

Impact of remittances on employment: Evidence from post-transition countries

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Abstract. The aim of this paper is to examine the impact of remittances on employment rates in post-transition countries and to determine the differences in remittance effects on male and female employment rates. For this purpose, panel data over the 2008-2023 period are analysed for 24 countries. The remittance effects are estimated using the generalized method of moments (GMM) approach. The estimation results indicate that remittances have a statistically significant impact on the employment rate. In consideration of the endogenous regressor problem, it is estimated that a 10-percent increase in remittances per capita will result in a decline of 0.10 percent in the total employment rate. However, while the female employment rate is projected to fall by 0.18 percent, the effect on the male employment rate is insignificant. These research findings are pertinent to the determination of effective measures for mitigating the negative effects of remittances on the labour market.

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1. INTRODUCTION

During the transition period, there was a considerable increase in labour emigration flows from former socialist countries. A number of factors contributed to this, including the prevalence of negative economic incentives in other developing countries. Moreover, the political circumstances related to the dissolution of three federal states, as well as the accession of the Central and Eastern Europe countries to the European Union, additionally contributed to the increase in emigration flows. The surge in labour emigration was accompanied by the growing remittance inflows to transition countries. In the early 1990s, remittances accounted for 1 percent of GDP in transition countries, but by the end of 2000s, their share in GDP doubled (Schelburne & Palacio, 2008). According to the World Bank, while remittance inflow in transition countries amounted to nearly \$57 billion in 2008, this indicator reached \$97 billion in 2023 (World Development Indicators, n.d.). Even during economic crisis induced by COVID-19, remittance flows remained relatively

resilient despite the decline in economic activities and employment levels in major migrant-hosting countries (World Bank, 2022). In many post-transition countries, the share of remittances in GDP is quite high, which highlights the considerable role of external sources in the financing of their national economies. In view of these facts, the necessity of investigating the different effects that remittances have on receiving economies becomes clear. A number of empirical studies have demonstrated the role of remittances in the alleviation of poverty (UNCTAD, 2011; Gupta et al., 2009; Pekovic, 2017), economic growth (Pradhan et al., 2008; Ekanayake & Moslares, 2020), and financial development (Aggarwal et al., 2011; Azizi, 2020). On the other hand, potential “Dutch disease” effects of remittances include the appreciation of real exchange rates and a decline in competitiveness (Acosta et al., 2009; Hassan & Holmes, 2013).

In addition to these established positive and negative economic consequences of remittances for the receiving country, concerns regarding labour market effects have emerged recently, particularly in terms of the labour force participation of non-migrant household members. Remittances, as non-labour income, may raise the reservation wage of remittance-receiving household members and reduce their incentives to participate in the labour market. The majority of empirical studies have confirmed the negative impact of remittances on the labour force participation rate. However, empirical research into remittance effects on other labour market outcomes is scarce. Empirical studies into the impact of remittances on employment have mostly focused on self-employment and informal employment using household survey data of single countries. There are few studies conducted on remittance effects on the total employment rate including employment of remittance non-receiving individuals. These pieces of research suggest that remittances discourage families of migrants from working in post-transition countries with a high share of remittances in GDP (as Tajikistan, the Kyrgyz Republic). Having in mind significant discrepancies in the employment rate between men and women, remittance effects in some post-transition countries could be larger across gender.

In this paper the author attempts to answer the following research questions: 1) Do remittances have a significant negative impact on the total employment rate in post-transition countries? 2) Is there a difference in the impact of remittances on the male and female employment rates in post-transition countries? This study contributes to the current empirical literature in several ways. Previous studies attempted to estimate remittance effects on employment in a single-country context using household level data, while this paper uses aggregate cross-country data. Considering that only few studies deal with the impact of remittances on the total employment rate, this paper contributes to a more comprehensive overview of remittance effects on the labour market. In addition, empirical literature regarding remittance effects on employment in post-transition countries is relatively scarce.

The rest of the paper is organized as follows: Section 2 presents the review of recent empirical findings; Section 3 describes the data and the empirical model specification and methodology; Section 4 presents the results and Section 5 the conclusion.

2. LITERATURE REVIEW

The neoclassical model of labour-leisure choice explains the factors that determine an individual's choice between working hours, necessary to provide income for consumption of goods, and leisure hours. An individual chooses the combination of working and leisure hours which provides the maximum utility. Part of the individual's income is independent of how many hours they work. Non-labour income (such as property income, dividends, and lottery prizes) can affect the individual's working and leisure hours. Remittances as non-labour income can alleviate the budget constraint, raising the utility level with increased leisure hours (Borjas, 2020). For that reason, the majority of previous empirical literature studies the effects of remittances on labour supply. It could be assumed that remittance inflow reduces labour force

participation for several reasons. First, remittances can disincentivise the recipient's labour market enrollment by increasing their reservation wage. In addition, remittances can incentivise the members of remittance-receiving households to choose higher education, consequently decreasing labour force participation. On the other hand, the members of remittance-receiving households could be forced to increase participation in the labour market to substitute the labour activities of migrant household members (Ayalew & Mohanty, 2022).

The majority of empirical literature are micro-studies focused on assessing the remittance impact on labour supply decision using household survey data. These studies have mostly found that remittance inflow has a negative influence on the labour force participation decision. In a remittance-dependent country as Tajikistan, remittance receiving causes a decline in the remaining household members' labour force participation rate by 10.2 percentage points (Murakami et al., 2021). In case of El Salvador, Guatemala, and Honduras, it is estimated that remittances are associated with lower labour force participation (Sousa & Garsia-Suaza, 2018). Similar results are found in Ghana (Asiedu & Chimbar, 2020), Ethiopia (Ayalew & Mohanty, 2022), rural India (Dey, 2021), while in case of Nigeria there are positive effects of remittances on labour force participation (Nwokoye et al., 2020).

There are several empirical studies that deal with the impact of remittances on labour force participation utilizing aggregate cross-country data. Some studies have found differences in the results between male and female labour supply. One of the more comprehensive studies of labour market effects of remittances has been conducted by Chami et al. (2018). Based on the data for 139 countries, they found a negative statistically significant influence of remittances on labour force participation, but the negative impact is weaker in case of men than in case of women. Using the data for 122 developing countries from 1990 to 2015, Azizi estimated that an average 10 percent increase in remittances will lead to a 0.17 percent decline in the total labour force participation rate, a 0.03 percent decline in the male labour force participation rate, which is not statistically significant, and a 0.33 percent decline in the female labour force participation rate (Azizi, 2018). On the other hand, assessing the remittance impact on labour force participation in a sample of 66 developing countries, Posso found a positive statistically significant relationship between remittances and labour force participation. However, he emphasises that for men this is an inverted-U relationship, which means that once remittances pass a certain threshold, labour can potentially be substituted for leisure (Posso, 2012).

Relatively few studies assess remittance effects on unemployment and they give different results. Chami et al. emphasize that remittance inflows reduce unemployment mostly in lower-wage and lower-productivity nontradable industries (Chami et al. 2018). Sousa and Garcia-Suaza (2018) failed to find any significant relationship between remittances and unemployment, whereas Jackman estimates that remittances have a positive statistically significant impact on unemployment in Latin American and Caribbean countries when the remittance to GDP ratio is below 3.25 percent, with the impact becoming negative as the ratio increases (Jackman, 2014).

Empirical studies into remittance effects on employment are mostly focused on their impact on self-employment and, to a lesser extent, informal employment. The remittance effects on self-employment determined in the empirical studies that are mostly based on household survey data are highly inconsistent. Using a multinomial logit model, Shair et al. found that remittances increase the likelihood of self-employment participation (Shair et al., 2023). Similarly, Petreski and Mojsoska-Blazevski investigated whether remittance receiving has an impact on youth self-employment in North Macedonia. They found that there is a considerably higher probability of self-employment among the youths in remittance-receiving households, between 28 and 33 percent, than among non-youth and remittance non-receiving household members (Petreski & Mojsoska-Blazevski, 2015). On the other hand, there is evidence of remittances having a negative impact on self-employment. The results of an empirical study in Nigeria suggest that remittance

inflow decreases the probability of recipients being self-employed by 28.4 percent (Salman, 2016). A panel data study of seven Southeast European countries indicates that there is no statistically significant relationship between remittances and the self-employment rate in the long-run (Kokotović & Kurečić, 2022). Similarly, Acosta did not find any major effects of remittances on self-employment (Acosta, 2020). In addition, there is evidence in empirical literature that remittance inflow increases the likelihood of informal employment (Ivlevs, 2016; Chami et al., 2018).

Papers analysing the influence on remittances on the total employment rate are rare. The author of this paper considers the results of the study carried out by Ibourk and Amaghous using a sample of 58 countries. They found that remittances have a negative statistically significant impact on the total employment rate. Their findings indicate that a 10 percent increase in the remittance share in GDP will lead to a 1.34 percent decline in the total employment rate. However, remittances cause a greater decline in the female employment rate than in the total employment rate (1.99 percent) (Ibourk & Amaghous, 2014).

3. METHODOLOGY

The effects of remittances on the employment rate were estimated on a sample of 24 post-transition countries, selected based on the model variables' data availability. The sample is, however, representative of most of the post-transition countries with a significant share of remittances in GDP. It includes post-transition countries that are the European Union members, countries of Southeast Europe and countries of the Commonwealth of Independent States (CIS). The list of countries that make up the sample is given in Table 1. The observed period is from 2008 to 2023 because the data for this period are available for all countries. The data series are from the World Bank's World Development Indicators Online. It should be noted that there are certain limitations in the quality of data, particularly relating to remittances. Remittance data are taken from the category "Personal remittances" which includes personal transfers and compensation of employees. However, an amount of remittance flows goes through informal channels thus raising the possibility of underestimating the amount of remittance inflows presented by official data.

Table 1

List of countries in the sample

Central and Eastern Europe – EU members	South-East Europe countries	Commonwealth of Independent States
Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, Slovenia	Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, the Republic of Serbia	Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Tajikistan, Uzbekistan

Source: Own compilation.

Based on previous empirical models of the impact of remittances on employment and other labour market outcomes, the specification of the panel data model can be written as:

$$\ln EMP_{it} = \alpha_i + \beta_1 \ln REM_{it} + \beta_2 \ln GDP_{it} + \beta_3 \ln GC_{it} + \beta_4 \ln GFC_{it} + u_{it}$$

$$(i = 1, 2, 3, \dots, N; t = 1, 2, 3, \dots, T) \quad (1)$$

where EMP is employment measured by employment indicators as the total employment rate, the male employment rate and the female employment rate in country i and time t ; REM is remittance per capita; GDP is real GDP per capita based on purchasing power parity and data are in constant 2021 international dollars; GC is general government final consumption expenditure expressed as a ratio of GDP; GFC is gross

fixed capital formation expressed as a ratio of GDP; u_{it} is disturbance term. In addition, the author has estimated the model including additional control explanatory variables like the dummy variable for the Covid-19 crisis period. Since they have a very small or statistically insignificant effect on employment indicators, the author chooses this model specification.

In economic literature there are many empirical studies confirming that a GDP growth results in the employment rate increasing (Basnet & Sen, 2013). The estimated regression coefficient of the GDP variable is expected to be positive and statistically significant. Domestic investment is one of the important factors accelerating economic growth and employment. Empirical findings suggest that there are positive domestic investment effects on the employment rate. For that reason, the author includes gross fixed capital formation, which is the major component of domestic investment, as a variable in the estimated model. The estimated regression coefficient β_4 is expected to be positive and statistically significant. The literature has addressed the impact of government spending on employment (Bova et al., 2014). Government spending on goods and services has a positive effect on aggregate demand and consequently employment. Nevertheless, inappropriate government spending could cause the problem of crowding out private investments leading to a decreasing employment rate.

The information relating to the pairwise correlation matrix is presented in Table 2. The correlation between the employment rate and remittances per capita is negative and statistically significant, as is the case with government consumption. The employment rate has a positive statistically significant correlation with GDP per capita while there is no significant correlation with gross fixed capital formation.

Table 2

Correlation matrix

Variables	Ln_EMP	Ln_REM	Ln_GDP	Ln_GC	Ln_GFC
Ln_EMP	1.0000				
Ln_REM	-0.2788*	1.0000			
Ln_GDP	0.2257*	-0.0797	1.0000		
Ln_GC	-0.2133*	0.3665*	0.4146*	1.0000	
Ln_GFC	0.0266	-0.0606	-0.3488*	-0.1611*	1.0000

Source: Authors' results. * indicates significance level of 0.05

In order to ensure the validity of the statistical results, the presence of a unit root in the panel data series was tested first. There are several unit root tests. In this paper, the Levin-Lin-Chu test and the Im-Pesaran-Shin test were used to determine the stationarity of the panel data series. The Levin-Lin-Chu test examines whether the panels contain a unit root against the alternative hypothesis that the panels are stationary (Levin et al., 2002). The Im-Pesaran-Shin test examines whether all panels contain a unit root or if there are some panels that are stationary (Im et al., 2003). Besides the level of variables, it was tested whether the first difference of the variables' data series has a unit root or is stationary. The results presented in Table 3 show that the coefficients of the variables' first difference are statistically significant at the 1 percent level and it can be concluded that the variables are stationary at their first difference.

Table 3

Results of unit-root tests

Variables	Levin-Lin-Chu		Im-Pesaran-Shin	
	Levels	First differences	Levels	First differences
Ln_EMP	-10.4118 p=0.0000	-10.8576 p=0.0000	-1.4079 p=0.0796	-6.8000 p=0.0000
Ln_MALE_EMP	-11.3713 p=0.0000	-14.5741 p=0.0000	-2.3626 p=0.0091	-7.2795 p=0.0000
Ln_FEM_EMP	-8.1938 p=0.0000	-7.6600 p=0.0000	-2.5876 p=0.0048	-7.7356 p=0.0000
Ln_REM	-5.1860 p=0.0000	-9.0199 p=0.0000	-3.5920 p=0.0002	-9.4566 p=0.0000
Ln_GDP	0.9592 p=0.8313	-0.0057 p=0.4977	-1.5866 p=0.0563	-13.0661 p=0.0000
Ln_GC	-5.9097 p=0.0000	-13.8152 p=0.0000	-2.9220 p=0.0017	-8.7626 p=0.0000
Ln_GFC	-12.1338 p=0.0000	-13.8411 p=0.0000	-3.4197 p=0.0003	-7.7983 p=0.0000

Source: Authors' results

The next step is selecting an appropriate specification of the panel data model and testing the existence of unobservable individual-specific effects. For that reason, the author used the F test for the fixed effects model and a modified Breusch-Pagan (1980) test for the random effects model. The results of both tests presented in Table 4 show that individual-specific effects are significant and that it is necessary to decompose the random error into individual effects and the residual random error. The results of a modified Wald test confirmed the presence of heteroscedasticity. In addition, the results of the Pesaran (2004) CD test indicate a cross-sectional independence, except for the model with the female employment rate as a dependent variable. The selection between the fixed effects model and the random effects model was made based on the results of the Hausman (1978) test. The results show that the null hypothesis about the correlation of regressors with individual effects is rejected. The author concludes that individual-specific effects should be treated as fixed parameters and that the fixed effects model is more appropriate than the random effects model. Consequently, the LSDV (Least Square Dummy Variable) model with panel-corrected standard errors and the Prais-Winsten transformation are used (Greene, 2002).

Table 4

Tests in the panel model

Tests	Ln_EMP	Ln_MALE_EMP	Ln_FEM_EMP
F test	155.61 (p=0.0000)	112.23 (p=0.0000)	202.10 (p=0.0000)
BP test	2129.72 (p=0.0000)	1733.24 (p=0.0000)	2350.34 (p=0.0000)
Wald test	6309.72 (p=0.0000)	14180.75 (p=0.0000)	3792.29 (p=0.0000)
Pesaran CD test	3.954 (p=0.0001)	5.056 (p=0.0000)	1.572 (p=0.1159)
Hausman test	27.01 (p=0.0000)	93.68 (p=0.0000)	11.29 (p=0.0235)

Source: Authors' results

However, several empirical studies have confirmed bidirectional causality between remittances and labour supply (Motha et al., 2022), and remittances and poverty (Yasmin et al., 2015). Based on the evidence from the existing empirical literature, it may be assumed that the employment rate affects the amount of remittance inflows. One of the motives for sending remittances is the migrants' wish to improve the well-

being of their family members who have remained in the home country (Azizi, 2017). A decrease in the employment rate may be associated with the worsening of their financial situation and incentivise migrants to send larger remittances. Other studies consider the issue of reverse causality between remittances and labour market indicators and their authors make an estimation using the methodology which takes into account the endogeneity problem (Azizi, 2018; Chami et al., 2018; Posso, 2012).

It is difficult to find valid and strong instruments to overcome the endogeneity of remittances. Strictly exogenous external instruments that can vary over time are in general hard to come by (Giuliano & Ruiz-Arranz, 2009). Empirical literature, therefore, most often adopts the Generalized Method of Moments (GMM) approach which includes lagged values of dependent and independent variables as internal instruments. The author estimates the model using dynamic GMM estimators which are suitable for situations where a panel model has few time periods (small T and large N); fixed individual effects and independent variables that are not strictly exogenous (Roodman, 2009). In the process of estimation, the author uses the difference GMM estimator proposed by Arellano and Bond (1991) which transforms all regressors by differencing, subsequently employing the general method of moments. In using difference GMM, the author applies a two-step estimation. The Sargan test is used to check the validity of instruments and the Arellano-Bond test to determine whether there is a serial correlation in the model.

4. EMPIRICAL RESULTS AND DISCUSSION

The results of the LSDV model in Table 5 show that the most explanatory variables are statistically significant. Remittances per capita have a very small positive impact on the total employment rate as well as on the male and female employment rates. However, remittance inflows have not had a statistically significant effect on all employment indicators. The estimated regression coefficients of other explanatory variables confirm the expected results. GDP per capita as an income variable has a positive statistically significant effect on the employment rate. A 10 percent increase in GDP per capita will lead to an average increase of 1.75 percent in the total employment rate, 1.21 percent in the male employment rate and 1.85 percent in the female employment rate. In addition, gross fixed capital formation as a measure of domestic fixed investments has a positive statistically significant impact, while the effects of government consumption on all employment indicators are negative.

Table 5

Results of LSDV model

	Dependent Variable		
	Ln_EMP	Ln_MALE_EMP	Ln_FEM_EMP
Ln_REM	0.00294 (0.0046)	0.00526 (0.0049)	0.00046 (0.0053)
Ln_GDP	0.17461*** (0.0255)	0.12157*** (0.0246)	0.18495*** (0.0232)
Ln_GC	-0.02761 (0.0182)	-0.05927*** (0.0212)	-0.02804 (0.0201)
Ln_GFC	0.04904*** (0.0490)	0.07376*** (0.0181)	0.02631** (0.0131)
Cons.	2.11530*** (0.2328)	2.75787*** (0.2367)	1.83075*** (0.2151)
R ²	0.9951	0.9965	0.9956
Wald	1048.87 (p=0.0000)	345.27 (p=0.0000)	1923.71 (p=0.0000)

Dummy variables for individual effects are included; standard errors are in parentheses. ** indicates significance level of 0.05, *** indicates significance level of 0.01. *Source:* Authors' results.

The results of the GMM estimation are presented in Table 6. The results of the Sargan test confirm the null hypothesis that overidentifying restrictions are valid and suggest that the instruments are exogenous, they are uncorrelated with the unobserved component of the model. Based on the Arellano-Bond test results, the author can conclude that there is no serial correlation in the model. In addition, the model is estimated using the alternative specification which includes an additional variable TRADE. The variable TRADE is the sum of exports and imports of goods and services measured as a share of GDP.

Table 6

Results of GMM model

	Dependent Variable					
	Ln_EMP	Ln_EMP	Ln_MALE_E MP	Ln_MALE _EMP	Ln_FEM_EMP	Ln_FEM_E MP
Ln_EMP(t-1)	0.39642*** (0.0536)	0.45289*** (0.0379)				
Ln_MALE_EMP (t-1)			0.44696*** (0.0473)	0.45052*** (0.0483)		
Ln_FEM_EMP (t-1)					0.47649*** (0.0656)	0.45385*** (0.0889)
Ln_REM	-0.01028** (0.0047)	-0.00935** (0.0038)	-0.00432 (0.0036)	-0.00770** (0.0037)	-0.01765*** (0.0049)	-0.02092** (0.0101)
Ln_GDP	0.22243*** (0.0304)	0.16833*** (0.0384)	0.17665*** (0.0226)	0.16961*** (0.0212)	0.22829*** (0.0314)	0.20077*** (0.0491)
Ln_GC	-0.02872* (0.0166)	-0.01438 (0.0229)	-0.06425*** (0.0188)	-0.05701** (0.0241)	-0.05653*** (0.0183)	-0.03217 (0.0261)
Ln_GFC	0.06505*** (0.0108)	0.05050*** (0.0134)	0.07501*** (0.0162)	0.07314*** (0.0189)	0.03176*** (0.0063)	0.01963** (0.0109)
Ln_TRADE		0.03723 (0.0232)		0.01592** (0.0081)		0.04744 (0.0311)
Cons.	0.20899 (0.2936)	0.31917 (0.3337)	0.58728** (0.2554)	0.55844** (0.2540)	-0.01662 (0.2758)	0.06006 (0.3410)
Year dummies	Yes**	Yes**	Yes**	Yes**	Yes**	Yes**
No. of obs.	360	360	360	360	360	360
No. of instr.	36	37	36	37	36	37
Sargan test	18.49022 (p=0.8878)	17.7852 (p=0.9099)	19.46159 (p=0.8526)	19.49153 (p=0.8514)	21.79901 (p=0.7475)	20.08719 (p=0.8271)
AR (1)	-1.1215 (p=0.2621)	-1.707 (p=0.0878)	-2.3016 (p=0.0214)	-2.2832 (p=0.0224)	-2.2516 (p=0.0243)	-1.7779 (p=0.0754)
AR (2)	-0.43634 (p=0.6626)	-0.73575 (p=0.4619)	-1.0932 (p=0.2743)	-1.208 (p=0.2270)	0.15867 (p=0.8739)	0.17506 (p=0.8610)

Standard errors are in parentheses. * indicates significance level of 0.10, ** indicates significance level of 0.05, *** indicates significance level of 0.01.

Source: Authors' results.

The coefficients of most of the explanatory variables have kept the same sign and statistical significance of influence on the dependent variable. The employment rate from the previous year largely determines the employment rate in the current year and this dynamic effect is statistically significant. Remittances, as an explanatory variable of the greatest importance for this research, show a statistically significant effect on the

total employment rate and the female employment rate, while the impact on the male employment rate is insignificant. The negative sign of the estimated coefficient shows that remittance inflow causes employment reduction, besides others market and non-market factors. The findings show a relatively small size of remittance effects on the employment rate. Having considered the potential endogenous regressor problem, the author estimates that a 10 percent increase in remittances per capita will lead to an average decline of 0.10 percent in the total employment rate and 0.18 percent in the female employment rate. The negative impact of remittance inflows on the employment rate could be explained by the fact that remittances, as a source of non-labour income, reduce the likelihood of employment among members of remittance-receiving households and increase the reservation wage. Given that the research also includes the employment of remittance non-receiving individuals, these results indicate that remittances are primarily used for consumption and to a lesser extent for investing into productive activities. When remittance effects on the employment of men and women are compared, the study results lead to the conclusion that remittance inflow causes a considerably greater decline in the employment of women. A possible explanation stems from the fact that in post-transition countries, the majority of migrants are men who send remittances to other family members in their home countries. This also represents a necessity, having in mind the traditional role of women as housewives and their larger participation in unpaid work or family-contributing work in certain post-transitional societies, particularly in rural areas. Therefore, there is a larger probability that women's employment will decrease due to an increase in remittance inflow.

As control variables, GDP and gross fixed capital formation as a measure of domestic fixed investments, have an expectedly positive statistically significant impact on all employment indicators. A 10 percent rise in GDP per capita increases the total employment rate by 2.22 percent, male employment rate by 1.77 percent and female employment rate by 2.28 percent. In addition, a 10 percent increase in the share of gross fixed capital formation in GDP will raise the total employment rate by 0.65 percent, male employment rate by 0.75 percent and female employment rate by 0.32 percent. According to the results, government final consumption expenditure has a negative statistically significant effect on employment indicators.

5. CONCLUSION

The aim of this paper is to investigate the relationship between remittances and the employment rate in post-transition countries. Most of empirical literature is focused on estimating remittance effects on the labour force participation decision. Previous empirical studies have shown that remittances have a negative statistically significant impact on the labour force participation rate with considerable differences in the results between male and female labour supply. Research studies into the influence of remittances on employment are mostly focused on self-employment, while the estimation of remittance effects on the total employment rate is scarce.

In this paper, the author uses aggregate cross-country data for 24 post-transition countries in the observed period from 2008 to 2023. The impact of remittances on the employment rate is estimated using the difference GMM approach. The results confirm the hypothesis about a negative statistically significant relationship between remittances and the employment rate. In consideration of the endogenous regressor problem, the author estimates that a 10 percent increase in remittances per capita will lead to an average decline of 0.10 percent in the total employment rate and 0.18 percent in the female employment rate, while the effect on the male employment rate is insignificant.

Having in mind these empirical results, it is necessary to identify effective measures for mitigating the negative effects of remittances on the labour market. In addition, it is particularly important to establish labour market policy measures aimed at raising the female employment rate. The governments of

remittance-receiving countries could identify policy instruments to incentivise remittance channeling into investment and entrepreneurial activities.

Finally, it is necessary to consider certain limitations of the current study and also possibilities for future empirical research on this topic. As in the case of other empirical studies on remittance effects, the reliability of this study's results is affected by the limitations of the remittance data quality. An amount of remittance flows goes through informal channels thus raising the possibility of underestimating the amount of remittance inflows presented by official data. In addition, post-transition countries are heterogeneous in terms of their economic and other characteristics. Therefore, any future research into remittance effects on the employment rate could be more focused on post-transition countries of specific regions.

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