs for transactions. Additionally, future research might explore possibilities to create indicators capturing different forms of securities to advance our understanding of the nexus between remittances and human security.

References

Abedie, A. & Gardeazabal, J. (2003) The Economic Costs of Conflict: A Case Study of the Basque Country. *The American Economic Review*, 93(1), 113–132.

- Adams, R. & Page, J. (2003) International Migration, Remittances, and Poverty in Developing Countries. Washington: World Bank.
- Adida, C. L. & Girod, D. M. (2011) Do Migrants Improve Their Hometowns? Remittances and Access to Public Services in Mexico, 1995-2000. *Comparative Political Studies* 44(1), 3–27.
- Brito, S., Corbacho, A. & Osorio, R. (2014) Remittances and the Impact on Crime in Mexico. *IADB*. https:// publications.iadb.org/ publications/english/viewer/Remittances-and-the-Impact-on-crime-in-Mexico.pdf (Accessed: 10.05.2024).
- Bugamelli, M. & Paterno, F. (2009) Do Workers Remittances Reduce the Probability of Current Account Reversals? World Development 37(12), 1821–1838.
- Chaaban, J. & Mansour, W. (2012) The Impact of Remittances on Education in Jordan, Syria and Lebanon. *Economic Research Forum*. https://erf.or.eg/app/uploads/2014/08/684.pdf (Accessed: 06.05.2024).
- Chami, R., Fullenkamp, C. & Jahjah, S. (2003) Are Immigrant Remittance Flows a Source of Capital for Development? Washington: IMF.
- Chimhowu, A., Piesse, J. & Pinder, C. (2005) The Socioeconomic Impact of Remittances on Poverty Reduction. In S. M. Maimbo & D. Ratha (eds.), *Remittances: Development Impact and Future Prospects* (83–102), Washington: World Bank
- Collier, P. (1999) On the Economic Consequences of Civil War. Oxford Economic Papers 51(1), 168-183.
- Cox Edwards, A. & Ureta, M. (2003) International Migration, Remittances, and Schooling: Evidence from El Salvador. *Journal of Development Economics* 72(2), 429–462.
- Davenport, C. (1995) Multi-dimensional Threat Perception and State Repression: An Inquiry into Why States Apply Negative Sanctions. *American Journal of Political Science* 39(3), 683–713.
- Davenport, C. (2007). *State Repression and the Domestic Democratic Peace*. Cambridge: Cambridge University Press.
- Davies, S., Pettersson, T. & Oberg, M. (2022). Organized Violence 1989-2021 and Drone warfare. Journal of Peace Research 59(4), 593–610
- Doyle, D. (2015) Remittances and Social Spending. American Political Science Review 109(4), 785-802.
- Doyle, D. & Lopez Garcia, A. I. (2021). Crime, Remittances, and Presidential Approval in Mexico. Journal of Ethnic and Migration Studies 47(6), 1395–1413.
- Gerring, J., Thacker, S. C. & Alfaro, R. (2012) Democracy and Human Development. *The Journal of Politics* 74(1), 1–17.
- Gibney, M. & Dalton, M. (1996) The Political Terror Scale. *Policy Studies and Developing Nations* 4(1), 73–84.
- Giuliano, P. & Ruiz-Arranz, M. (2009) Remittances, Financial development, and Growth. Journal of Development Economics 90(1), 144–152
- Gleditsch, N. P. et al. (2002) Armed Conflict 1946 2001: A New Dataset. *Journal of Peace Research*, 39(5), 615–637.
- Glytsos, N. P. (2005) The Contribution of Remittances to Growth: A Dynamic Approach and Empirical Analysis. *Journal of Economic Studies* 32(6), 468–496.
- Gould, D. M. (1994) Immigrant Links to the Home Country: Empirical Implications for U.S. Bilateral Trade Flows. *The Review of Economics and Statistics* 76(2), 302–316.
- Gupta, S., Pattillo, C. & Wagh, S. (2007) Making Remittances Work for Africa. *Finance and Development* 44(2), 1–8.
- Gupta, S., Pattillo, C. A. & Wagh, S. (2009). Effect of Remittances on Poverty and Financial Development in Sub-Saharan Africa. World Development 37(1), 104–115.

- Gurr, T. R. (1988) War, Revolution, and the Growth of the Coercive State. *Comparative Political Studies* 21(1), 45–65.
- Hanson, G. H. & Woodruff, C. (2003) *Emigration and Educational Attainment in Mexico*. University of California at San Diego: Mimeo. School of International Relations and Pacific Studies.
- Hastings, D. A. (2009) From Human Development to Human Security: A Prototype Human Security Index. New York: UNESCAP.
- Hastings, D. A. (2010) The Human Security Index: An Update and A New Release. International Symposium on Geoinformatics for Spatial Infrastructure Development in Earth and Allied Sciences.
- Head, K. & Ries, J. (1998). Immigration and Trade Creation: Econometric Evidence from Canada. *The Canadian Journal of Economics* 31(1), 47–62.
- Henderson, C. W. (1993) Population Pressures and Political Repression. *Social Science Quarterly* 74(2), 322–333.
- Kapur, D. (2010). *Diaspora, Development, and Democracy: The Domestic Impact of International Migration from India.* Princeton, NJ: Princeton University Press.
- Leblang, D. (2010) Familiarity Breeds Investment: Diaspora Networks and International Investment. American Political Science Review 104(03), 584–600.
- Lopez-Ekra, S. et al. (2011) The Impact of Remittances on Gender Roles and Opportunities for Children in Recipient Families: Research from the International Organization for Migration. *Gender and Development* 19(1), 69–80.
- Marshall, M. G., Gurr, T. R. & Jaggers, K. (2019) Polity IV Project: Political Regime Characteristics and Transitions, 1800-2018. Systemic Peace. http://www.systemicpeace.org/polityproject.html (Accessed: 22.04.2024).
- McAuliffe, M. & Triandafyllidou, A. (2021) World Migration Report 2022. *International Organization for Migration*. https://publications.iom.int/books/world-migration-report-2022 (Accessed: 22.04.2024).
- Mitchell, N. J. & McCormick, J. M. (1988) Economic and Political Explanations of Human Rights Violations. *World Politics* 40(4), 476–498.
- Mora-Rivera, J. & Van Gameren, E. (2021) The Impact of Remittances on Food Insecurity: Evidence from Mexico. *World Development* 140, 1–21.
- Orozco, M. (2003) Hometown Associations and Their Present and Future Partnerships: New Development Opportunities? *IADB*. https://publications.iadb.org/publications/english/viewer/Hometown-Associations-and-Their-Present-and-Future-Partnerships-New-Development – Opportunities.pdf (Accessed: 02.03.2024).
- Poe, S. C. & Tate, C. N. (1994) Repression of Human Rights to Personal Integrity in the 1980s: A Global Analysis. American Political Science Review 88(4), 853–872.
- Poe, S. C., Tate, C. N. & Keith, L. C. (1999) Repression of the Human Right to Personal Integrity Revisited: A Global Cross-National Study Covering the Years 1976–1993. *International Studies Quarterly* 43(2), 291–313.
- Ponce, J. E. Olivie, I. & Onofa, M. (2011) The Role of International Remittances in Health Outcomes in Ecuador: Prevention and Response to Shocks. *International Migration Review* 45(3), 727–745.
- Rao, B. B. & Hassan, G. M. (2011) A Panel Data Analysis of the Growth Effects of Remittances. *Economic Modelling* 28(1), 701–709.
- Ratha, D. et al. (2021) *Recovery: COVID-19 Crisis through a Migration Lens*. Washington: KNOMAD-World Bank.

- Reinsberg, B., Daniel O. S. & Bujnoch, L. (2024) Revisiting the Security-Development Nexus: Human Security and the Effects of IMF Adjustment Programmes. *Conflict Management and Peace Science* 41(1), 72–95.
- Singer, D. A. (2012) The Family Channel: Migrant Remittances and Government Finance. *MIT Political Science Department Research Paper*, no. 2012-23.
- Schulte, B. (2008) Second Generation Entrepreneurs of Turkish Origin in Germany. Diasporic Identity and Business Engagement. *Centre on Migration, Citizenship and Development*. https://www.ssoar.info/ ssoar/handle/document/35349 (Accessed: 22.04.2024).
- Schuttler, K. (2007) *The Moroccan Diaspora in Germany: Its Contribution to Development in Morocco.* Eschborn: Federal Ministry for Economic Cooperation and Development.
- Tertytchnaya, K. et al. (2018). When the Money Stops: Fluctuations in Financial Remittances and Incumbent Approval in Central Eastern Europe, the Caucasus and Central Asia. American Political Science Review 112(4), 758–774.
- United Nations Department of Economic and Social Affairs (2021) International Migrant Stock 2020. https://www.un.org/en/desa (Accessed: 20.04.2024).
- United Nations Development Programme (1990) Human Development Report 1990. https://hdr.undp.org/ system/files/ documents/hdr1990encompletenostatspdf.pdf (Accessed: 20.04.2024).
- United Nations Development Programme (1994) Human Development Report 1994. https://hdr.undp.org/ system/files/ documents/hdr1994encompletenostatspdf.pdf (Accessed: 20.04.2024).
- Valdero-Gil, J. (2009). Remittances and the Household's Expenditures on Health. *Journal of Business Strategies* 26(1), 119–140.
- Werthes, S., Heaven, C. & Vollnhals, S. (2011) Assessing Human Insecurity Worldwide: The Way to A Human (In)security Index. Institute for Development and Peace, University of Duisburg-Essen, INEF-Report 102/2011.
- Wood, R. M. & Gibney, M. (2010) The Political Terror Scale (PTS): A Re-introduction and A Comparison to CIRI. *Human Rights Quarterly* 32(2), 367–400.
- World Bank (2006) Global Economic Prospects: Economic Implications of Remittances and Migration. https://documents1.worldbank.org/curated/en/507.301.468142196936/pdf/Global-economicprospects-2006-economic-implications-of-remittances-and-migration.pdf (Accessed: 18.04.2024).
- World Bank (2019) World Development Indicators 2019. https://datatopics.worldbank.org/worlddevelopment-indicators (Accessed: 18.04.2024).
- Yang, D. (2008) International Migration, Remittances and Household Investment: Evidence from Philippine Migrants Exchange Rate Shocks. *The Economic Journal* 118(528), 591–630.
- Yang, D. (2011) Migrant Remittances. The Journal of Economic Perspectives 25(3), 129–152.
- Yoshino, N., Taghizadeh-Hesary, F. & Otsuka, M. (2017) International Remittances and Poverty Reduction: Evidence from Asian Developing Countries. Asian Development Bank Institute. https://www.adb. org/publications/international-remittances-and-poverty-reduction (Accessed: 20.04.2024).
- Zhunio, M. C., Vishwasrao, S. & Chiang, E. P. (2012) The Influence of Remittances on Education and Health Outcomes: A Cross Country Study. *Applied Economics* 44(35), 4605–4616.