International School of Economics

Aitkali Tolganay

Mamatayeva Dinara

Temirbulatova Aruzhan

"Impact of general economic indicators on Net migration of the Central Asian countries and Russia during 2000-2021"

Thesis submitted for the degree of Bachelor in

6B04102 Economics

6B04104 Finance

Supervisor: Kemelbayeva S.S.

Astana 2023

Table of contents

Abstract

This paper aims to provide an academic analysis of the Impact of general economic indicators on Net migration of the Central Asian countries and Russia. It examines fixed and random effects models by using panel data which includes various factors that might affect people's motivation to migrate, such as political stability, economic growth (GDP), corruption and others. The research draws on scholarly sources, government reports, and statistical data to present an objective assessment of the migration trends in Central Asian countries and Russia. We found out that none of the tested factors potentially affecting migration flows between these countries is statistically or economically significant. This suggests that officially reported migration flows likely do not reflect the true (possibly illegal) migration flows and more research is needed.

Introduction

Migration nowadays is a complicated phenomenon that is influenced by a variety of factors, including economic, social, and political conditions. Central Asian countries and Russia have experienced significant migration flows in recent years, with many people leaving their home countries in search of better economic opportunities. Despite making up a small portion of the world's total migrant population, migrant workers have a significant impact on the economy of Central Asia. The highest ratio of remittances to GDP is in Tajikistan. Remittance inflows to GDP in Tajikistan was reported at 26.88 % in 2020, according to the World Bank collection of development indicators (2020), whereas Kyrgyzstan received nearly $2 billion in remittances, equivalent to 30.4% of GDP. Taking into account advantages as well as disadvantages of migration itself, it can be seen that, on the one hand, it contributes to population growth, covers the labor shortage, and also replenishes the countries budget. On the other hand, it creates competition and tension in the labor market, which can exacerbate social tensions, thereby affecting the economy. The aim of this research is to examine the impact of general economic indicators on net migration in these regions over the period from 2000 to 2021. The study will investigate the relationship of economic growth, unemployment rates, inflation, and other economic indicators with net migration of population, with the goal of identifying the main drivers of migration flows in these regions.

One of the reasons for selecting these countries is that all Central Asian countries tend to create relatively attractive conditions for foreign investments, which should help them integrate into the global economy. The main goal of this thesis is to evaluate the effect of net migration on GDP, human capital, investments and trade of the Central Asian countries and Russia. The research consists of panel data with implementing causal study research within the countries selected. By understanding the economic factors that influence migration, policymakers can develop more effective measures to control migrant flows and advance economic growth by understanding the economic issues that affect migration promote economic development in these regions.

The following research questions were aroused to analyze the migration topic:

1. How migration in Central Asian countries has been impacted from economic indicators through the past 21 years?

2. How significant are indicators such as political stability index or corruption control index indicating patterns of migration over the past 21 years?

Following hypothesis were proposed for this study:

1) main drivers of the emigration are low GDP, rising inflation and unemployment in the origin country (push factors);
2) comparatively better life and work conditions abroad determine the decision of an immigration (pull factors);
3) political stability and corruption indexes are less important than economic factors in motivating migration and choosing the destination to relocate.

Literature Review

The subject of migration holds paramount importance within Central Asian countries and Russia, which have experienced notable changes in its demography over the recent decades owing to political, economic, and environmental factors with millions of people moving within the region and to other countries annually. Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan are the five former Soviet nations that make up Central Asia. History, culture, geographic location, and a variety of other factors, which are commonly shared between those five countries, have influenced patterns of migration and the challenges associated with them.

The purpose of this literature review is to provide a comprehensive overview of research on how the economic indicators and people's life affect the migration across Central Asian nations and Russia.

The information regarding "net migration" was obtained from the official website of The World Bank from 1990-2020. Independent variables i.e. economic growth, inflation, unemployment rate, government spending and other were taken from web-page called The Global Economy.

According to Hass (2007), migration and remittances contribute to the growing economic imbalance between the wealthy and the poor. According to some scholars, moving across national borders might have an impact on the familial structure of the individual's home country (Hayes, 1991). They claim that remittance monies sent by expats may not be a consistent source of income (Hass, 2007). The recent economic issues have resulted in a 50% decrease in remittance inflows to Kyrgyzstan and Tajikistan. This figure is significant because it highlights the significant amount of these countries' total economic revenues received from remittances, which account for around 27-30% of their entire revenue.

The official website of the Kazakhstan office of the International Organization for Migration (IOM) provides access to a wide range of scholarly papers and analytical materials pertaining to migratory patterns

in the Central Asian region, with a specific focus on Kazakhstan. The IOM experts delve into various aspects of migration, such as the protection of vulnerable migrants, youth migration, return migration, and the challenges associated with unregulated migration. Furthermore, the Committee on Statistics of the Ministry of National Economy offers compilations, bulletins, and dynamic tables that serve as valuable statistical sources on migration in Kazakhstan. These data sources offer comprehensive information categorized by gender, age, ethnicity, and geographical location within Kazakhstan, encompassing both domestic and international migration phenomena.

Definition of net migration

Net migration refers to the difference between the number of people immigrating to a particular place and the number of people emigrating from that same place over a given time period (Eurostat Glossary:Migration - Statistics Explained). This can be measured at different scales, such as at the national, regional or local level. Net migration is an important demographic indicator, as it can have significant economic, social and political implications.

According to the United Nations Department of Economic and Social Affairs (UNDESA), net migration is a key component of population change, along with natural increase (births minus deaths). Net migration can contribute to population growth or decline, depending on whether the number of immigrants exceeds or falls short of the number of emigrants. Net migration can also affect the age structure, cultural diversity and workforce characteristics of a population, among other factors.

Relevance of chosen indicators

During migration economic and political indicators might be crucial both ways for immigrants and emigrants as well. People may decide to migrate in quest of better economic prospects, to flee political unrest, war, or persecution in their home country, or for any number of other reasons.

Economic indicators like the unemployment rate, average household income, and cost of living can give valuable information about the employment situation and cost of living in various regions or nations. People may decide to move to regions with lower unemployment rates and higher average wages or to regions with more affordable living expenses.

Political and economic issues were chosen for this study because they are the cornerstones of human survival and development. According to more current research and analysis examining the linkages

between the 17 Sustainable Development Goals (Fonseca et al., 2020), SDG 16 which states for peace, justice, and strong institutions and SDG 8 (decent work and economic growth) are strongly positively correlated. These links extend beyond growth and may be seen in other areas of development; traditionally, countries with higher levels of peace and stability have outperformed those that are experiencing conflict in terms of reducing poverty.

Political indicators including political stability, the likelihood of civil disturbance or violence, and the degree of public corruption can all play a significant role in a persons decision to immigrate. Migration to regions with more stable political climates and lower danger of violence or persecution is a possibility. Other factors, such as the availability of social, medical, and educational services, may also have an impact on migration choices since people may move to places with easier access to these services. Individuals and families may take into account a variety of reasons before deciding to relocate, and in general, economic and political indicators can have a considerable impact on this decision.

Thus, there is broad agreement that peace and security are crucial components in building circumstances that enable countries to succeed, even though they are undoubtedly not the sole factors that support economic growth and development. For instance, recent research from the Institute for Economics and Peace (2020) shows that less peaceful nations not only face greater economic volatility but are also linked to subpar macroeconomic performance. In fact, during the past 60 years, countries with high levels of peace have had per capita GDP growth that is over three times larger than that of less peaceful nations. Since the data for the study were collected during the aforementioned period, this section of the study will disclose the economic and political state in the nation by the end of 2021. As a result, you can learn more about how things are in a given nation and what draws immigrants or causes emigrants to leave. Other empirical studies on the connections between prosperity and peace by Ho and Dinov (2013) have discovered that peace not only creates a "suitable environment" for prosperity, but also has a "mechanical" impact on nations prosperity, with a definite positive relationship between peace and prosperity.

An overview of political and economic situation in Central Asian countries and Russia

Since the data for the study were collected during the aforementioned period, this section of the study will disclose the economic and political state of the countries under consideration by the end of 2021. This analysis attempts to shed a light on what might draw immigrants or causes emigrants to leave.

Kazakhstan

Economic situation	**Political situation**
economic challenges, including corruption, a relatively high poverty rate, and a need to further diversify its economy	restrictions on political freedom, freedom of expression (human right watch, 2022)
53rd place in list of largest economic growth rate (nominal GDP,2022)	Democratic Deficits The political landscape is dominated by a single party, limiting political pluralism and opposition representation

Kazakhstan's economy has grown steadily in recent years, as a consequence of the country's plentiful natural resources, particularly its oil and gas reserves.. Economic reforms have been implemented in the country with the goal of diversifying the economy, encouraging investment, and improving business environments. These initiatives have resulted in more job opportunities, particularly in manufacturing, finance, and information technology (IT). According to studies, the country's economic prospects are enticing to immigrants seeking better job opportunities and income stability. Political stability is an important factor for prospective immigrants because it ensures a safe and predictable environment. Since

gaining independence, Kazakhstan has maintained a stable political climate, avoiding major political upheavals or conflicts.

Russia

Economic situation	**Political situation**
11th place in list of largest economic growth rate (GDP)	Authoritarian government, superior influence and control of government officials and politicians
Constant decrease of unemployment rate	Limited freedom of speech and political opposition (Human Right Watch)
Economic inequality and significant corruption incidents (Statista Research Department)	World's largest stock of nuclear weapons and leading weapon manufacturer

Based on the brief information in the table above, it can be inferred that, in comparison to the other Central Asian nations, the economic situation in Russia likely appeals to immigrants more. However, the political situation in the country is extremely unstable and even threatening, taking into account the events of 2022. According to the UN DESA ranking of the top 20 destinations and origins of international migrants in 2020, The Russian Federation ranks fourth as a host country after the United States, Germany, and Saudi Arabia. Given the relatively small proportion of the population living in Russia and Central Asia combined (3%) in the world population, such statistics are quite significant. This means that despite the country's unsteady political climate, people are still interested in Russia due to the country's growing economy and the possibility of finding a job with better pay and living conditions.

Kyrgyzstan

Economic situation	**Political situation**
High dependance on international investments	Unstable governmental and political structure
Heavily dependent upon the inflow of remittances from its migrant workforce	Lack of freedom of speech for positioners
Increase in unemployment rate because of COVID	Corrupted and biased government

Kyrgyzstan, like other landlocked countries in Central Asia, relies significantly on remittances from labor migrants and exports of gold, agricultural products, and clothing to sustain a significant portion of its budget. The COVID-19 pandemic had negative effects on the country, resulting in a decrease in both remittances from labor migrants and export revenues. Economic fluctuations induced by external factors, such as volatile prices and shifts in trade dynamics, can have a considerable impact on the country's economy. In 2020, Kyrgyzstan experienced a substantial decrease in GDP by 8.6%, accompanied by an inflation rate of 8.5%. Many businesses were forced to close due to pandemic-related restrictions, resulting in an increase in unemployment. To alleviate the economic damage, the government has introduced measures such as tax breaks for small firms and increased spending for healthcare and social welfare programs. Kyrgyzstan's future path remains unpredictable, notably in terms of politics and the economy. While the government may contribute to progress, considerable obstacles remain that will require time, financial resources, and rigorous efforts to overcome.

Uzbekistan

Economic situation	**Political situation**
Economy growth is based on the agricultural and natural resources sector	Migration governance development
Economic reforms aimed at attracting foreign investment	Corruption and human rights violations

The economy of the Republic of Uzbekistan is heavily reliant on its agriculture industry and natural resources. In order to liberalize the economy, draw in foreign investment, and lessen state control over economic activities, the Uzbekistani government has adopted reforms recently. Foreign investment and economic growth have surged as a result of these reforms, particularly in the textile and energy industries. In general high levels of corruption, poor infrastructure, and a lack of economic diversification remain problems for the nation. As of the end of 2021 Governance of Uzbekistan has implemented significant political reforms, such as easing restrictions on political opposition and media freedom, releasing political prisoners, and improving relations with neighboring countries. According to the migration governance profile of Uzbekistan from Migration Data Portal (2023), as measured by the rights of migrants, a "whole-of-government" approach, partnerships, socioeconomic well-being of migrants, the mobility dimensions of crises, and safe and orderly migration, there are well-developed migration governance structures and areas with potential for further development. However, detractors contend that there is still little room for political dissent and criticism because the nation's political structure is still largely centralized. The nation also has to contend with security issues like terrorism and drug trafficking, especially in its border regions.

Tajikistan

Economic situation	**Political situation**
Increasing rate of inflation	Corrupted governmental structure
Dependance on remittances of migrants	Unstable economy
Low level of international investments	Dangerous neighborhood regions

Tajikistan, a small Central Asian country, is primarily reliant on remittances from overseas employees as well as commodity exports such as aluminum and cotton. The COVID-19 pandemic had a significant influence on the economy, culminating in a 4.7% decline in 2020. As a result, the cost of necessary goods and services has risen significantly, making it difficult for households to meet their basic necessities. In 2020, the country's inflation rate was 11.9%. In response to the pandemic, the government has taken economic measures such as tax reductions for enterprises and financial support to needy families. However, hurdles to growth and transformation exist throughout the country. These issues are exacerbated by the absence of private firms and little foreign investment. Political difficulties such as civil rights constraints, corruption, and a lack of transparency impede company progress and dissuade potential investors. Tajikistan faces security problems as a result of its proximity to Afghanistan and the presence of extremist groups in the region. Recent reports show a rise in terrorist activity, notably along the eastern border with Afghanistan. Addressing these significant difficulties and improving governance are critical for the country's future progress.

Turkmenistan

Economic situation	**Political situation**
the country is heavily reliant on its natural gas reserves, which account for the majority of its export earnings	a presidential republic with a strong authoritarian government
economic growth and investment have been hampered by restrictions on private enterprise and foreign investment	limitations on political opposition and independent media
one of the top ten cotton producers in the world, with cotton accounting for roughly half of all irrigated land	democratic Party of Turkmenistan being the only legal political party

Turkmenistan is not typically regarded as an appealing destination for immigrants due to a number of factors, including limited economic opportunities, government immigration restrictions, and concerns about human rights and freedom of expression. Turkmenistan has a small population of slightly more than 6 million people, and its economy is heavily reliant on natural gas exports (World Bank, 2022). While the country has made efforts to diversify its economy and attract foreign investment, the government maintains strict control over the economy, and foreign companies face significant regulatory barriers (U.S. Department of State, 2021).

In addition to these economic challenges, Turkmenistan imposes immigration restrictions, and obtaining a work permit can be a time-consuming and complex process. The government also places limits on the types of jobs that can be held by foreigners, and non-Turkmen citizens are required to pay higher fees for many services, including medical care and education (U.S. Department of State, 2021).

Methodology of research

Panel data (or longitudinal) data is a type of data employed in statistical analysis, econometric modeling, and social science research. Panel data pertains to data that has been accumulated over a period of time by repeatedly observing a cohort of individuals or entities, which might be companies or nations. The panel data consists of information from both cross-sectional and time-series, enabling a comprehensive analysis of both the variations within and between different groups. The benefit of panel data is that heterogeneity can be regulated in our regression model by classifying it as fixed or random. There are numerous approaches for analyzing panel data, including fixed-effects models, random-effects models, and pooled regression models.

Fixed effect model estimates the relationship between the independent variables and the dependent variable while controlling for individual-specific time-invariant factors. As stated by Wooldridge, J. M. (2010) in Econometric analysis, These time-invariant factors are treated as fixed and are incorporated as individual-specific intercepts in the regression model. The researcher can use this model to account for individual-specific features that are not seen but may be associated with both the dependent variable and the independent variables. The next type is random effects model that takes into consideration individual-specific time-invariant characteristics that are uncorrelated with the independent variables while estimating the relationship between the independent variables and the dependent variable. These variables that change over time are considered random and are incorporated into the regression model as person-specific error terms. When the researcher considers that the independent variables and the person-specific time-invariant components are uncorrelated, this model is helpful. Simple pooled OLS regression model does not consider individual- or time-specific characteristics, this model calculates the link between the independent variables and the dependent variable.

The data about net migration and the effect of different economic indicators changed over the past 20 years were collected and used in this research. With this research, we explore the correlation between dependent variable (net migration) and independent variables (economic and political indicators).

Data analysis

The dependent variable is net migration - the migration balance which is defined as:

Net migration (NM) = Immigrating population - emigrating population (Inflow - outflow)

A positive migration balance denotes a country or territory where more people arrive than depart from, while a negative net migration number indicates that more people leave the country than enter it. Independent variables used in the analysis are based on the information from The Global Economy, Business and Economic data source. There is the table explaining the precise definition of each variable as well as the correlation expectation with the net migration data:

To estimate the relationship between net migration and economical-political data, the R-studio software was used. For the analysis of panel data, a variety of techniques are available, including fixed effects, random effects, and pooled simple OLS regression models.

Models	p-value	R^2	Separate p-values		Coefficients in Equation
Pooled OLS	4.578e-13	0.5122	Economic growth **Consumption** as % of GDP Unemployment rate **Government spending** as % of GDP` **Government effectiveness** Control of corruption **Political stability** index Freedom from corruption Economic freedom	0.9859 9.18e-05 0.1486 0.0178 1.05e-05 0.0763 0.0104 0.0763 0.0603	Net Migration = 161662.98 - 55.18*Growth - 2886.89*C + 8084.84*U + 8400.80*GS + 199695.04*GE - 133449.67*CC - 58315.75*PS + 3242.5*FC - 4195*EF.

Type	**Variable name**	**Definition**	**The expectation with regards to correlation to NM**
Dependent	Net migration	Immigrating population - emigrating population (Inflow - outflow) if n>0 = inflow if n<0 = outflow	
Independent	Economic growth GDP	Increasing rate means the GDP grows and vice versa.	positively correlated if Growth ↑ => NM ↑
Independent	Consumption as % of GDP	The higher value of the consumption means the higher living condition of inhabitants	positively correlated if C ↑ => NM ↑
Independent	Unemployment rate	Unemployment refers to the share of the labor force that is without work but available for and seeking employment (The Global Economy, 2023).	negatively correlated if U ↑ => NM ↓
Independent	Government spending as % of GDP	This includes government purchases and social welfare payments	positively correlated if GS ↑ => NM ↑
Independent	Government effectiveness	It captures perceptions of the quality of public services, the quality of the civil	positively correlated

	index: -2.5 weak; +2.5 strong	service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (The Global Economy, 2023).	if GE ↑ => NM ↑
Independent	Control of corruption index -2.5 weak; +2.5 strong	It measures perceptions of the degree to which public power is used for private gain, taking into account both small-scale and large-scale corruption as well as the elites' and private interests' capture of the state (The Global Economy, 2023).	positively correlated if CC ↑ => NM ↑
Independent	Political stability index -2.5 weak; +2.5 strong	The index of Political Stability measures likelihood that the government will be destabilized or overthrown by unconstitutional or violent means (The Global Economy, 2023).	positively correlated if PS ↑ => NM ↑
Independent	Freedom from corruption	100 = no corruption, decreasing amount means higher corruption rate	positively correlated if FC ↑ => NM ↑
Independent	Economic freedom	It has 10 components grouped into four broad categories: Rule of Law; Limited	positively correlated

	0 to 100 100 – maximum freedom		Government; Regulatory Efficiency and Open Markets (The Global Economy, 2023).	if EF ↑ => NM ↑
Random effect	0.41215	0.086575	Economic growth 0.1887 Consumption as % of GDP 0.6748 Unemployment rate 0.4890 Government spending as % of GDP` 0.5887 Government effectiveness 0.6124 Control of corruption 0.1204 Political stability index 0.8292 Freedom from corruption 0.3395 Economic freedom 0.4944	Net Migration = -287.23 - 871.63*Growth - 154.85*C + 2079.54*U - 967.24*GS - 9089.94*GE - 40531.33*CC - 2241.36*PS + 649.83*FC + 758.14*EF.
Fixed Effect	0.14347	0.1219	Economic growth 0.22851 Consumption as % of GDP 0.12848 Unemployment rate 0.4890 Government spending as % of GDP` 0.85750 Government effectiveness 0.8501 **Control of corruption** 0.0147 Political stability index 0.6162 Freedom from corruption 0.55301 Economic freedom 0.62641	Net Migration = - 1013.09*Growth - 424.14*C + 424.06*U + 285.74*GS + 3046.48*GE -54955.13*CC + 3980.73*PS + 319.18*FC + 418.17*EF.

Table above shows the results of each three panel data models used in R. The second column describes summaries of probability value (p-value) of F-statistic, meaning the joint probability of all nine independent variables fitting the data well. We can infer that at least one of the independent variables has a significant linear relationship with the dependent variable if the F-statistic is high and the corresponding p-value is low (less than 0.05 significance level). The percentage of the total variation of the dependent variable that can be explained by the independent variables is presented in the next column, which is designated as R-squared. A greater R-squared suggests that the model fits the data more accurately. Third

and fourth columns are indicated for the separated p-values of each variable and their coefficients in the regression equation respectively.

First, it is needed to identify whether pooled OLS regression is suitable for this model, because this model has a few conditions for choosing OLS. If at least one of the assumptions of Gauss-Markov theorems (Exogeneity, Homoscedasticity and Non-autocorrelation) are violated, then the Fixed Effect or Random Effect models are more applicable. Through running the Breusch-Pagan test Heteroskedasticity assumption resulted in the output of a high test statistic (BP=47.466) and a low *p-value* (<0.05). We therefore reject the null hypothesis and come to the conclusion that the homoscedasticity assumption is violated by this regression model. Here it can be concluded that FE or RE models are preferred to continue the analysis. The following step is to select between Fixed and Random effect models. This was accomplished by using the Hausman test. The endogeneity of the examined models is essentially demonstrated by this test. Endogeneity assumption refers to a common problem in statistical analysis where a relationship between two variables may be affected by a third, unobserved variable (Lee, 2007). In simpler terms, it means that there may be an additional factor that is influencing the relationship between the two variables we are interested in, but we are not measuring or accounting for it in our analysis. The assumption of zero covariance between independent variables and the error term is the null hypothesis. If so, FE should be avoided in favor of RE. We must use the FE-model if the null hypothesis is rejected. In this situation, selecting the Fixed effect for the regression model have the best results.

Interpreting the results in the table of Fixed effect model results, the joint p-value of independent variables is equal to 0.14347 which is greater than the significance level of 5%. Thus, it is concluded that the model is statistically insignificant. There is evidence that there is no linear relationship, so variables are not statistically significant. R-squared resulted in a low percentage of 12.19% indicating the percentage of the model explained by the independent variables. Looking at the separate p-values of each indicator, there is only one significant variable with a p-value of 0.01472. Control of corruption is statistically significant and has a direct relationship with the change in Net migration, according to our results. Along with that, this

result is economically meaningless, as the coefficient turned out to be negative which means that a perception of the increased control over corruption is associated with the increase in migration outflow and/or decrease in migration inflow. The rest of the coefficients though some of them have expected signs are not statistically significant.

One possible explanation for the inconsistent results of our regressions is insufficient data points or unobserved non-recorded illegal immigration flows between the countries under analysis. Another possible explanation is that the tested factors indeed do not explain the migration flows between these countries and more research is needed.

Conclusion

Summarizing the research project on net migration of the population of five Central Asian countries and Russia, the result is based on research data with linear regression indicating that there is no connection between basic economic and political data with the net migration flow. This conclusion serves as the foundation for disproving the initially anticipated theories that the primary driving forces are the relative political stability and economic allure of other nations. The chance that people from Central Asia will not have sufficient resources to relocate to a country with living circumstances comparable to those in their home countries, however, is raised by such a conclusion. There is an interesting finding that the low control of corruption by the government is statistically significant for the outflow of the population and vice versa. It can be concluded that political indicators are somewhat more important in choosing the destination of living. Additionally, it is reasonable to believe that such a conclusion could result from a lack of official data, a lack of indicators, or the population's majority of illegal immigration. The above-mentioned finding might have the path for fresh, original research projects in the future.

Bibliography

Fonseca, L. M., Domingues, J. P., & Dima, A. M. (2020). *Mapping the Sustainable Development Goals relationships*. Sustainability, 12(8), 3359.

Freedom House. (2021). *Turkmenistan.* Retrieved from https://freedomhouse.org/country/turkmenistan/freedom-world/2021

Glossary:Migration - Statistics Explained. (n.d.). Glossary:Migration - Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Migration#:~:text=Emigrant%20is%20a%20person%20undertaking,and%20the%20number%20of%20emigrants.

Human Rights Watch. (2022, January 13). *Russia: Bleak year for human rights*. Retrieved from https://www.hrw.org/news/2022/01/13/russia-bleak-year-human-rights

International Organization for Migration. (2022). *World migration report 2022*. Geneva, Switzerland: IOM. Retrieved from https://www.iom.int/wmr/world-migration-report-2022

Institute for Economics and Peace. (2020). *Global Peace Index 2020: Measuring peace in a complex world. Sydney.* Retrieved from https://www.visionofhumanity.org/wp-content/uploads/2020/10/GPI_2020_web.pdf

Marat, E. (2009*). Labor migration in Central Asia: Impacts and potential solutions.* Silk Road Papers, 9.

Migration Data Portal. (2023). *Migration Governance Indicators Profile 2022 | Republic of Uzbekistan.* Retrieved from: Migration Governance Indicators Profile 2022 | Republic of Uzbekistan | IOM Publications Platform

Statista. (n.d.). *Population living in poverty Russia 2022.* Retrieved from https://www.statista.com/statistics/1318347/population-living-in-poverty-in-russia/

The Global Economy. (n.d.). *Compare countries with annual data from official sources.* Retrieved from https://www.theglobaleconomy.com/compare-countries/

United Nations Department of Economic and Social Affairs. (2019). *World population prospects 2019: Highlights (ST/ESA/SER.A/423).* Retrieved from https://population.un.org/wpp/Publications/Files/WPP2019_10KeyFindings.pdf

U.S. Department of State. (2021). *Turkmenistan.* Retrieved from https://www.state.gov/reports/2021-report-on-international-religious-freedom/turkmenistan/

World Bank. (2022). *Turkmenistan.* Retrieved from https://data.worldbank.org/country/turkmenistan

Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data.* MIT Press. Retrieved from: Econometric Analysis of Cross Section and Panel Data (ipcig.org)