

---

**ECONOMICS**

---

*Sociology*

---

Świerczyńska, K., Kliber, A. (2018). African Emigration to Europe. Social Cohesion and Inequality Nexus. *Economics and Sociology*, 11(1), 188-204.  
doi:10.14254/2071-789X.2018/11-1/12

---

## AFRICAN EMIGRATION TO EUROPE: SOCIAL COHESION AND INEQUALITY NEXUS

**Świerczyńska Katarzyna,**  
*Poznan University of Economics,*  
*Poznań, Poland,*  
*E-mail:*  
*katarzyna.swierczynska@ue.poznan.pl*

**Kliber Agata,**  
*Poznan University of Economics,*  
*Poznań, Poland,*  
*E-mail: agata.kliber@ue.poznan.pl*

*Received:* September, 2017

*1st Revision:* January, 2018

*Accepted:* February, 2018

DOI: 10.14254/2071-  
789X.2018/11-1/12

**ABSTRACT.** An important aspect of the nexus between social cohesion and inequality currently discussed in both media and academia is the phenomenon of migrations. There are two sides of this coin. The first one represents the inequality-driven outflow of people from low- and middle-income countries. The second one is the selection of destination countries by migrants. Why more and more people from Africa tend to choose the same specific countries? This research adds to the existing literature by offering the analysis of economic and social context from both perspectives. The contribution of this paper is as follows. First, it aims to fill in the lacuna in the analysis of inequality driven migration in the perspective of the country of origin and host country. We found that emigration is driven by inequality, but it is also reflected in the positive outbound of social cohesion, which may contribute to economic development. We found, that if the change of poverty level is permanent, we can expect that in the long run the number of emigrants will double (*ceteris paribus*). Further, high-income countries with well-developed social security programs attract immigration flows. The conclusions of this study call for the development of comprehensive social policies to tackle the inequality issues and improve social cohesion in both sending and recipient countries, as migrations have an impact on both parties of this process.

**JEL Classification:** N37, F22,  
O15

**Keywords:** migration, Sub-Saharan Africa, inequality, social cohesion, Europe.

### Introduction

Migration is a complex phenomenon with major impacts on economies and societies. Attitudes towards migration may depend on its direction, size, and composition (e.g. religion, culture, nationality). As disparities between rich and poor countries are only growing, so does the socioeconomic gap between potential immigrants and hosts. This makes the assimilation processes more challenging. Moreover, high-income societies tend to refuse engagement in international problems and demand their governments concentrate on national issues. Hence, openness towards immigration decreases. Support for the Brexit and numerous political

successes of right-wing parties across the World based on the bias towards outsiders (with a number of groups falling under this category) represent the wrath forming inside these societies. Boucher (2013) warns that the current trends polarizing the societies into nationals/immigrants and poor/rich (deepened by the economic crisis and neoliberal austerity programmes) tend to increase the popularity of populism, thus turning many people increasingly against both economic globalization and European integration.

It appears that the paradigm of multidimensional integration is questioned by contemporary societies. In accordance with the decreasing benefits principle, developed societies appreciate the attained level of growth, regional integration, and more broadly, globalization less and less. European citizens are satisfied with their working conditions (WCS, 2015), but having achieved a certain level of wealth and security, they become less open to solving the problems of the less fortunate. Thus, we observe the emergence of prejudice and discriminatory attitudes towards immigrants (Bello, 2016). We may be experiencing a cyclical crisis of democracy, as predicted by Fukuyama (1992). However, these tendencies make development policies even more valid and thus, requiring more attention, in both domestic and global perspectives (Birdsall *et al.*, 2005; Easterly & Pfutze, 2008; Harman, & Williams, 2014). Ensuring social cohesion in developed countries of the European Union is considered an important task for the Community, considering all the changes in the global environment (Hannequart, 1992; Ona and Ivashinenko, 2011; Farole *et al.*, 2011; Johns, 2012; Boucher, 2013), as cohesion policy had a major impact on European economy, thus helping to cushion the impact of crisis, reducing economic differences and promoting environmental and social development (Farole *et al.*, 2011; Ona and Ivashinenko, 2011). Sociopolitical turmoil following the recent economic migrations to Europe and especially the reception of refugees from Syria is a clear example of the necessity to embrace the issue of social cohesion in a spectrum not limited to the Community issues (Abrams, 2016).

Therefore, it is required to concentrate not only on local problems but to adopt a broader approach, which would allow better understanding the interactions between different regions. Neglecting the problems of developing economies comes with the consequences. The income gap across the World does not seem to be narrowing. Differences in wealth levels between nations raise negative consequences for the international stability (Devarajan & Kanbur, 2007; Harman & Williams, 2014, pp. 935-940). This is aggravated by income disparities in the middle- and low-income economies, which have remained to be the source of instability for decades (Kuznets, 1972). Persistence in calling the Official Development Assistance system “help” and refusing to admit its instrumentalisation has backfired (Easterly and Pfutze, 2008). Growing threats of terrorism, social exclusion, and illegal migrations disturb the status quo of North-South relations and thus call for reflection. Development studies, particularly those focused on sub-Saharan Africa – the poorest region in the Globalized World, require more in-depth analyses.

The aim of this study is to address the inequality and social cohesion nexus in the context of economic migration. This paper does not address the problem of refugees nor asylum. The central idea is to provide a two-directional analysis of migrations – in the perspective of a country of origin and a country of destination, following the approach of Gonzalez-Garcia and Mlachila (2017). First, the factors of immigration from Africa in potentially recipient European societies were studied. Next, the relationship between the inequality variables as the factors behind the decision to migrate was studied. Remittances serve as the proxy of social cohesion and its relevance for the migration process. Econometric models were applied in order to determine these factors.

## 1. Literature review

The existing definitions of migrations do not lack ambiguity (Djajic, 2001; Giddens, 2007). We experience constant relocation of different groups i.a. due to the progress in transportation technology, the growth of transnational corporations, international integration, and cultural homogenization in contemporary World (Djajic, 2001). Migrations have globalized and accelerated, became highly diversified, increasingly political, and feminized (Catles and Miller, 2011). Hence, it is difficult to define what migrations are (in other words, which of the “constant relocations” are migrations). According to Okolski (2004), modern migrations include multiform of durability, size, intensity, legitimacy, and directions of movements of the population. The decision to migrate is taken freely, for reasons of 'personal convenience' and without the intervention of an external compelling factor (UNCHR, 1998). However, with an increasing number of people temporarily changing domicile, choosing to have a multiple domiciles, or choosing to work in one country and live in another one, it is difficult to draw a line and decide whether the decision has been taken and if so, when the migration occurred (Okolski, 2004; Giddens, 2007; Beauchemin, 2015). It is equally tricky to determine which of the population movements fall under the category of economic migrations (Faist, 2000). Aware of these obstacles, we are not inclined to enter the debate on the theoretical concept of migration in this paper. As a matter of fact, considering the empirical orientation of this study, we utilize the simple variable: „net migration number“ to approximate the value of the migration flow. We simplify the image by estimating the magnitude of outflows and inflows of people in order to include more countries in the study and receive an overview of migration trends, rather than concentrate on the specific migration types, which are addressed in other research, mostly case studies.

However, there is a number of economic studies which attempt to analyze the processes lying under the migration mechanisms. In particular, two categories of scientific problems related to population movements are distinguished: the determinants of migrations and the impact of migrations (Pryor, 1981; Mueller, 1982; Long, 1988). Weinstein (2002) claims that migrations are reciprocally positive, as they foster economic growth, entrepreneurship and trade, and on the other hand cause increase in taxes and limit the rise of salaries. However, based on Smith and Edmonston (1997) inflows of unskilled workforce contribute to the decrease of wages for the low-paid jobs and to the increase of salaries for highly qualified jobs. Boeri and Brucker (2005) studied the flows of migrants between the new and the old member states of the European Union. They estimated that the inflows of migrants would contribute to 0,5% GDP growth in the host economies. Broadly economic studies indicate i.a. that migrations may foster the development of industry and public works (Lee, 1966), trade development (Say, 1960), and are connected with business cycle (Saks and Wozniak, 2011). Some recent research focuses on the role of regional cooperation, including EU policies in the management of migration flows (Messina, 2002; Zimmerman, 2013; Reslow and Vink, 2015).

According to the literature, migrations are determined by historical and geographical factors, including colonialism (Massey *et al.*, 1993), geographical proximity between country of origin and country of destination (Ruyssen and Ryap, 2014; Bodvarsson *et al.*, 2015), climate change and environmental distress (Zimmerman, 2013). It is argued that they are stimulated by push and pull factors which have economic and demographic, political, and socio-cultural dimensions (Mansor and Quillin, 2006). Difficult economic conditions in the home country (poverty, unemployment, low wages, lack of access to medical services, etc.) push migrants out. They seek a host country which promises the possibility of personal development, higher wages and living standards. People from politically unstable, corrupted, conflicted countries seek shelter in sound and safe states. Migration may be caused by discrimination, religious bias, ethnical conflict, or human rights violations (Mansor and Quillin, 2006). Moreover, a “reversed

migration” – the return from the exhale to the land of the ancestors may be observed. Having attained a certain level of income, people afford to seek for their roots and sometimes relocate back; however usually to a higher standard of living. Regardless of the motivation to emigrate, experience and social networks play an important role in the migration process (Delechat, 2001; Anyanwu and Erhijakpor, 2010; Ruysen and Ryap, 2014). The existence of a diaspora may influence the selection of a destination country by migrants.

Some of the recent studies address the issues of migrations in the African context (Ruysen and Rayp, 2014; Thomas, 2016; Reslow and Vink, 2015; Beauchemin, 2015; Asongu and Nwachukwu, 2016; Gonzalez-Garcia and Mlachila, 2017). Some of these works are focused on the determinants of African migrations. The intra-regional migrations are claimed to be driven by geographic proximity, differences in income, war at home, cultural links (Ruysen and Ryap, 2014; Gonzalez-Garcia and Mlachila, 2017), and environmental factors such as floods and droughts (Gonzalez-Garcia and Mlachila, 2017). On the contrary, the out-of-Africa migrations are stimulated by the economic opportunity, as the vast majority of flows are directed to OECD countries (85% of sub-Saharan diaspora) – especially France, the UK, and the USA (50% of the sub-Saharan diaspora) (Gonzalez-Garcia and Mlachila, 2017). Thomas (2016) raised the problem of the outflow of highly-skilled professionals to the United States. Most of the studies concentrate on particular aspects of migrations.

In this research, we wish to address the issue of African migrations to Europe from a broader perspective, to understand the global tendencies which push and pull population movements between the Old and the Oldest continents. Based on the literature review findings, our study takes into account the possible quantitatively expressed factors which may determine both the decision to migrate and the decision, where to migrate. In the first part of empirical proceedings we estimated the role of inequality and poverty factors on emigration, which correspond to the approach of Naudi (2010). Moreover, as for the consequences for home countries, remittances are considered an important source of income, which overpassed foreign direct investments as a source of a foreign exchange (Andrzejczak and Kliber, 2017; Gonzalez-Garcia and Mlachila, 2017).

Remittances are associated with social capital theory, especially social cohesion. It is a broad concept, which combines the sense of belonging and active participation, trust, and mobility (OECD, 2011b), reflects a social force embodied in a society, which may contribute to overcoming inequality issues and hence contribute to the process of economic development (Fay, 2005; Birdsall, 2007). Social cohesion in informal and formal institutions enables the building of trust, with the use of strengths and assets of poor communities in participatory, bottom-up processes (Fay, 2005), including migration. According to Anyanwu and Erhijakpor (2010), remittances have a positive impact on poverty reduction. The policies which allow cash flows for the sake of private households (such as reduced costs of money transfers) may have a positive impact on economic development by enabling the positive effects of migrations on countries of origin (Esser *et al.*, 2009). In this research the impact of remittances on emigration flows from Sub-Saharan African countries was determined.

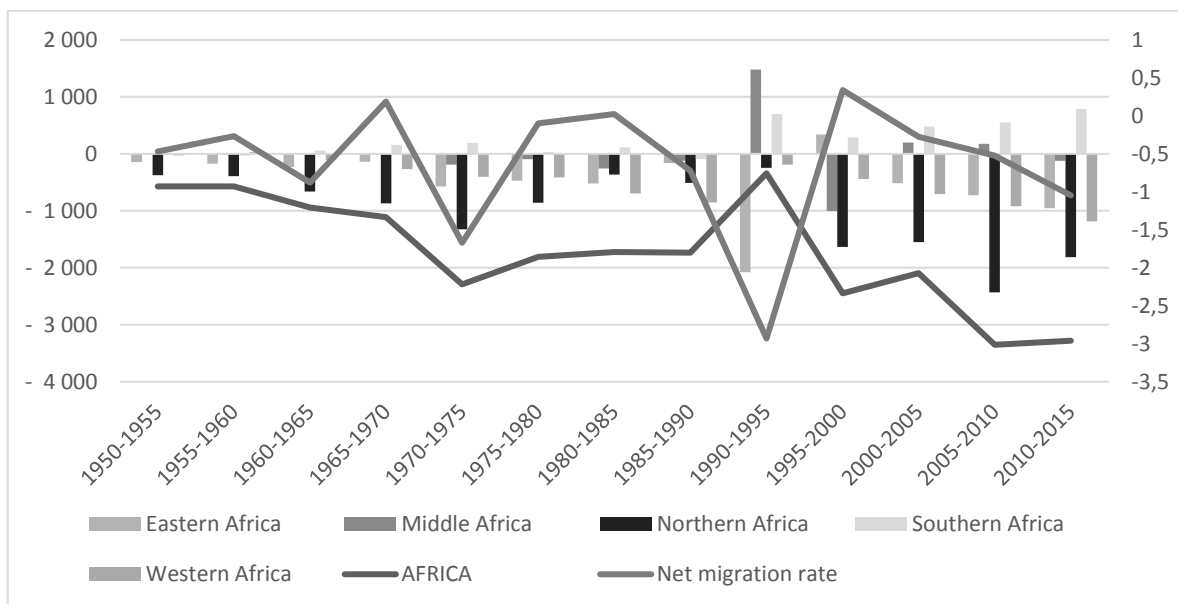
Moreover, in the second part of our study, we included a variable of “immigration openness” in order to check, whether the decreasing support for immigration in European societies has made an impact on the direction of population movements. Based on the literature, also a number of other possible pull factors were included, especially social protection and the determinants of life quality in countries of destination.

## 2. African migration and its determinants

### 2.1. Trends in African migration

The number of migrants from African countries in 1950-2015 grows in absolute values, while the trends of the net migration rate are ambiguous (*Graph 1*). Net migration rate indicates the difference between the incoming and outgoing migration. In the short term after 2000, we may, however, identify a constant increase of the African emigration (*Graph 1*). This tendency is especially visible and strong for the sub-region of North Africa, where the constantly increasing population outflow over the period 1950-2015 was consequently higher than the inflow and reached its peak in 2005-2010. Apart from North Africa, the number of Western and Eastern African emigration seems to rise over the period – especially after 2000. In the same period, the decline of the net migration rate indicates a general trend to emigrate from African states. These trends are confirmed in the OECD report (OECD, 2013). However, despite the media-driven image of „African invasion“ to Europe, sub-Saharan citizens remain a minority in the European immigration flows (Beauchemin, 2015).

African migrations include flows from both outside and inside the continent (Ruyssen and Rayp, 2014). It may be observed that some regions in Africa become the hubs and attract regional migration flows, as presented in *Graph 1*. This concerns especially economic leaders in a southern part of Africa, but also Ivory Coast (Gonzalez-Garcia and Mlachila, 2017), which is the largest economy in West Africa. Countries such as South Africa, Botswana and Namibia, are the best performers of economic development in sub-Saharan Africa with the highest incomes, competitiveness and scores in social indicators (see ex. GCI, 2017; WDI, 2017). As such, they attract labour force from other countries in Africa (e.g. In particular, immigration of workers that seek a job in mimesis attracted to South Africa).



Graph 1. Net number of migrants, both sexes combined (thousands) in Africa and African sub-regions and mean net migration rate for Africa in 1950-2015

Source: own elaboration based on UN dataset, 2017.

General trends of migrations which may be seen in *Graph 1* have been heavily disrupted over the period 1990-95. This can be explained by the social and political crises in the region

in the “lost decade” of the 90’s, which include particularly the Rwandan genocide followed by the Great Lake crisis, and the Congo wars. The latter caused the increase of major population flows in the central part of the continent and explains the drop of the net mean regional migration rate over the period. Large flows of migration from Rwanda and South Sudan were balanced by the inflows to the Democratic Republic of Congo and to Ethiopia. A number of military conflicts in Africa in the 90’s caused population displacements. However, as the political situation in Africa stabilized, it seems that majority of recent migrations are driven by the economic motivation. The share of forced migration, refugees, declined to about 10% in the post-2000 period (Gonzalez-Garcia and Mlachila, 2017). It is, therefore, interesting to determine which factors undermine the decision to emigrate and, subsequently, to investigate, what characterizes the countries chosen by the immigrants as their destination.

## 2.2. Model Explaining Factors Contributing to Increase of Emigration Number

A major limitation of the empirical proceedings presented in this paper was the availability of the data on migrations from Africa. Nevertheless, the gravity of issues under examination prompted us to engage quantitative methods to address the problem of migration. The data which we collected were the net number of migration. As we did not have the exact data on the emigration, we assumed (for the purpose of the research) that the number of emigrants to African countries is negligible and we approximated the number of emigrants by the net number of migration. We did not take into account the cases when the net migration number was positive – indicating higher inflow of the immigrants than the outflow of the emigrants. As there were lots of missing observations in our dataset, we applied the following strategy. We took into account the period 1995-2015 and the mean number of migration for the following four periods: T1: 1995-1999; T2: 2000-2004; T3: 2005-2009; T4: 2010-2015. The source of data was: The United Nations Population Division’s World Population Prospects.

In the model, we took into account the logarithm of the overall emigrants number from a given country, as the magnitude of dependent and explanatory variables differed a lot. We present descriptive statistics of the data in *Table 1*. As we can see, after the transformation of the data, the number of observations decreased by 37. Finally, 35 countries were included in the sample (Angla, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo Dem.Rep., Congo Rep., Cote d’Ivoire, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zimbabwe) and the total of 103 observations were analyzed. Based on the data in *Table 1* we can see, that the average number of net migration, as well as the median value, are negative – indicating the prevailing outflow over the inflow of people. This is consistent with the analysis of graphical representation of migration flows presented in *Graph 1*.

Table 1. Descriptive statistics of net migration and variable approximating emigration number

	<i>Migration</i>	<i>log(Emigration)</i>
Mean	-40029	11.038
Median	-30000	11.002
Min	-1006400	7.2233
Mx	1402600	13.822
Std.dev	264630	1.2942
volatility factor	6.611	0.117
Missing	0	37

In the first part of the study, we wanted to analyze the determinants of a decision to emigrate in the sample of 35 sub-Saharan African countries. As possible explanatory variables, we took into account:

- *Coverage of social safety net programs (SOCIAL)*. Coverage of social safety net programs shows the percentage of population participating in cash transfers and last resort programs, noncontributory social pensions, other cash transfers programs (child, family and orphan allowances, birth and death grants, disability benefits, and other allowances), conditional cash transfers, in-kind food transfers (food stamps and vouchers, food rations, supplementary feeding, and emergency food distribution), school feeding, other social assistance programs (housing allowances, scholarships, fee waivers, health subsidies, and other social assistance) and public works programs (cash for work and food for work). Estimates include both direct and indirect beneficiaries. The source of the data was ASPIRE: The Atlas of Social Protection – Indicators of Resilience and Equity, The World Bank. Data are based on nationally representative household surveys.
- *Personal remittances, received, in current US\$ (REMITTANCES)*. Personal remittances comprise personal transfers and compensation of employees. Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households. Personal transfers thus include all current transfers between resident and nonresident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities. Data are the sum of two items defined in the sixth edition of the IMF's Balance of Payments Manual: personal transfers and compensation of employees. Data source: World Bank staff estimates based on IMF balance of payments data. Remittances approximate social cohesion (see Anyanwu and Erhijakpor, 2010).
- *Improved water source: % of the population with access (WATER)*. Access to an improved water source refers to the percentage of the population using an improved drinking water source. The improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection). Data source: WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation.
- *Mortality rate, infant: per 1,000 live births (Mortality)*. Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. Data source: Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division).
- *Poverty gap at \$1.90 a day (2011 PPP) in % (Poverty\_gap)*. Poverty gap at \$1.90 a day (2011 PPP) is the mean shortfall in income or consumption from the poverty line \$1.90 a day (counting the nonpoor as having zero shortfalls), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions. Data source: World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments.

- *Literacy rate*, adult total: % of people ages 15 and above (LITERACY). The adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life. Data source: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.
- *Access to electricity*: % of the population (ELECTRICITY). Access to electricity is the percentage of the population with access to electricity. Electrification data are collected from industry, national surveys and international sources. Data source: World Bank, Sustainable Energy for All (SE4ALL) database from the SE4ALL Global Tracking Framework.

The variables, which approximate the level of inequality and poverty in the sample countries are: water, mortality, poverty gap, literacy rate and access to electricity, while the amount of remittances represents the level of social cohesion (Anyanwu and Erhijakpor, 2010). A possible factor which could reduce the willingness to migrate is the coverage of social programs. As already mentioned, due to the differences in the magnitude of the variables, we first computed the logarithms of the data. Next, we calculated the correlation matrix to determine variables most correlated with the emigration number and least among themselves (see *Table 2*). We took the data for each country in the four above mentioned periods. What we can observe is that the number of migration is positively and significantly correlated with remittances and mortality rate. However, the potential explanatory variables are even stronger correlated among themselves, e.g. correlation between literacy rate and mortality rate amounts to -0.481, while the correlation between mortality rate and emigration number – to 0.203 and between mortality rate and the literacy rate is insignificant. Equally, it appears that higher levels of mortality are associated with less infrastructural development.

Table 2. Correlation matrix between the number of emigrants and possible explanatory variables in the 35 sample countries (*p*-values in brackets)

	<i>log</i> ( <i>Emi</i> )	<i>log</i> ( <i>Social</i> )	<i>Log</i> ( <i>Remittances</i> )	<i>log</i> ( <i>Water</i> )	<i>log</i> ( <i>Mortality</i> )	<i>log</i> ( <i>Poverty_gap</i> )	<i>log</i> ( <i>Literacy</i> )	<i>log</i> ( <i>Electricity</i> )
log( <i>Emi</i> )	1	0.082 (0.65)	<b>0.279</b> ( <b>0.01</b> )	-0.012 (0.90)	<b>0.203</b> ( <b>0.04</b> )	-0.116 (0.35)	-0.159 (0.19)	0.076 (0.45)
log( <i>Social</i> )		1	-0.134 (0.49)	0.255 (0.16)	-0.025 (0.89)	-0.116 (0.55)	0.114 (0.57)	-0.176 (0.34)
log( <i>Remittances</i> )			1	0.225 (0.03)	-0.365 (<0.01)	-0.268 (0.04)	0.153 (0.22)	0.275 (0.01)
log( <i>Water</i> )				1	-0.427 (<0.01)	-0.158 (0.20)	0.286 (0.02)	0.166 (0.1)
log( <i>Mortality</i> )					1	0.287 (0.02)	<b>-0.481</b> (<0.01)	-0.343 (<0.01)
log( <i>Poverty_gap</i> )						1	-0.036 (0.80)	-0.382 (<0.01)
log( <i>Literacy</i> )							1	0.184 (0.12)
log( <i>Electricity</i> )								1

Note: Computation performed in Rcran, package stats.

Next, we estimated the series of models, from which we chose the best based on the information criteria, the economic and statistical significance of regressors and the value of  $R^2$ . The best one appeared to be the dynamic panel model (with one lag only). The same methodological approach was adopted in Naude (2010). We present the results of estimation in *Table 3*.



Table 3. Results of estimation of dynamic panel model for emigration number over the period 1995-2015

Variable	Estimate	Standard error	t-Statistics	p-value
log(EMI)(-1)	0.555	0.170	3.260	0.001
const	-4.033	1.815	-2.222	0.026
log(REMITT)	0.251	0.050	4.991	0.000
log(MORTALITY)	0.980	0.276	3.553	0.000

Notes: 1-step estimation using GMM-system equations, asymptotic standard errors (GRETLL).

AR(1) test statistics amounted to 1.09 with p-value of 0.276; Sargan test for over-identification: 6.822 (with p-value of 0.146), while the Wald test statistics to 77.624 (with p-value <0.001). Doornik-Hansen test statistics for normality of residuals amounted to 1.295 with a p-value of 0.523.

Based on the estimates of the model we can observe that the higher the remittances received by the citizens, the higher the amount of the emigrants. The higher the mortality rate in the country of origin (approximating the poverty level), the higher the number of emigrants. This confirms, that poverty constitutes a push factor of emigration. Moreover, the results of this model add to the theory, as they identify remittances (social cohesion) as a significant push/pull factor of migrations.

Short-term elasticity of emigration with respect to remittances equals 0.251, while elasticity of emigration with respect to mortality: 0.98. Thus, if (ceteris paribus) remittances increase in a country of destination by 1%, we can expect the immediate increase of the outflow of population of 0.25%. The effect of poverty seems to be stronger. The increase of mortality rate by 1% should result (ceteris paribus) in the immediate outflow of population of 0.98%. The respective elasticities in the long run are: 0.564 (remittances) and 2.202 (mortality rate). Thus, if the change of poverty level is permanent, we can expect that in the long run the number of emigrants will double (ceteris paribus).

As a robustness check, we re-estimated the model using the random-effect model (the type of the model was chosen based on the results of the Hausman, 1978 test). The results are presented in *Table 4*. To account for heteroskedasticity we computed also robust errors using White (1980) approach (see also: Zeleis, 2004 and Millo, 2017) – and presented the estimates in two last columns of *Table 4*. The conclusions do not change.

Table 4. Estimates of the random-effect panel model explaining factors contributing to emigration number – Swamy-Arroa transformation

Variable	Estimate	Standard Error	p-value	Robust error	p-value
const	1.319	3.237	0.685	3.408	0.707
log(REMITT)	0.185	0.087	0.038	0.083	0.029
log(MORTALITY)	1.466	0.432	0.001	0.484	0.003

Notes: Breusch-Pagan test statistics (H0: The variance of residuals error equals 0) amounted to 61.124 with p-value <0.001. Hausman test statistics (H0: the estimator is consistent) amounted to 3.08 (p-value: 0.214). Model was estimated in R Cran using package plm (see: Croissant and Millo, 2008).

### 2.3. Model Explaining Factors Contributing to Increase of Immigration Number

In the case of immigration, we were not able to collect the sample of time series data, due to the nature of potential explanatory variables, which were taken partially from the results of qualitative survey on values and attitudes (World Value Survey, WVS). The data for immigration model, particularly addressing the openness towards immigrants (IMOPE) was derived from WVS waves 5 and 6, Eurostat and WDI. This way we were able to increase the

number of observations, but we had to use data from different periods, relevant for each country – the data on immigrants' number was for the time precedent to explanatory variables (unless such data was unavailable and then the data most approximate to this date was considered, e.g. Bulgaria). The countries of destination are presented in *Table 5*, together with the number of African immigrants in selected years.

Table 5. Number of African immigrants in selected European countries in given years

<i>Country</i>	<i>Year</i>	<i>Number of immigrants from Africa</i>
Bulgaria	2005	1561
Finland	2005	17838
Italy	2005	414880
The Netherlands	2005	94019
Poland	2005	9495
Slovenia	2005	10171
The United Kingdom	2005	431487
Cyprus	2006	10320
France	2006	301544
Germany	2006	707352
Sweden	2006	65229
Norway	2007	45776
Spain	2007	840844
Hungary	2009	37652

*Source:* own elaboration based on Eurostat data, 2017. The data was derived from WVS waves 5 and 6, Eurostat and WDI – in this way we were able to increase the number of observations, but we had to use data from different periods. The data on immigrants' number was for the time precedent to explanatory variables, unless such data was unavailable and then the data most approximate to this date was considered.

In this, second part of the study, we wanted to identify the pull factors in European countries which attract the migration flows from sub-Saharan countries. We took into account the following explanatory variables:

- IMOPE – immigration openness – it is approximated by the percentage number of positive answers to the question: Would not like to have immigrants/foreign workers as neighbours? in a given country. The variable approximates the negative attitude towards immigrants in a given country and we expect that it would be negatively correlated with the number of immigrants.
- SOconPR – Social contributions (% of revenue). The variable approximates the amount of social help the immigrants could receive in a country of destination. We expect a high and positive correlation of the variable with the immigrant number.
- Socon – Social contributions (current LCU). It is another approximation of the amount of social help the immigrants could receive in a country of destination.
- MECONS40 – Survey means consumption or income per capita, the bottom 40% of the population (2011 PPP \$ per day). The variable approximates the quality of the poorer part of the society – it also represents the possible social policy which secures the level of income of less fortunate. Countries with higher mean consumption are expected to attract more immigration.
- MECONTO – Survey means consumption or income per capita, total population (2011 PPP \$ per day) represents general level of life in a given country.

- GINI – Gini Index, which represents the inequalities in income distribution.
- INTER – Individuals using the Internet (% of the population). The variable represents the technological advancement of the country of destination, and we expect a positive correlation of the variable with immigrants number.
- MOBI – cellular subscriptions (per 100 people). The variable represents the technological advancement of the country of destination, and we expect a positive correlation of the variable with immigrants number.
- POPden – Population density (people per sq. km of land area). We expect that lower density of population should attract immigration.
- POPcit – Population in urban agglomerations of more than 1 million. This variable may represent the increase immigration populations in cities, which may be considered negative.

In *Table 6* we present correlation matrix computed for the sample presented in *Table 5*, between the immigrant number in European countries in a given year and possible explanatory variables in the corresponding periods (in each case:  $t-1$ ), so it could be seen what drove the population inflow to a certain country. The results of correlation are based on the country data. Again, we look for the regressors most correlated with immigrants number and least among themselves. We can observe a high positive correlation between the immigrants' number and SOCONPR, which indicates that the immigrants prefer the countries with higher social help. We observe a high correlation between immigrants' number in a given country and MOBI – which can be interpreted that the immigrants prefer technologically-advanced destinations. A very high correlation is observed between immigrants number and POPCIT – which suggests that large urban agglomerations indeed attract migration. Eventually, a high and positive correlation is observed between GINI and immigrants number. Both high correlations with POPCIT and GINI may also be a sign of a reverse tendency, that in immigrant countries the inequality in the society tends to rise due to assimilation problems and that migrants concentrate in large cities.

Table 6. Correlation matrix between the immigrant number and possible explanatory variables

	IMIG	IMOPE	SOconPR	Socon	MECONS40	MECONTO	GINI	INTER	MOBI	POPden	POPcit
IMIG	1	-0.129 (0.66)	<b>0.674</b> <b>(0.01)</b>	-0.102 (0.73)	-0.035 (0.91)	0.177 (0.56)	<b>0.489</b> <b>(0.08)</b>	0.115 (0.70)	<b>0.444</b> <b>(0.11)</b>	0.239 (0.41)	<b>0.686</b> <b>(0.02)</b>
IMOPE		1	0.155 (0.60)	0.315 (0.27)	-0.162 (0.60)	-0.126 (0.68)	-0.010 (0.97)	<b>-0.520</b> <b>(0.06)</b>	-0.433 (0.12)	-0.036 (0.90)	0.310 (0.35)
SOconPR			1	0.063 (0.83)	-0.381 (0.20)	-0.264 (0.38)	0.393 (0.16)	-0.287 (0.32)	-0.041 (0.90)	0.227 (0.44)	0.202 (0.55)
Socon				1	<b>-0.508</b> <b>(0.08)</b>	-0.542 (0.05)	-0.220 (0.45)	-0.003 (0.99)	0.328 (0.25)	-0.045 (0.88)	-0.182 (0.59)
MECONS40					1	<b>0.960</b> <b>(&lt;0.01)</b>	-0.215 (0.48)	<b>0.543</b> <b>(0.06)</b>	0.087 (0.78)	0.062 (0.84)	0.186 (0.61)
MECONTO						1	0.050 (0.87)	<b>0.475</b> <b>(0.10)</b>	0.113 (0.71)	0.183 (0.55)	0.405 (0.25)
GINI							1	-0.434 (0.12)	-0.154 (0.60)	0.333 (0.24)	0.406 (0.22)
INTER								1	<b>0.588</b> <b>(0.03)</b>	0.013 (0.97)	-0.041 (0.90)
MOBI									1	-0.047 (0.87)	0.269 (0.42)
POPden										1	0.141 (0.68)
POPCit											1

We do not detect any association between the attitudes towards incoming groups (IMOPE) and the flows of migrants. However, based on the correlation matrix we can further suggest, that in more technologically advanced countries the societies are more open to immigration. It seems that societies more exposed to information are less biased towards immigrants in their surrounding. This could suggest, that education and information policies are suitable tools to address social tensions between different social groups. At the same time, these societies have lower GINI index and a higher level of life, including the bottom 40% of the society. It may implicate that newly rich countries are less open towards immigrants, despite the fact that in their recent past they also have been less fortunate. At the same this may indicate that the rich societies are less afraid that the inflow of immigrants may decrease their wealth.

Table 7. Estimates of the model explaining the increase in immigration number to European economies

Variable	Estimate	Standard error	t-statistics	p-value	VIF
const	$-2.875 \cdot 10^6$	274579	-10.47	<b>&lt;0.0001</b>	--
log(POPcit)	131854	34119.1	3.865	<b>0.006</b>	1.323
SOconPR	9771.16	2577.89	3.79	<b>0.007</b>	1.202
MOBI	8131.06	3512.3	2.315	<b>0.054</b>	1.163

Notes: Dependent variable – immigration number. R<sup>2</sup> amounted to 0.89. VIF denotes volatility inflation factor – and indicator of possible multicollinearity if its value exceeds 10.

As our dataset was very small and lots of possible explanatory variables were stronger correlated among themselves than between the dependent variable, we decided to estimate a simple linear regression model with three explanatory variables (see *Table 7*). The results of the estimation confirm the information contained in the correlation matrix, i.e. the positive relationships between the immigrants number and social help, technological advancement of the destination country, as well as its high level of urbanization. This confirms the results of Gonzalez-Garcia and Mlachila (2017) in terms of geography of choice of destination countries, but goes further by providing the determinants of such selections. The relation between the number of immigrants net in European countries and openness towards immigrants was not confirmed by the model. This could suggest that public perceptions do not yet have a relevant impact on the actual migration flows. Migrants are pulled by urban areas in countries with high social security. This research further suggests, that immigrants choose more technologically advanced countries in Europe.

### 3. Social Cohesion, Inequality and Migrations. Discussion and Implications

One shall accept, that the centre of economic gravity of the world has progressively shifted from the West to the East and from the North to the South, resulting in a new geography of growth, as reported by OECD (2011a). The fastest growing economies and populations are located in Asia and Africa. However, the distribution of wealth and the quality of life, especially in Africa, lags behind other regions, especially the Old Continent. Despite the increasing performance of the sub-Saharan economies since the 2000's (driven mostly by the conjuncture on commodities) growth is not translated into sufficient development achievements, as it does not lead to the expected structural change, nor to industrialization, nor to labor mobility towards more productive sectors (Lipton, 2012; Rodrik, 2014). Due to the illicit capital flights (returns on political economy), which are higher than the growth rate, the inequalities in economic

development increase and African countries may not catch up to the high-income world (Asongu and Nwachukwu, 2016).

The societies in Africa face not only strong external competition in the markets, but also an inland rivalry, which results in unequal distribution of income, uneven access to education and health, and a threat of social exclusion of vulnerable groups (Loewenson, 2010; HDI, 2017). These factors, which reflect the inequality in a broad sense – are major causes of economic migration. According to Anyanwu and Erhijakpor (2010), inequality is the strongest factor fueling poverty in the continent. Our results confirm, that the quality of life is an important factor which impacts the decision to migrate from African countries. Increased number of people who lack access to medical services – approximated by the Mortality variable – appear to have a strong and positive impact on the emigration flows. Large mortality in the country of origin reflects inequalities, as some parts of the population are excluded from medical care. However, based on our results, another suggestion can be made. It appears that if the poverty is spread over the country (large poverty gap) people do not migrate (negative correlation between migration and poverty gap variables). This may indicate, that large poverty may decrease the ability to migrate, as people cannot afford it.

Next, our results confirm, that migration is a multidimensional phenomenon. Among the push factors both: purely negative reasons to migrate (such as inequality and poverty) and positive ones may be found. The ability to migrate may be considered as an output of social effort. A society is capable to bear the cost of migration in order to seek for better economic conditions of living for some of its members. We found evidence, that emigration is associated with higher remittances, which are considered a derivative of social cohesion (Anyanwu and Erhijakpor, 2010). The responsibility of emigrants to support their families back home is an emanation of social cohesion of a community. Despite the separation from the family, the diaspora uses the opportunity to support them.

The analysis of the immigration determinants from the perspective of the European countries reveals that the new immigrants follow the patterns of the previous immigration. We can suspect that people feel more secure when they move to a country where a diaspora already exists. Immigration is also directed towards countries with higher levels of social help, which indicates rational grounds of the decision to migrate and the selection of destination. Our results comply with the outcomes of previous research which suggests, that the countries which have more developed social security programs and provide more workplaces are more attractive for migrants (Gonzalez-Garcia and Mlachila, 2017). Based on our results, the inflow of emigrants tends to be higher in the case of the more technologically advanced economies, with a higher level of urbanization.

Bello (2016) suggests that individuals are more open towards immigrants once their national identity is based on inclusive policies. Moreover, a tendency for individuals to appreciate other cultures and to show positive dispositions towards outsiders is observable in societies which highly regard their own traditions and customs. Other studies suggest, that the attitudes towards immigrants are more positive amongst people who have actually interacted with them than the attitudes of those who have not (Månsson and Dahlander, 2011; Bhuyan *et al.*, 2012). The results of our research add to these findings and suggest that the openness towards immigrants is higher in societies that are more advanced in terms of the use of communication technologies and hence information flows. It implicates that the general outward orientation of a society makes it easier to adapt to cultural interaction and raise acceptance for others.

The major limitation of this research was data availability which has narrowed also the choice of possible methodology suitable to apply for the analysis. The statistical data on immigration as well as the access to public opinion surveys is sparse. Therefore, the results shall be interpreted with caution. The results should be repeated when the amount of data

increases in order to confirm the obtained results. Moreover, due to the sample size and adopted methodology, some aspects of migration indicated in the literature (such as geographical proximity, language, or colonial past) were not included in the study. We were not able to compute the individual effects between the pairs of countries. However, we are aware of the fact, that these factors also play a role in the distribution of migration flows.

## Conclusion

African migration in 2000-2015 was rising, especially from Northern and Western sub-regions. The factors and consequences of African migration appear to be an amalgam of positive and negative social and economic mechanisms. In this paper, we found empirical evidence, that variables associated with economic and social inequalities have an impact on the decision to migrate from African countries. Countries with high mortality rate generate relatively higher migration. Lack of the access to health care indicates that inequalities in terms of social protection may motivate population outflows. However, we also found evidence, that in some countries, the size of poverty may limit the ability of society members to initiate relocation. Organizing difficult and costly emigration may be supported by the diaspora if the ties between the families in home and host countries are kept. The results of this study imply that remittances, which approximate social cohesion, have a significant and positive impact on migration. Social cohesion is the social asset which enhances sharing the profits of migration between the emigrants and the family members which stay in the country of origin. In this way, social cohesion may compensate for the inequalities, as it increases the income of the poor, and boosts the development of small business. Hence, the policies, which enable such benefits from migration, i.e. facilitation of international remittances transfers, are expected to contribute to economic development.

Further, the paper reflects over the reception of African immigrants in Europe. These processes are inevitable, and the mobility of the workforce, provided technological progress, will continue (Sen, 1992). We did not find a significant impact of the European societies' openness towards immigrants on the direction of migration flows. However, the analysis of correlation implies that more „informed societies“ show more openness towards incoming groups. Based on the results of the estimation of the model, we suggest that the migrations are directed to the areas of high income, high social security, and urbanization. This allows concluding, that in the XXI century the dominant force in the distribution of African population movements in Europe is the economic pull factors, as African immigrants are oriented towards the fulfilment of economic security goals.

Welfare state countries attract immigration and hence are exposed to the social problems related to unresolved migration issues. In the case of the absence of assimilation policies, they risk deviating from the course of openness and social protection. Therefore it is crucial to mitigate these risks. As the population of immigrants in large cities in Europe will tend to increase in the future, the development of social inclusion policies which would enable blending of the multicultural societies is required. Migrations are a global dimension of workforce mobility, which is a process inherent to the economy – here: global economy. Politicians are limited in their ability to actually stop them. But it is up to them to decide, what immigration policies they will create. We suggest that the policies aimed at education, information and integration are required to overcome the “migration crisis”.

Finally, it is worth saying that the migration in Africa is not exclusively directed towards Europe. Large amounts of African migrations have a regional character. Growing and developing economies of the continent also attract labour force from neighbouring countries. Supporting economic development of Africa (and other low-income regions) is not only generally a fair thing to do, but also a smart one for those who are scared to lose their cultural

uniformity because of migration. Hence, the catalogue of pros to support low-income countries economic development may be enlarged by the conclusions reached in this study.

### Acknowledgement

The research is supported by Polish Ministry of Science and Higher Education through the Project SONATA: 2013//09/D/HS4/01849 (Mechanisms of technology absorption in Sub-Saharan Africa). The authors would like to thank the participants of the international conference "Trends in Inequality: Social, Economic and Political Issues" (Bologne, Italy, 2 – 4.11.2017) for the discussion.

### References

- Abrams, D. (2016). In pursuit of harmonious cohesion. *Psychologist*, 29(2), 111-112.
- Anyanwu, J. C., Erhijakpor, A. E. O. (2010). Do International Remittances Affect Poverty in Africa? *African Development Review*, 2, 51-91. doi:10.1111/j.1467-8268.2009.00228.x
- Asongu, S. A., Nwachukwu, J. C. (2016). Rational Asymmetric Development, Piketty and Poverty in Africa. *European Journal Of Comparative Economics*, 13(2), 221-246.
- Bello, V. (2016). Inclusiveness as Construction of Open Identity: How Social Relationships Affect Attitudes Towards Immigrants in European Societies. *Social Indicators Research*, 126(1), 199-223.
- Beauchemin, C. (2015). Migration between Africa and Europe (MAFE): Advantages and Limitations of a Multi-Site Survey Design. *Population*, 70(1), 13-38.
- Bhuyan, R., Park, Y., Rundle, A. (2012). Linking Practitioners' Attitudes Towards and Basic Knowledge of Immigrants with Their Social Work Education. *Social Work Education*, 31(8), 973-994. doi:10.1080/02615479.2011.621081
- Birdsall, N. (2007). Do No Harm: Aid, Weak Institutions and the Missing Middle in Africa. *Development Policy Review*, 25, 575-598. doi:10.1111/j.1467-7679.2007.00386.x
- Boeri, T., Brucker, H. (2005). Why Are Europeans So Tough on Migrants. *Economic Policy*, 20(44), 629-703.
- Boucher, G. (2013). European social cohesions. *Patterns Of Prejudice*, 47(3), 215-234. doi:10.1080/0031322X.2013.797170
- Bovarsson, O. B., Simpson, N. B., Sparber, Ch. (2015). Migration Theory. In: B. R. Chiswick, P. W. Miller (eds.), *Handbook of the Economics of International Migration: The Immigrants* (3-53). Amsterdam: Elsevier B. V.
- Catles, S., Miller, M. J. (2011). *Migracje we współczesnym świecie*, Wyd naukowe PWN, Warszawa.
- Croissant, Y., Millo, G. (2008). Panel Data Econometrics in R: The plm Package. *Journal of Statistical Software*, 27(2), 1-43. doi: 10.18637/jss.v027.i02.
- Delechat, C. (2001). International migration Dynamics: the role of experience and social networks. *Labour*, 3, 457-486.
- Devarajan, S., Kanbur, R. (2007). A Framework for Scaling Up Poverty Reduction, With Illustrations from South Asia. In: D. Narayan, E. Glinskaya (eds.). *Ending Poverty in South Asia: Ideas That Work*, World Bank, Washington, DC.
- Djajic, S. (2001). *International Migration: Trends, Policy and economic aspects*, Routledge, London.
- Easterly, W., Levine R. (1997). Africa's Growth Tragedy: Policies and Ethnic Divisions. *Quarterly Journal of Economics*, 112, 1203-50.

- Esser, I., Ferrarini, T., Nelson, K., Sjöberg, O. (2009). A framework for comparing social protection in developing and developed countries: The example of child benefits. *International Social Security Review*, 62, 91-115. doi:10.1111/j.1468-246X.2008.01323.x
- Faist, Th. (2000). *The Volume and Dynamics of International Migration and Transnational Social Spaces*, Oxford: Clarendon Press.
- Farole, T., Rodríguez-Pose, A., Storper, M. (2011). Cohesion Policy in the European Union: Growth, Geography, Institutions, *Journal of Common Market Studies*, 49(5), 1089-1111.
- Gonzalez-Garcia, J., Mlachila, M. (2017). Beyond the Headlines: Migration from sub-Saharan Africa has far-ranging effects on home and host countries alike. *Finance and Development*, 54(2), 48-50.
- Hannequart, A. (1992). *Economic and social cohesion in Europe: A new objective for integration*. London: Routledge.
- Harman, S., Williams, D. (2014). International development in transition. *International Affairs*, 90(4), 925-941. doi:10.1111/1468-2346.12148
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica*, 46(6), 1251-1271.
- Kuznets, S. (1972). Problems in Comparing Recent Growth Rates for Developed and Less Developed Countries. *Economic Development & Cultural Change*, 20(2), 185-209.
- Lee, E. S. (1966). A Theory of Migration. *Demography*, 3(1), 47-57.
- Lipton, M. (2012). *Income from Work: The Food-Population-Resource Crisis in the 'Short Africa'*, Leontief Prize lecture, Tufts University, Medford, MA, 3 April 2012.
- Loewenson, R., Bambas, N. L., Wamala, S. (2010). Globalisation and women's health in Sub-Saharan Africa: Would paying attention to women's occupational roles improve nutritional outcomes? *Scandinavian Journal of Public Health*, 38(4), 6-17.
- Long, L. (1988). *Migration and Residential Mobility in the United States*, New York: Russel Sage Foundation.
- Mansor, A., Quillin, B. (2006). *Migrations and Remittances. Eastern Europe and former Soviet Union*. The World Bank, Washington.
- Månsson, J., Dahlander, J. (2011). Social interaction impact on attitudes: Native Swedes' attitudes towards labour immigrants and guest workers after hurricane Gudrun. *Baltic Journal Of Economics*, 11(1), 51-64.
- Massey, D. S., Arango, J, Hugo, G., Kouaouci, A, Pellegrino, A i Taylor, J. E. (1993). Theories of International Migration: A Review and Appraisal. *Population and Development Review*, 19(3), 431-466.
- Messina, A. (2002). *West European and immigrant policy in the new century*. London Greenwood Publishing Group.
- Millo, G. (2017). Robust Standard Error Estimators for Panel Models: A Unifying Approach. *Journal of Statistical Software*, 82(3), 1-27. doi: 10.18637/jss.v082.i03
- Mueller, Ch. F. (1982). *The Economics of Labor Migration. A Behavioral Analysis*. New York, Academic Press Inc.
- Naude, W. (2010). The Determinants of Migration from Sub-Saharan African Countries. *Journal Of African Economies*, 19(3), 330-356.
- OECD (2011a). The new geography of growth, in: OECD Science, Technology and Industry Scoreboard 2011, OECD Publishing, Paris. DOI: [http://dx.doi.org/10.1787/sti\\_scoreboard-2011-6-en](http://dx.doi.org/10.1787/sti_scoreboard-2011-6-en)
- OECD (2011b). Perspectives on Global Development 2012: Social Cohesion in a Shifting World, OECD Publishing. [http://dx.doi.org/10.1787/persp\\_glob\\_dev-2012-en](http://dx.doi.org/10.1787/persp_glob_dev-2012-en)
- OECD (2013). Migration in figures. *Organisation for Economic Cooperation and Development*. Retrieved from: <https://www.oecd.org/els/mig/World-Migration-in-Figures.pdf>



- Ona, G. R., Ivashinenko, N. (2011). The Economic And Social Cohesion Of The Eu: Methodology Of Investigation. *Intelektine Ekonomika*, 4(12), 575-589.
- Pryor, R. J. (1981). Integrating international and internal migrations theories. In: M. M. Kritz, Ch. B. Keely, S. M. Tomasi (eds.). *Global trends In migrations: theory and reseach on international population movements*. Center for Migration Studies, Staten Island, N.Y., 110-129.
- Okólski, M. (2004). *Demografia zmiany społecznej*. Wyd Naukowe Scholar, Warszawa.
- Reslow, N., Vink, M. (2015). Three-Level Games in EU External Migration Policy: Negotiating Mobility Partnerships in West Africa. *Journal Of Common Market Studies*, 53(4), 857-874.
- Rodrik, D. (2011). New Structural Economics: Comments. *World Bank Research Observer*, 26(2), 227-229.
- Ruyssen, I., Rayp, G. (2014). Determinants of Intraregional Migration in Sub-Saharan Africa 1980-2000. *Journal Of Development Studies*, 50(3), 426-443.
- Saks, R. E., Wozniak, A. (2011). Labor Reallocation over the Business Cycle: New Evidence from Internal Migration. *Journal of Economics*, 29(4), 697-739.
- Say, J. B. (1960). *Traktat o ekonomii politycznej, czyli prosty wykład sposobu, w jaki się tworzą, rozdzielają i spożywają bogactwa*. Kraków, PWN.
- Smith, J. P., Edmonston, B. (1997). *The New Americans: Economic, Demographic and Fislal Effects of Immigration*. National Academy Press, Washington D.C.
- Thomas, K. A. (2016). Highly Skilled Migration from Africa to the US: Exit Mechanisms, Demographic Determinants, and the Role of Socioeconomic Trends. *Population Research And Policy Review*, 35(6), 825-849.
- UNCHR (1998). Measures to improve the situation and ensure the human rights and dignity of all migrant workers. Report of the working group of intergovernmental experts on the human rights of migrants submitted in accordance with Commission on Human Rights resolution 1997/15. COMMISSION ON HUMAN RIGHTS Fifty-fourth session, Intergovernmental working group of experts on the human rights of migrants.
- WCS (2015). Working Conditions Survey, European Foundation for the Improvement of Living and Working Conditions. Retrieved from: <https://www.eurofound.europa.eu/surveys/data>
- Weinstein, E. (2002). Migrations et interet general: pour une nouvelle de l'immigration economique. *Revue Internationale du Travail*, 3, 249-278.
- Zimmerman, K. F. (2013). The Mobility Challenge for Growth and Integration i Europe, *IZA Paper Series*, 69, 1-18.
- White, H. (1980). A Heteroskedasticity-Consistent Covariance Matrix and a Direct Test for Heteroskedasticity. *Econometrica*, 48, 817-838. doi:10.2307/1912934.
- Zeileis, A. (2004). Econometric Computing with HC and HAC Covariance Matrix Estimators. *Journal of Statistical Software*, 11(10), 1-17.