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THE IMPACT OF IMMIGRANT REMITTANCES ON DEVELOPMENT IN TERMS OF SUSTAINABILITY: A PANEL DATA APPLICATION

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ABSTRACT

While there are many ways to achieve sustainable development, which has been frequently used in economics literature in recent years, various studies have been conducted that show that remittances also contribute to sustainable development. Individuals, whose mobility has increased with the development of technology and other opportunities transfer their earnings to their own countries. This is accepted as an important source of income in providing the monetary dimension of development. In this respect, remittances are seen as an important source of investment, especially for developing countries. In addition, transferring the income earned in developed countries to the immigrant's home country also gives a clue about the relationship between the immigrant and his country. In this study, econometric analysis was conducted to panel data set of the developing countries that received the most transfers and Turkey. In the study, HDI was used as a dependent variable, remittances as an independent variable, and economic growth rate as an explanatory variable. According to the results of the panel data analysis applied for 2005-2021 period; A 1% increase in remittances provides a 0.07% increase in development. Also, it was determined that one-unit increase in economic growth will create an increase of 0.02% on development.

Keywords: Migration, Remittances, Sustainable Development, Growth

Jel Codes: L26, O18, R11, B21.

SÜRDÜRÜLEBİLİRLİK AÇISINDAN GÖÇMEN PARA TRANSFERLERİNİN KALKINMA ÜZERİNDEKİ ETKİSİ: BİR PANEL VERİ UYGULAMASI

ÖZ

İktisat literatüründe son yıllarda sıklıkla kullanılan sürdürülebilir kalkınmaya ulaşmanın birçok yolu olmakla birlikte, göçmen para transferlerinin de sürdürülebilir kalkınmaya katkı sağladığına dair çeşitli araştırmalar yapılmıştır. Teknolojinin ve diğer imkanların gelişmesiyle hareketliliği artan ve yabancı ülkelerde çalışan bireyler, kazançlarını kendi ülkelerine aktarmaktadır. Bu ise, kalkınmanın parasal boyutunun sağlanmasında önemli bir gelir kaynağı olarak kabul edilmektedir. Bu yönüyle, göçmen para transferleri özellikle gelişmekte olan ülkeler için önemli bir yatırım kaynağı olarak görülmektedir. Ayrıca gelişmiş ülkelerde kazanılan gelirin göçmenin anavatanına transfer edilmesi de göçmenin ülkesiyle ilişkisi hakkında ipucu vermektedir. Bu çalışmada, en fazla transfer alan gelişmekte olan ülkeler ve Türkiye'ye ait panel veri setine ekonometrik analiz uygulanmıştır. Çalışmada bağımlı değişken olarak insani gelişmişlik endeksi, bağımsız değişken olarak göçmen para transferleri ve açıklayıcı değişken olarak ekonomik büyüme oranı kullanılmıştır. 2005-2021 dönemi için uygulanan panel veri analizi sonuçlarına göre; göçmen para transferlerinde görülen %1'lik bir artış kalkınma üzerinde %0,07 düzeyinde bir artış sağlamaktadır. Ayrıca, ekonomik büyümede görülen bir birimlik artışın kalkınma üzerinde %0,02 düzeyinde bir artış yaratacağı belirlenmiştir.

Anahtar Kelimeler: Göç, Göçmen Para Transferleri, Sürdürülebilir Kalkınma, Büyüme.

Jel Kodları: L26, O18, R11, B21.

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INTRODUCTION

With the development of technology and transportation opportunities, there has been an increase in the number of immigrants, which means people who migrate from one country to another to settle in another country. Immigrants concern two countries, the country of departure and the country of settlement. The most important reason behind the migration of individuals is poverty. Therefore, the countries left during the migration are generally developing countries while the countries settled are developed countries. The transfer of earnings they have earned in the countries they settled to the countries where they left provides a great source of financing. Remittances, which appear to be a promising source of finance in this respect, are evaluated by researchers in terms of their economic consequences between personal remittances recipient and sender countries, thanks to their large amounts (Maimbo & Ratha, 2005: 2).

In the literature, there is a considerable body of research on the relationship between migrant remittances and economic development. A number of studies have found that such remittances can have positive effects on development, as they can help to reduce income disparities between the countries of origin and destination, support basic education and health services, and promote consumption and investment (Acosta et al., 2006; Giuliano and Ruiz-Arranz, 2009; Kim, 2021; Ping & Shaohua, 2008; Ratha and Mohapatra, 2007). However, some studies present a contrasting view, asserting that remittances do not necessarily support economic development due to various factors such as the emigration of qualified human capital, the diversion of remitted funds to non-productive areas such as housing and consumption, and the high volatility in the amount of remittances (Adams Jr, 2011; De Haas, 2005; Glytsos, 2002; Li et al., 2022; Nyamongo et al., 2012; Ofori et al., 2023).

The main objective of this study is to investigate the impact of migrant remittances on development, specifically in terms of sustainability. This will be achieved through the measurement of the contribution of remittances to the development of selected countries that emigrate as an investment source, examining remittances as an income-generating source, and investigating the relations of immigrants with their home countries. The study is divided into several parts. In the first part, the relationship between migration and development is discussed in the context of the concept of development, including the positive and negative effects of migration on the countries of origin from different perspectives. The second part focuses on migrant remittances, while the third part examines their contribution to development. In the fourth part of the study, econometric analysis is applied to examine the effect of remittances on development. Finally, the fifth chapter presents the results of the study. The absence of econometric studies that include Turkey regarding the impact of migrant money transfers on development, and Turkey's inclusion in such a study, indicates that this study has the potential to contribute to the relationship between migration and development, making it an original contribution to the field.

1. The Relationship Between Migration and Development from A Development Perspective

Development refers to progress towards achieving various goals, such as providing employment, eradicating poverty, reducing inequality, and securing human rights, in the context of sustainable economic, social, and environmental development. Sub-targets for meeting development include expanding growth over time, addressing basic needs, and integrating rural development (Abuiyada, 2018: 119). The sustainable nature of development, which is sometimes used with similar meanings to the concepts of growth and development, is an indicator of its success (Lélé, 1991: 608). Sustainable development, which refers to meeting the needs of the present without compromising the ability of future generations to meet their own

needs, is a crucial indicator of the success of development (UN, 2015). Meeting the sub-targets of development contributes to achieving the overall goals of development by ensuring that economic, social, and environmental progress is sustainable and equitable.

The concept of development is measured by various indicators. Zienkowski (1971) identified nineteen indicators of development, including life expectancy at birth, daily animal protein per capita, electricity consumption per capita, gross domestic product, salaried and paid employees in the active population, and foreign trade per capita. One widely used indicator of development is the Human Development Index (HDI). Yumuşak and Tuna (2002) stated, citing from the United Nations Development Programme (UNDP), that economic development is not solely related to the growth rate but also to other indicators such as the level of welfare and human development. Many theoretical and empirical studies have found a strong correlation between a country's development level and the opportunities and qualifications of its citizens. As a general rule, economic development and human development tend to be parallel to each other, except for some exceptional cases (Yumuşak & Tuna, 2002:8).

The history of discussions on the relationship between migration and development dates back to historical times. As a matter of fact, these discussions center around debates on the benefits of skilled individuals' mobility for development. Kurtulmuş (1992) draws attention to two different views on this issue: the internationalist model and the nationalist model. According to the internationalist (humanitarian) model, which views migration as a beneficial phenomenon, migrant individuals can transfer their diverse skills and knowledge to the world and contribute positively to the prestige of their country of origin. Moreover, emigrant countries may benefit from their own people's experiences at various times. Conversely, the nationalist model argues that investing in education in countries that receive immigration can compensate for the loss of citizens in emigrant countries. Furthermore, growing new individuals takes time and requires resources. However, the mobility of skilled individuals can cause gaps in their professional and academic fields, which is seen as a disadvantage in terms of educating intellectuals.

In the relationship between migration and development, Genç et al. (2019) evaluate the problem in terms of financial contribution and take into account the positive effect of the issue. According to the aforementioned point of view, they state that "remittances sent by migrants to their home countries can contribute to the economic growth and development of their countries" (Genç et al., 2019:492). Even though sending countries face the reality of losing their labor resources due to migration, the remittances can have a positive impact on the development of their countries.

2. Immigrant Remittances

Immigrant remittances are a valuable resource that can stimulate financial development and are typically used for essential needs such as consumption, housing, and education. In some developing countries, these remittances have become a significant source of funding, even surpassing revenues from exports of goods and services and foreign direct investments (Slaton, 2016:33-34).

The income that migrant workers send to their households from abroad can be transferred to their home countries through official or unofficial channels, either in cash or in kind. Private money transfer operators such as MoneyGram and Western Union are among the leading official channels for money transfers. Official channels also include partnerships with banks that work with money transfer operators and various credit unions. Informal channels consist of systems operated by brokers and non-financial institutions in the regions where immigrants are located and where their remittances are sent. Examples of these channels are hawala and hundi in South Asia, and the padala system in the Philippines (Yang, 2011:132).

Immigrant remittances operate through a system that involves payment interfaces used by senders, recipients, intermediaries, and agents. These remittance channels are mostly low-value and consist of regular and frequent payments, serving the purpose of family livelihood.

Remittances can be in the form of cash, credit and in-kind transfers. Cash transfers refer to physical transfers sent in foreign and local currencies, while credit transfers involve payment orders from sending country providers to receiving country providers. The payment orders utilize an effective communication network through a messaging process that facilitates the transfer of funds. In contrast, in-kind transfers involving consumer goods are delivered physically through informal means (IMF, 2009:6-7).

In the context of migrant remittances, the study of migrants' relationships with their transnational networks is an important area to consider. This is because the decision of immigrants to send remittances is influenced by their relationships with their networks. The distance between immigrants and their networks, resulting from their transnational mobility, can create a situation of asymmetric information. Immigrants may not fully understand the needs of their networks or the best use of any transfer, while networks may lack information about immigrants' occupations, living standards, and earnings (Batista and Narciso, 2018:204).

According to the distinction made by Lucas and Stark (1985) on the connection between immigrants and their remittances, remittances can be categorized as altruistic or self-interested. In altruistic remittances, immigrants sacrifice their own personal interests and use the remittances for the needs of their families. In self-seeking remittances, the immigrant seeks to increase their individual economic gains, such as buying assets for themselves. Accordingly, decisions about remittances are linked to decisions about immigration and are taken at the household level. On the other hand, three important factors emerge when considering self-interested transfers. First, the desire to receive a larger inheritance motivates migrants to send greater amounts of remittances. The second factor is the migrant's willingness to invest in assets located near their hometown, with their family playing an intermediary role in protecting these investments. The proximity of the migrant's family to the region explains the forwarding of funds. The third factor can be explained by the encouragement of fixed capital investments, such as houses and land, as well as social and public investments. Immigrants purchase these assets in their home country with the intention of eventually returning home (Lucas and Stark, 1985: 903-904).

A study conducted on individuals of Indian origin living in Germany revealed that although various types of remittances are observed in immigrant money transfers, individual remittances have a significant dimension. The prominent types of remittances in this context include those for parents, education, health, charitable activities, and collective aid (Butsch, 2020:12).

Tablo 1. Countries with highest remittance inflows by migrants (2022) (million dollars)

Country	2005	2010	2015	2021
India		53.480	68.910	89.375
China	23.626	52.460	63.938	53.000
Mexico	22.742	22.080	26.233	54.130
Philippines	13.733	21.557	29.799	36.685
Pakistan	4.280	9.690	19.306	31.312
Bangladesh	4.315	10.850	15.296	22.203
Nigeria	14.640	19.745	20.626	19.483
Guatemala	3.067	4.225	6.482	15.395
Dominik Republic	2.719	3.887	5.196	10.743
Morocco	4.589	6.423	6.904	10.705
Indonesia	5.420	6.916	9.659	9.402
Colombia	3.346	4.031	5.002	8.608
Nepal	1.212	3.464	6.730	8.203

Source: The World Bank, https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT date of access: 12 February 2023

The table presents the countries with the highest inflows of immigrant remittances. Based on the 2022 data, it is evident that India, China, and the Philippines occupy the top three positions. This outcome, which is not surprising, can be interpreted as a consequence of the diaspora of India and China, which is dispersed worldwide. India and China serve as prominent examples of scientific diasporas, and these two countries maintain institutional relationships with their citizens residing abroad. In this context, these countries, where state institutions and organizations play a significant role, are actively involved in ensuring that migration contributes to their own development.

3. Immigrant Remittances in Terms of Their Contribution to Development

In addition to their potential impact on economic growth, remittances can also contribute to poverty reduction and social development in recipient (developing) countries (Adams, 2011:23).

Tablo 2. Potential effects of remittances

For individual remitter	**For 'host' country of remitter**
• Strengthening ties with the former country. • Payment of financial and other debts. • Risk of over-consumption of under-spent income.	• Loss of a certain part of the income earned in developed countries. • Functioning as a compensatory mechanism in terms of brain drain.
For recipients of remittances	**For country receiving remittances**
• Increase in revenues. • Access to goods sent or brought by immigrants. • Transfer of remittance to human capital (educational investment etc.). • Being a source of capital for entrepreneurs • Collateral feature against possible risks. • Remittances sent regularly carry the risk of deterring participation in economic activities for individuals in the receiving countries.	• Being a source of foreign exchange • Potential to revive the financial sector and investments. • Increasing competition in exports as a result of the increase in exchange rates. • Contributing to poverty alleviation. • Providing the opportunity to use loans through remittances. • A revival in tourism and other sectors thanks to immigrants' visits to their home countries. • The increase in exports of immigrants' demands for various products in their own countries. • Immigrants' contribution to development and financing of various institutions.

Source: (Sriskandarajah, 2005)

Ratha (2003) was one of the first to highlight the contribution of immigrant remittances to development, and his study on remittances as a source of financing for development conveyed several messages. Firstly, remittances are the second-largest source of foreign financing after foreign direct investments and are considered a more stable source than private capital flows. Secondly, remittances are often used for investment purposes, particularly in countries with strong economic policies. Improvements in economic policies and exchange controls in the 1990s have been effective in this regard. Thirdly, countries can increase their remittance flows by strengthening the infrastructure of the financial sector and international travel practices. Finally, the international labor mobility of developing countries could increase the flow of remittances, but this also brings concerns about the risk of brain drain, especially for these countries. One solution to this issue could be to provide services under a service contract.

4. Econometric Application

In this part of the study, econometric analysis was conducted on panel data set of Bangladesh, China, the Dominican Republic, Indonesia, Morocco, the Philippines, Guatemala, India, Colombia, Mexico, Nepal, Nigeria, and Pakistan, which are the largest recipients of immigrant remittances and Turkey. The aim of the analysis was to examine the impact of migrant remittances on development. The human development index was selected as the dependent variable, while the received immigrant remittances to each country were used as the independent variable. Additionally, the economic growth rate was included as the explanatory variable. The data for the study was obtained from the World Bank and UNDP database for the period of 2005-2021. Table 3 provides information on the variables used in the analysis.

Tablo 3. Information of the variables

Vars.	Def^{n}	Source
HDI	Human development index	UNDP
LHDI	Natural logarithm of HDI variable	Calculated by the authors
RR	Personal remittances, received (current US$)	World Bank
LRR	Natural logarithm of RR variable	Calculated by the authors
GG	GDP annual growth rate	World Bank

4.1. Stationarity Analysis

Econometric analyses are highly sensitive to the stationarity of the series used, and there is a high probability of encountering the problem of spurious regression (i.e., obtaining results that do not reflect the true relationships between variables) if stationarity is not examined. Therefore, in time series analysis or panel data analysis, it is essential to first determine the stationarity of the series.

Since this study utilizes panel data analysis, panel unit root tests should be conducted to examine the stationarity of the series. Panel unit root tests are classified into two generations. First-generation panel unit root tests assume no cross-sectional dependence between the sections (such as countries or companies) in the data, while second-generation tests assume cross-sectional dependence. Using an inappropriate unit root test can lead to false conclusions about the stationarity of the series, resulting in erroneous analyses and spurious regression problems. Therefore, the cross-sectional dependence of the series should be examined first. There are several cross-section dependency tests available, including the Breusch-Pagan (1980) Lagrange Multiplier (LM) test, the Pesaran (2004) scaled LM test, the Bias-corrected scaled LM test developed by Baltagi, Feng, and Kao (2012), and the Pesaran (2004) CD (Cross-Section Dependence) test. The appropriate test(s) should be chosen based on the specific characteristics of the data being analyzed.

The selection of which test to use is determined based on the cross-section size (N) and time dimension (T) of the panel dataset. The Breusch-Pagan LM test, which is a commonly used test among cross-sectional dependency tests, gives significant results when N is constant and T approaches infinity (i.e., when T > N). The Pesaran scaled LM test is preferred when T $\rightarrow\infty$ and N $\rightarrow\infty$. The Bias-corrected scaled LM test is useful when N $\rightarrow\infty$ and T $\rightarrow\infty$. Lastly, the Pesaran CD test is suitable when N>T. In all four tests, the null hypothesis is "H0: there is no cross-sectional dependence between units", and significant results indicate that there is evidence of cross-sectional dependence in the panel dataset (De Hoyos & Sarafidis, 2006:483; Koçbulut & Barış, 2016:29-30; Karadaş, 2020a:51; Karadaş, 2020b:124; Şengönül et al., 2018:1129).

Since the time dimension (T=16) is larger than the cross-sectional dimension (N=14) in the data set used in the study, the Breusch-Pagan LM test will be used to examine the cross-sectional dependence. The results of the Breusch-Pagan LM cross-section dependence test are given in table 4.

Tablo 4. Breusch-Pagan LM cross-section dependency test results

Vars.	Stats.	d.f.	Prob.
LHDI	1438.264*	91	0.0000
LRR	956.7501*	91	0.0000
GG	527.3351*	91	0.0000

Note: * denotes significance at the 1% level.

When the results given in table 4 are examined, the Breusch-Pagan LM test null hypothesis was rejected for all three variables. Therefore, there is a cross-section dependency in the variables used in the analysis. Therefore, second-generation unit root tests, which assume a cross-sectional dependence between the series, should be applied. In this study, Pesaran (2007) Panel unit root test (CIPS) was preferred and applied as the second-generation unit root test. Test results are given in table 5.

Tablo 5. CIPS panel unit root test results

Vars.	Without trend		With trend	
	Zt-bar	Prob.	Zt-bar	Zt-bar
LHDI	-0.508	0.306	LHDI	-0.508
D.LHDI	-2.821*	0.002	D.LHDI	-2.821*
LRR	1.819	0.966	1.970	0.976
D.LRR	-3.573*	0.000	-4.655*	0.000
GG	-1.888**	0.030	-1.261	0.104
D.GG	-9.108*	0.000	-2.001**	0.023

Note: * denotes significance at the 1% level.

According to the results of the CIPS test given in table 5, the independent variable LHDI is stationary in the first order. In addition, LRR and GG variables are also first-order stationary.

4.2. Panel Long-Term Relationship

In this section of the study, the panel ARDL test will be utilized to examine the long-term relationship between the variables. However, it is essential to verify the absence of cross-sectional dependency in the equation employed before the panel ARDL test. To check the cross-sectional dependence of the equation, various tests are employed, similar to the ones utilized for the variables. Given that the time dimension (T=16) exceeds the cross-sectional dimension (N=14) in the current dataset, the Breusch-Pagan LM test will be applied to investigate the cross-sectional dependence of the equation. The results for the equation are presented in table 6.

Tablo 6. Equation cross-section dependency test results

Test	Stats	d.f.	Prob.
Breusch-Pagan LM	21.5309	91	1.000

As can be seen from table 6, the null hypothesis cannot be rejected, indicating that there is no significant cross-sectional dependency in the equation. Therefore, the panel ARDL test can be applied to examine the long-term relationship between the series.

We use two estimators to conduct panel ARDL test which are MG and PMG. The difference between these estimators arises from the assumptions made about the homogeneity or heterogeneity of the series in the short and long run. The MG estimator assumes that the variables in the panel data set are heterogeneous in both the short and long term, whereas the PMG estimator assumes that the series are heterogeneous in the short term but homogeneous in the long term (Pesaran et al., 1999:621; Asteriou et al., 2021:276; Karadaş, 2020b:127). Thus, the MG estimator assumes that both the short- and long-run coefficients of the panel sections are different, while the PMG estimator assumes that only the short-term and error-term coefficients are different, and that the long-term coefficients are the same across the panel.

The decision on which estimator to use is made with the help of the Hausman test. The null hypothesis of the test is examined based on the chi-square value obtained, and the preferred estimator is determined accordingly. The first-order estimator (b) is considered consistent under both the null hypothesis (H0) and the alternative hypothesis (Ha), while the second-order estimator (B) is considered inconsistent under Ha but efficient under H0 (Karadaş, 2020b:127-128; Karadaş, 2021:445). Therefore, if the null hypothesis is rejected, the first estimator will be used, and if not, the second estimator will be preferred. The Hausman test results for the model in the study are presented in table 7.

Tablo 7. Hausman test results

Vars.	**(b)**	**(B)**	**(b-B)**	**sqrt(diag(V_b-V_B))**
	MG	**PMG**	**Difference**	**S.E.**
LRR	0.1801	0.0695	0.1106	0.2869
GG	0.0608	0.0177	0.0430	0.0683
Chi2 = 0.42				
Prob>chi2 = 0.8124				

As a result of the Hausman test, the null hypothesis cannot be rejected because the p-value of chi-square (0.8124) is greater than 0.10. Therefore, the second-order PMG estimator should be used when applying the panel ARDL test. The results of the panel ARDL (1,1,3) test applied according to the PMG estimator are given in table 8.

Tablo 8. Hausman test results

Dependent variable: LHDI						
Vars.	**Coeff.**	**S. E.**	**Z-stats**	**P>|z|**	**95% Confidence interval**	
ECT	-0.1098*	0.0235	-4.6700	0.000	-0.1558	-0.0637
Long-run equation						
LRR	0.0695*	0.0086	8.0700	0.000	0.0527	0.0864
GG	0.0177*	0.0029	6.0400	0.000	0.0120	0.0235

Note: * denotes significance at the 1% level.

When examining the panel ARDL results, it is observed that the coefficient of the error term is negative and statistically significant at the 1% level. This indicates that there exists a long-term relationship between the variables, and thus, the coefficients can be examined to investigate the short-term dynamics of the model.

Based on the long-term coefficients, an increase of 1% in migrant remittances entering the countries in the panel leads to an increase of approximately 0.07% in HDI, which is a measure of development. On the other hand, a unit increase in economic growth provides an increase of approximately 0.02% in HDI. This implies that the impact of migrant remittances on development is greater than that of economic growth.

As mentioned previously, the PMG estimator assumes that the short-run and error term coefficients differ among countries. Therefore, to determine which countries are affected by the long-term coefficients presented in the table, the error term coefficients of each country should be examined separately. Upon reviewing the error term coefficients in Annex-1, it can be observed that the error term coefficients for China, Dominican Republic, Indonesia, Morocco, India, Colombia, Mexico, Nepal, Pakistan, and Turkey are statistically significant and negative. This indicates that the long-term coefficients presented in table 6 are applicable to these countries. However, it can be concluded that the long-term coefficients are not valid for Bangladesh, the Philippines, Guatemala, and Nigeria.

CONCLUSION

Although the migration and development debates date back to much earlier periods, these debates have gradually increased since the 2000s. Immigrant remittances have taken their place

among the topics examined in terms of development in many studies. Remittances, which have a considerable amount in countries including India, China, Mexico, and the Philippines, are considered an important source of income among other investments.

There are different assessments of the impact of development on migration. Some perspectives claim that migration is a loss for sending countries and that compensating for this loss has a costly and time-consuming effect. On the other hand, the point of view that claims that immigration is a gain suggests that individuals who migrate will contribute to both their home country and the world.

This study examines the contribution of immigrant remittances to development and evaluates the performance of remittances received by the thirteen countries that receive the most remittances in the world, as well as Turkey. The study measures the role of remittances as an investment source in development, and the results show that a 1% increase in remittances leads to a 0.07% increase in development. Furthermore, a one-unit increase in economic growth is associated with a 0.02% increase in development.

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ANNEXES

Annex -1:

Vars.	**Coeff.**	**Standard error**	**Z-statistic**	**P>|z|**	**95% Confidence interval**	
LRR	0.0695	0.0086	8.0700	0.0000	0.0527	0.0864
GG	0.0177	0.0029	6.0400	0.0000	0.0120	0.0235
Bangladesh						
ECT	0.0107	0.0375	0.2800	0.7760	-0.0628	0.0842
LRR (D1)	-0.0115	0.0182	-0.6300	0.5270	-0.0472	0.0242
GG (D1)	-0.0062	0.0052	-1.2000	0.2300	-0.0164	0.0039
GG (D2)	0.0106	0.0073	1.4600	0.1440	-0.0036	0.0248
GG (D3)	-0.0053	0.0033	-1.6100	0.1070	-0.0117	0.0011
C	0.0419	0.0850	0.4900	0.6220	-0.1247	0.2086
China						

ECT	-0.0562	0.0068	-8.3100	0.0000	-0.0695	-0.0430
LRR (D1)	-0.0053	0.0015	-3.5900	0.0000	-0.0081	-0.0024
GG (D1)	-0.0008	0.0005	-1.4500	0.1470	-0.0018	0.0003
GG (D2)	0.0005	0.0006	0.7700	0.4420	-0.0007	0.0016
GG (D3)	-0.0001	0.0002	-0.4600	0.6460	-0.0006	0.0003
C	-0.1082	0.0186	-5.8200	0.0000	-0.1447	-0.0718
Dominican Republic						
ECT	-0.1089	0.0479	-2.2700	0.0230	-0.2028	-0.0150
LRR (D1)	-0.0280	0.0227	-1.2300	0.2180	-0.0724	0.0165
GG (D1)	0.0001	0.0015	0.0400	0.9700	-0.0030	0.0031
GG (D2)	-0.0011	0.0012	-0.9000	0.3670	-0.0036	0.0013
GG (D3)	0.0005	0.0004	1.1400	0.2540	-0.0004	0.0013
C	-0.2029	0.0975	-2.0800	0.0370	-0.3941	-0.0117
Indonesia						
ECT	-0.0762	0.0358	-2.1300	0.0330	-0.1463	-0.0062
LRR (D1)	0.0036	0.0125	0.2900	0.7730	-0.0209	0.0281
GG (D1)	0.0035	0.0033	1.0600	0.2890	-0.0029	0.0098
GG (D2)	-0.0049	0.0039	-1.2600	0.2090	-0.0125	0.0027
GG (D3)	0.0018	0.0016	1.1300	0.2600	-0.0013	0.0049
C	-0.1494	0.0769	-1.9400	0.0520	-0.3001	0.0012
Morocco						
ECT	-0.0480	0.0182	-2.6400	0.0080	-0.0837	-0.0124
LRR (D1)	-0.0086	0.0154	-0.5600	0.5780	-0.0387	0.0216
GG (D1)	-0.0008	0.0009	-0.8900	0.3730	-0.0025	0.0009
GG (D2)	0.0005	0.0007	0.7500	0.4530	-0.0008	0.0019
GG (D3)	-0.0001	0.0002	-0.6100	0.5410	-0.0006	0.0003
C	-0.0897	0.0398	-2.2600	0.0240	-0.1676	-0.0118
Philippines						
ECT	-0.0998	0.0634	-1.5700	0.1160	-0.2240	0.0245
LRR (D1)	-0.0010	0.0346	-0.0300	0.9770	-0.0688	0.0668

GG (D1)	-0.0001	0.0028	-0.0400	0.9700	-0.0055	0.0053
GG (D2)	-0.0007	0.0023	-0.3200	0.7460	-0.0052	0.0037
GG (D3)	0.0001	0.0006	0.2000	0.8420	-0.0011	0.0014
C	-0.2080	0.1363	-1.5300	0.1270	-0.4752	0.0591
Guatemala						
ECT	-0.0403	0.0997	-0.4000	0.6860	-0.2358	0.1551
LRR (D1)	-0.1142	0.0312	-3.6500	0.0000	-0.1754	-0.0529
GG (D1)	0.0058	0.0040	1.4400	0.1500	-0.0021	0.0138
GG (D2)	-0.0038	0.0037	-1.0400	0.2990	-0.0110	0.0034
GG (D3)	0.0003	0.0014	0.2000	0.8430	-0.0025	0.0031
C	-0.0687	0.2110	-0.3300	0.7450	-0.4823	0.3449
India						
ECT	-0.1082	0.0196	-5.5300	0.0000	-0.1465	-0.0699
LRR (D1)	-0.0269	0.0102	-2.6300	0.0090	-0.0469	-0.0068
GG (D1)	0.0004	0.0013	0.3200	0.7480	-0.0021	0.0029
GG (D2)	-0.0027	0.0013	-2.1300	0.0330	-0.0051	-0.0002
GG (D3)	0.0010	0.0005	2.3100	0.0210	0.0002	0.0019
C	-0.2402	0.0539	-4.4600	0.0000	-0.3458	-0.1346
Colombia						
ECT	-0.1674	0.0432	-3.8800	0.0000	-0.2521	-0.0828
LRR (D1)	0.0170	0.0167	1.0200	0.3090	-0.0157	0.0497
GG (D1)	-0.0047	0.0021	-2.2800	0.0230	-0.0088	-0.0007
GG (D2)	0.0040	0.0022	1.8600	0.0630	-0.0002	0.0083
GG (D3)	-0.0016	0.0008	-1.8800	0.0610	-0.0032	0.0001
C	-0.3171	0.0906	-3.5000	0.0000	-0.4947	-0.1395
Mexico						
ECT	-0.2418	0.0745	-3.2500	0.0010	-0.3877	-0.0958
LRR (D1)	-0.0371	0.0141	-2.6300	0.0080	-0.0647	-0.0095
GG (D1)	-0.0027	0.0020	-1.3100	0.1900	-0.0067	0.0013
GG (D2)	0.0011	0.0016	0.7000	0.4820	-0.0020	0.0042

GG (D3)	-0.0003	0.0005	-0.5900	0.5550	-0.0012	0.0006
C	-0.4743	0.1514	-3.1300	0.0020	-0.7710	-0.1776
Nepal						
ECT	-0.2891	0.0715	-4.0500	0.0000	-0.4292	-0.1490
LRR (D1)	-0.0257	0.0145	-1.7800	0.0750	-0.0541	0.0026
GG (D1)	-0.0049	0.0030	-1.6500	0.0990	-0.0108	0.0009
GG (D2)	0.0024	0.0024	1.0000	0.3190	-0.0023	0.0072
GG (D3)	-0.0004	0.0007	-0.5100	0.6120	-0.0018	0.0011
C	-0.6243	0.1936	-3.2200	0.0010	-1.0038	-0.2448
Nigeria						
ECT	-0.0058	0.0229	-0.2500	0.8010	-0.0507	0.0391
LRR (D1)	0.0404	0.0225	1.7900	0.0730	-0.0037	0.0845
GG (D1)	-0.0023	0.0018	-1.2900	0.1990	-0.0057	0.0012
GG (D2)	0.0013	0.0022	0.5900	0.5580	-0.0030	0.0056
GG (D3)	-0.0006	0.0010	-0.5600	0.5730	-0.0025	0.0014
C	-0.0070	0.0552	-0.1300	0.9000	-0.1152	0.1013
Pakistan						
ECT	-0.2063	0.0952	-2.1700	0.0300	-0.3929	-0.0198
LRR (D1)	0.0298	0.0168	1.7700	0.0770	-0.0032	0.0627
GG (D1)	-0.0007	0.0030	-0.2400	0.8120	-0.0067	0.0052
GG (D2)	-0.0013	0.0024	-0.5400	0.5920	-0.0060	0.0034
GG (D3)	0.0003	0.0008	0.3600	0.7190	-0.0012	0.0018
C	-0.4809	0.2309	-2.0800	0.0370	-0.9334	-0.0283
Türkiye						
ECT	-0.0991	0.0233	-4.2600	0.0000	-0.1447	-0.0535
LRR (D1)	-0.0143	0.0157	-0.9200	0.3600	-0.0451	0.0164
GG (D1)	-0.0010	0.0010	-1.0100	0.3110	-0.0030	0.0010
GG (D2)	0.0010	0.0010	0.9400	0.3490	-0.0011	0.0030
GG (D3)	-0.0001	0.0004	-0.2500	0.8010	-0.0009	0.0007
C	-0.1675	0.0431	-3.8800	0.0000	-0.2520	-0.0829

GENİŞLETİLMİŞ ÖZET

SÜRDÜRÜLEBİLİRLİK AÇISINDAN GÖÇMEN PARA TRANSFERLERİNİN KALKINMA ÜZERİNDEKİ ETKİSİ: BİR PANEL VERİ UYGULAMASI

Kalkınma ülkelerin gelişmişliklerinin belirlenmesinde önemli bir kavram olup kalkınmanın sürdürülebilir olması özellikle kalkınmanın sürdürülebilir olması istikrarlı bir kalkınmaya vurgu yapmaktadır. Kalkınma pek çok göstergeyle ifade edilmekte ve bunlar arasında nitel (doğumda yaşam beklentisi, eğitim, sağlık vb.) ve nicel göstergeler (gayrı safi yurt içi hasıla vb.) yer almaktadır. Nitel göstergeler açısından kalkınmanın ölçülmesinde yararlanılan göstergelerden biri de beşeri kalkınma endeksidir. 2000'li yıllardan itibaren ise kalkınma göç olgusuyla ilişkilendirilmekte ve kalkınmanın ölçülmesinde göçmenlerin kendi ülkelerine yönelik gerçekleştirdikleri para transferleri dikkat çekmektedir.

Kalkınma ve göç bağlamında; göçün kalkınma üzerinde çeşitli etkilerinin olduğuna vurgu yapan pek çok çalışmaya rastlanmaktadır. Öyle ki kalkınma ve göç ekseninde yürütülen çalışmalarda göçün kalkınma etkisi açısından ortaya çıkan iki temel görüş öne çıkmaktadır. Bunlardan biri göçün göçmenin kendi ülkesi açısından bir kayba neden olduğu ve söz konusu kaybın telafi edilmesinin zaman ve maliyet kaybını da beraberinde getireceği yönündedir. Göçü bir kayıp olarak değerlendiren bu görüş milliyetçi görüş olarak ifade edilmektedir. Bununla birlikte bir başka görüş ise göçü bir kazanım olarak görmekte ve göçün göçmenin kendi ülkesi ve dünyanın kalkınmasına katkı sağlayacağı ileri sürülmektedir. Göçü faydalı bir olgu olarak gören bu görüş ise enternasyonelci (insaniyetçi) model olarak adlandırılmaktadır.

Para transferleri yönüyle göçün kalkınma üzerindeki etkisi değerlendirildiğinde; bireylerin göç ettikleri ülkedeki kazançlarını kendi ülkelerine aktararak ülkelerinin kalkınmasında önemli bir rol oynadığı söylenebilir. Bu yünüyle göçün göç veren ülke açısından fayda getirici bir özelliği söz konusudur. Söz konusu kazançlar göçmenin kendi ülkesi açısından bir gelir kaynağı olmaktadır. Diğer taraftan yapılan transferler göçmenin kendi ülkesiyle kurduğu bağın bir göstergesi olmaktadır. Nitekim gelişmiş ülkelerde çalışan göçmenler kazançlarını kendi ülkelerine aktararak ülkelerinin kalkınmalarında ciddi bir rol oynayabilmektedir. Özellikle gelişmekte olan ülkeler için para transferleri hatırı sayılır bir yatırım kaynağı olarak değerlendirilmektedir. Bu kapsamda transferler göçmenin kendi ülkesiyle arasında maddi olan ve maddi olmayan bir katkı olarak ifade edilebilir. Göçmen para transferi girişinin yüksek olduğu ülkelerin gelişmekte olan ülkeler olduğu dikkate alındığında transfer girişinin bu ülkeler için önemi bir kez daha ortaya çıkmaktadır.

Bu çalışmada en fazla transfer alan gelişmekte olan ülkeler (Bangladeş, Çin, Dominik, Endonezya, Fas, Filipinler, Guatemala, Hindistan, Kolombiya, Meksika, Nepal, Nijerya ve Pakistan) ve Türkiye'ye yer verilerek göçmen para transferlerinin kalkınma üzerindeki etkisinin ölçülmesi amaçlanmıştır. Bu amaçla dünyada en fazla para transferi alıcısı on üç ülke ile Türkiye'nin elde ettiği transferlerin kalkınma üzerindeki etkisinin ele alındığı çalışmada çeşitli sonuçlara ulaşılmıştır. Analizde bağımlı değişken olarak kalkınmayı temsilen insani gelişmişlik endeksi, bağımsız değişken olarak da ülkelere giriş yapan para transferleri seçilmiştir. Bu değişkenlere ek olarak çalışmada ekonomik büyüme oranı açıklayıcı değişken olarak seçilmiştir. 2005-2021 yılına ait olan çalışmanın verileri Dünya Bankası ve UNDP veri bankasından temin edilmiştir.

Çalışmada öncelikle seriler arasında durağanlık analizi yapılarak panel birim kök testleri uygulanmış ve serilerin birinci dereceden durağan olduğu görülmüştür. Ardından seriler arasındaki uzun dönem ilişkisinin incelenmesi amacıyla panel ARDL testi uygulanmıştır. Panel ARDL testi değişkenler arasındaki uzun dönemli ilişkinin varlığını kanıtlamaktadır. Para transferlerinin kalkınmaya olan etkisinin ölçülmesinde seçilen ülkelere ait panel veri setine ekonometrik analiz uygulanan çalışma kapsamında uzun dönem katsayılarına göre; para transferlerindeki %1 oranındaki artışın kalkınma üzerinde %0,07 düzeyinde artış sağladığı, ekonomik büyümede görülen bir birimlik artışın ise kalkınma üzerinde %0,02 düzeyinde artış ortaya koyacağı sonucuna ulaşılmaktadır. Bu çalışmada ulaşılan sonuçlar özelinde göçmen para transferlerinin seçili ülkelerde kalkınma üzerinde etkisinin olduğu söylenebilir.

KATKI ORANI BEYANI VE ÇIKAR ÇATIŞMASI BİLDİRİMİ

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