

ABSTRACT

This paper undertakes a rigorous examination of global unemployment levels using panel data estimation techniques. Current literature lacks a comparative analysis using panels of different countries and a gap exists in determining common determinants of unemployment levels globally. The principal objective of this study is to conduct a comparative estimation of unemployment rates across income groups of countries with gross fixed capital formation as our main independent variable. Our findings showed distinct patterns and an interplay amongst capital formation, labour force participation and unemployment across countries. By providing empirical evidence, this research enriches the scholarly dialogue on the complexities surrounding labour markets, thereby enhancing our comprehension of this crucial socio-economic phenomenon.

INTRODUCTION

Unemployment is a socio-economic issue that transcends national boundaries, affecting individuals, communities, and economies worldwide. The shifting economic landscape brought about by globalisation and technology improvements has made unemployment more dynamic and complex. Unemployment is defined as the percentage of individuals in the labour force of a country who are looking for work but are currently jobless. Individual purchasing power is directly impacted by unemployment. Lower consumption results in lower spending and a deceleration of economic growth. Prolonged and persistent unemployment can lead to public dissatisfaction, which can cause civil unrest, protests, discontent with the government, and disputes between classes. Therefore, understanding and addressing unemployment is crucial not only for maintaining economic stability but social stability too..

This paper, titled “Mapping Unemployment Across Nations: A Panel Data Analysis (2000-2018),” aims to employ panel data estimation techniques to explore and model the determinants of unemployment on a global scale over a nineteen-year period. The period from 2000 to 2018 spans significant economic retraction and expansion phases. These events have left an indelible mark on labour markets worldwide, shaping employment patterns, policy responses, and the broader discourse on labour market dynamics. We seek to capture the behaviour of unemployment across nations by incorporating data from multiple countries over this period. This analysis allows for the identification of both cross-sectional variations and longitudinal trends, while controlling for the heterogeneity across countries, regions, and income levels.

Our objective is to identify macro-level indicators that significantly influence unemployment rates across different income categories of countries. In particular, we aim to look

Mapping Unemployment Across Nations

at the effect that gross capital formation has on unemployment. By comparing results across different income groups and regions, we will gain insights into the effectiveness of different economic models in addressing unemployment across diverse economic contexts. Moreover, by introducing time and individual effects using panel data estimation techniques we can isolate their effect on the levels of unemployment. Finally, the research intends to address the existing research gap by conducting a countrywide analysis of unemployment using panel data, which has not been thoroughly explored before.

LITERATURE REVIEW

There is a complex connection between jobs and our social roles/identities. Influential thinkers like Weber and Marx have highlighted the significance of work in shaping how we see ourselves in the society. Work is not just about earning a living; it is a key factor in social stratification and mobility. It ends up reflecting both our background resources and personal achievements. In the labour market, job fluidity has become the norm, often seen as boosting economic efficiency. However, this fluidity comes at a cost, primarily affecting displaced workers and their communities. When there is such a lack of regulation safeguarding workers, their families, and localities, the negative impact can extend beyond individuals to hamper overall productivity (Brand, 2015). Several time series analyses have been conducted to find out the determinants of unemployment levels in countries. On the other hand, panel data analysis has been conducted in specific regions or a group of countries. Most of these studies have been limited to regions and countries in Africa. However, we will look at such studies and their methodologies coupled with important findings derived from the same.

A study was conducted in Africa for the period 2000 to 2015. Trade openness and population growth were significant drivers of unemployment, while the interplay between information and computer technology (ICT) and human capital development showed a negative influence on unemployment (Tsaurai, 2020). The paper emphasised to focus on enhancing human capital alongside technological advancements. Economic growth was consistently linked to lower unemployment rates, emphasising the importance of growth-oriented policies for tackling unemployment in Africa effectively. Pasara et al. conducted a similar study which explored the causal relationships among unemployment, economic growth, and gross capital formation in South Africa from the years 1980 to 2018. The study utilised time series analysis, specifically Granger

Mapping Unemployment Across Nations

causality analysis. The findings of the research revealed a positive impact of gross capital formation on both unemployment reduction and economic growth. The Granger causality results further showed that economic growth drives gross capital formation (Pasara & Garidzirai, 2020) .

Betul conducted an analysis on unemployment determinants within BRIC countries in their paper titled, “An Analysis of Unemployment Determinants in BRIC Countries,” using panel data methods for 2000-12. Their data was taken from world bank development indicators and OECD database. The paper’s main findings include that the population growth contributes to an increased unemployment in BRIC countries. An expansion of foreign trade due to liberalisation leads to higher trade volumes and subsequently lower unemployment rates. The study also affirms the inverse correlation between economic growth and unemployment in BRIC countries. Increases in industrial production and overall investment also play a significant role in mitigating unemployment levels (Betul, 2015).

Unemployment has been a severe economic challenge in Kosovo, a country in south-east Europe. A study was conducted to investigate the correlation and impact of macroeconomic factors on Kosovo’s unemployment levels. Utilising secondary data from World Bank Indicators spanning from 2001 to 2018, the findings revealed significant negative relationships of GDP and exports with the unemployment rate. In contrast, growth in FDI was associated with an increase in the Unemployment rate. The study found an insignificant relationship between unemployment and inflation. A similar country specific research was done by Wadi in their paper on “Determinants of Unemployment in Bahrain (Alrayes & Wadi, 2018a).” The study indicated a negative correlation between economic growth and unemployment, emphasising that capital formation has a positive impact on reducing unemployment levels in the economy. A study to determine unemployment rates in Indonesia shows a reduction in the same by increasing the average school

Mapping Unemployment Across Nations

duration (Muin, 2020). The level of economic growth and the percentage of individuals with IT skills were found to have an insignificant impact on the country's unemployment rate.

The existing literature on unemployment determinants has primarily focused on specific regions or groups of countries. Mainly, time series methodology was used in such studies. There exists a crucial gap in our understanding of the common variables that significantly influence employment levels. There is a clear absence of comparative analyses across different groups of countries over a period of time. By conducting such comparative analyses, especially with a focus on various income groups of countries, we can gain a deeper understanding of the intricate dynamics at play and derive meaningful policy implications from these comprehensive assessments. This approach allows us to not only identify the factors that consistently impact employment but also to discuss how these factors vary across different country groups and income levels.

DATA SECTION

All data used in this project has been sourced from the World Bank's online DataBank website. Specifically, all variables have been pulled from the 'World Development Indicators' (WDI) series (The World Bank, 2018). This dataset is compiled by the World Bank from various official international sources. Some of these sources include the International Labor Organization, the United Nations Population Division and UNESCO. The purpose of this dataset is to create a repository of important development indicators, presenting accurate development data across the globe, using national and global estimates. All indicators are updated annually.

Using the data available in the WDI dataset, we have compiled a dataset of 2308 observations for 133 countries. The time period of our panel data is from 2000 to 2018. Since certain countries had missing data under certain variables for specific time periods, our panel dataset is unbalanced. One restriction to the sample of countries present in our panel is the fact that data availability was not random. Low-income countries had a far greater amount of missing data, especially countries in the African continent. As such, the generalizability of our finding with reference to low-income countries is not ideal, since many of these countries have been left out. As previously mentioned, the dependent variable under study is unemployment. Specifically, we are looking at the percentage of the total labour force in a country that is unemployed. Inspired by the paper by Wadi (Alrayes & Wadi, 2018b), our main independent variable is gross fixed capital formation. Capital formation is generally used as an indicator for the level of economic growth and investments in an economy, allowing us to estimate the impact these factors have on unemployment. Based on the literature review, we have identified several variables that also potentially impact unemployment and have included them to act as controls in our model. The description of each variable used is given in table 1 of Appendix.

EMPIRICAL METHODOLOGY

Since an 'individual' in our dataset represents a single country, we had to theoretically identify which panel data estimation method would make the most sense for our model. We will need to establish that there exists factors unique to an individual country, independent of time. There are so many different factors unique to each country that can affect unemployment. The historical context within which a country developed; its colonial status, trade routes and adoption of modern technology, institutions that have developed over time, the culture and gender norms within a country all play a role in determining the level of unemployment in a country. As such, the assumption of constant fixed effects or homogenous fixed effects across countries cannot be applied here. Another important consideration is time fixed effects. Since our panel extends across 19 years, it is important to control for the effects time will have on unemployment across all countries. Then, the decision would be between the assumptions of the fixed effects and random effects models.

The random effect assumption states that the fixed effects of all countries are drawn from a common distribution. This means that all countries would have a common fixed effect on unemployment with only random variations. This assumption also seems invalid, given the completely different contexts countries operate in, as mentioned previously. That leaves us with the Least Squares Dummy Variables (LSDV) estimator and the Fixed Effects - Within Group Estimator (WG). Since the WG transformation involves the time-demeaned representations of variables, we entirely eliminate time-invariant fixed effects from our model. However, there are many potentially influential time-invariant factors that can affect unemployment. The best example of this would be the geographical region a country is located in. Geography can affect unemployment through climate, trade relations, resource availability etc. By removing such factors

Mapping Unemployment Across Nations

from our model, we will not be able to quantify the impact that these variables have on employment. Therefore, we have decided to use the two-way LSDV estimator to model unemployment.

The empirical model that we are trying to estimate is given as follows:

$$\begin{aligned} Y_{it} = & \alpha_0 + \beta_1. \text{Gross_Fixed_Capital_Formation}_{it} + \beta_2. \text{GDP_Growth}_{it} \\ & + \beta_3. \text{Inflation}_{it} + \beta_4. \text{Rural_Population_Growth}_{it} \\ & + \beta_5. \text{Urban_Population_Growth}_{it} + \beta_6. \text{Net_Migration}_{it} \\ & + \beta_7. \text{Crop_Production_Index}_{it} + \beta_8. \text{Oil_Rents}_{it} \\ & + \beta_9. \text{Broad_Money}_{it} + \beta_{10}. \text{Participation_Rate}_{it} \\ & + \beta_{11}. \text{Export_Value_Index}_{it} + \beta_{12}. \text{Demography}_{it} + \beta'. \text{Region}_i \\ & + \sum_{i=1}^{N-1} \alpha_i D_1 + \sum_{t=1}^{T-1} \gamma_t D_2 + \epsilon_{it} \end{aligned}$$

Where, α_0 is a common fixed effect, β_k is the regression coefficient of the k^{th} variable, β' is the vector of coefficients corresponding to all regions (with South Asia as the Base), α_i is the individual fixed effect, $D_1 = 1$ for the i^{th} individual, γ_t is the time fixed effect, $D_2 = 1$ for the t^{th} time period, and ϵ_{it} is the unsystematic random error term.

In order to account for the heterogeneity across countries, we have divided our dataset into four, corresponding to the four income groups defined by the World Bank. As such, the empirical model was estimated five times, one time including all countries in the dataset, and four more times for all countries split into each income group. Moreover, region was included as a control variable for all the fixed effects that a country's geography could have on unemployment.

RESULTS AND INTERPRETATION

Descriptive Statistics:

Figures 1, 2, and 3 and Table 2, 3, 4, and 5 of the Appendix summarise our main descriptive statistics for this dataset. Briefly, we can see that there are sizable differences in the mean values and variances of our explanatory variables across all income groups. Interestingly, the range of values for these variables were also significantly different across the income groups. Figure 2 shows us that on average, the upper-middle income countries have the highest rate of unemployment while the high and interestingly enough, low-income countries have the lowest rates of unemployment. From Figure 3, we can see that the Middle East & North African regions have the highest rates of unemployment while the East Asian & Pacific Regions have the lowest unemployment rates.

Hypothesis Testing

Models were estimated using the Pooled Ordinary Least Squares, Two-Way LSDV, Within Group, and Random Effects estimators. First Differencing was also implemented. The F-test and Hausman Test were conducted to test our underlying assumptions and compare different models. The appendix has the panel data regression output for Pooled OLS and Two-Way LSDV. Five equations were developed for each technique to account for the Global, High Income, Upper Middle, Lower Income and Low Income Country groups.

Refer to Tables 6, 7, 8 from the appendix for this section. The Breusch Pagan Test was used to detect heteroscedasticity in our data. We were able to reject the null hypothesis and conclude that there existed non-constant variance in the error term across all income categories. To deal with this, robust standard errors were applied to both the pooled OLS and LSDV models.. The F-test was used to check for the significance of individual and time fixed effects. Since the p-

Mapping Unemployment Across Nations

value was 0 for all income-groups, we concluded that fixed effects needed to be controlled for.. Lastly, we conducted the Hausman test to determine if the random effects (RE) model was consistent and efficient. The test reveals that the random effects model is consistent. However, as mentioned in the methodology, we believe that the random effects model is not appropriate for this study.

Models and Rationale

From the regression outputs we can see that there is a significant difference in the estimates of OLS and two-way LSDV models. Additionally, the relationship between our independent variables and unemployment vary across different income groups.

The R-squared for all the LSDV outputs was better compared to the Pooled estimator. Moreover, the coefficients of the regressors for the Pooled equations were highly inconsistent, varying in magnitude as well as direction across the income categories. By not accounting for the heterogeneity across countries by introducing individual and fixed effects, the coefficient estimates are biased, and not representative of the true values. It is for these reasons that we justify the use of the two-way LSDV models over the Pooled OLS models as a more accurate representation of the empirical model for unemployment.

Interpretation

High		Upper Middle Income	
Variable	Coefficient	Variable	Coefficient
Constant	10.73*	gross_fixed_capital_formation	-0.08**
gdp_growth	-0.14**	crop_production_index	-0.03***
broad_money	0.04***	demography	0.30***
labor_participation	-0.33***	Lower Middle Income	
demography	0.25***	Variable	Coefficient
Low Income			
Variable	Coefficient	gross_fixed_capital_formation	-0.05***
Constant	25.01*	net_migration	-0.24***
urban_pop_growth	-0.45**	crop_production_index	-0.02***
oil_rents	-0.03**	oil_rents	-0.08***

Table 1: LSDV 2-way Model Significant Variable with Estimates

An increase in fixed capital formation results in a decrease in unemployment for the upper and lower middle-income groups. This decrease in unemployment is relatively high for upper-middle income countries. This can be because the availability of skilled labour in higher income brackets enables increased labour utilisation of fixed capital assets, increasing the magnitude of employment generation.

Mapping Unemployment Across Nations

Inflation had no significant impact on unemployment across all income groups. We theorise that this is because consumer expectations about future inflation leads to an automatic adjustment in the supply of labour. Individuals and businesses often expect inflation and adjust their behaviour accordingly with negotiations on wages and prices.

On average, growth in GDP negatively affects unemployment for High Income countries. However, GDP growth was insignificant among the other groups. This insignificance can be explained through the phenomenon of jobless growth, which is a problem faced mostly by developing countries. Economic growth nowadays is driven more by capital-intensive industries than labour-intensive sectors which means that while GDP grows, the demand for labour may not increase at the same pace. Rapid growth may also outpace the development goals like education, leading to a mismatch of skills demanded by employers and those possessed by the workforce.

Labour force participation exhibits a strong negative relationship with unemployment for High Income countries. The reason why this relationship exists only for High income countries can be because of a generally higher level of job opportunities and availability of skilled labour. An increase in the proportion of population in the employable age range causes an increase in unemployment for high and upper-middle income countries. This increasing effect is mitigated by an increase in labour force participation for high income countries. However, a disproportionate increase in employable population relative to job availability can explain the negative effect in upper-middle income countries. Urban population growth reduces unemployment in the upper-middle and low-income categories. Since urban population growth can result from rural-urban migration, this negative relationship could be explained by rural migrants gaining employment in urban areas. The employment absorption in urban areas helps explain why increased urbanisation

Mapping Unemployment Across Nations

tends to reduce unemployment, especially in upper-middle and low-income countries where urban centres serve as engines of economic opportunity and social mobility.

An increase in agricultural output results in a decrease in unemployment for upper and lower-middle income countries. The implication of this is that for these countries, agriculture can be a potential source of employment, with further enhancements leading to increased employment. For lower-middle and low-income countries, an appreciation in the value of crude oil leads to a decrease in unemployment. The reasons for this can be manifold, including relatively labour-intensive methods of oil production and oil income significantly boosting other facets of the economy.

CONCLUSION AND DISCUSSION

Through this study, we were able to estimate a model for unemployment through the use of the Two-Way LSDV estimator. We found that our main dependent variable, gross fixed capital formation was only significant for the middle-income countries. We theorise that this is because economies in this income group are generally transitory in nature, moving from a saturated agricultural sector to the manufacturing and service sector. As such, there is an untapped pool of skilled and semi-skilled labourers, seeking employment which is generated through capital formation. The insignificance of gross fixed capital formation in high income countries can be explained through the fact that skilled labour is already utilised efficiently, and an increase in the availability of capital does not lead to a further decrease in unemployment. For the low-income countries, the insignificance can be due to the exact opposite reason. The lack of skilled labour in these countries means that an increase in capital formation does not impact the majority of the labour force in these countries,

As far as policy considerations are concerned, high income countries should be set as the benchmark for dealing with unemployment through investment and development. For middle income countries, an economy's available skilled labour should be fully utilised, which can only be achieved when a country prioritises and directs investments towards capital and infrastructural development. An encouragement towards secondary and tertiary sector undertakings is also important, especially near urban areas, to take full advantage of the larger number of migrants and working age population these countries have. As for low-income countries, directly increasing capital formation will not significantly reduce unemployment. These countries need to focus on human capital development first, so that there is a pool of the labour force that can actually benefit from the increased high skill job opportunities that capital formation will provide.

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APPENDIX**Table 1:** Variable Definitions

Variable Name	Definition
Unemployment(% of total labour force) (modelled ILO estimate)	The percentage of the labour force that is without work but is able and looking for employment.
Gross fixed capital formation (% of GDP)	The GDP contribution off all plants, machinery, and equipment purchases. Also includes infrastructural developments like roads, schools, offices, hospitals, and residential and commercial buildings
GDP growth (annual %)	The Annual GDP growth rate of a country at constant 2015, local prices expressed in USD .
Inflation, GDP deflator (annual %)	The rate of price change in a country measured by the deflator implicit GDP growth rate.
Rural population growth (annual %)	The growth of the population percentage of individuals living in rural areas defined by national statistical offices.
Urban population growth (annual %)	The growth of the population percentage of individuals living in urban areas defined by national statistical offices.
Net migration	The number of immigrants minus the number of emigrants in a country, including both citizens and noncitizens.
Crop production index (2014-2016 = 100)	Index showing the agricultural output of a country relative to the base period of 2014-2016. All crops except fodder crops are included.

Mapping Unemployment Across Nations

Oil rents (% of GDP)	Oil rents are the difference between the value of crude oil production at regional prices and total costs of production.
Broad money (% of GDP)	Calculated as the sum of currency outside banks. Mainly demand, time, savings, fixed and foreign currency deposits of resident sectors other than the central government. Also includes other securities such as certificates of deposit and commercial paper.
Labour force participation rate, total (% of total population ages 15-64) (modelled ILO estimate)	Labour force participation rate is the proportion of the population ages 15-64 that is economically active.
Export value index (2000 = 100)	The value of a country's exports measured in terms of U.S. dollars and expressed as a percentage of the average for the base period (2000).
Demography	Percentage of the total population between the ages 15 to 64 as a percentage of the total population. Includes non-citizen as well.

Table 2: Descriptive Statistics-1

Mean of Variables by Income Group				
Variable	High Income	Upper-Middle Income	Lower-Income	Low-Income
unemployment	6.24	10.42	7.55	5.39
gross_fixed_capital_formation	22.85	23.71	23.76	18.98
gdp_capita	37319.80	12205.00	4780.02	1622.30
gdp_growth	2.78	3.96	4.43	4.51
inflation_deflator	3.30	7.60	8.16	8.86
rural_pop_growth	0.11	-0.30	0.99	1.98
urban_pop_growth	1.54	1.72	2.74	4.18
net_migration	0.65	-0.01	-0.42	-0.16
crop_production_index	96.46	90.02	87.55	84.26
oil_rents	5.71	6.14	3.01	1.94
broad_money	80.07	57.64	45.59	27.21
broad_money_growth	8.60	15.49	16.46	17.40
labor_participation	72.64	62.78	63.34	66.44
export_index	88.37	91.31	92.30	117.23
demography	67.71	64.87	59.64	52.91
pop_growth	1.31	1.03	1.76	2.67

Table 3: Descriptive Statistics-2

Variance of Variables by Income Group				
Variable	High Income	Upper-Middle Income	Lower-Income	Low-Income
unemployment	10.17	48.37	40.65	16.60
gross_fixed_capital_formati on	21.93	44.53	92.94	62.05
gdp_capita	327860579.9 6	32719566.63	6385833.76	524556.77
gdp_growth	7.62	31.29	16.27	22.95
inflation_deflator	35.55	129.59	205.54	169.34
rural_pop_growth	5.46	2.16	1.19	0.98
urban_pop_growth	4.41	2.94	1.98	1.56
net_migration	2.28	0.74	1.88	0.17
crop_production_index	680.64	372.19	467.49	541.43
oil_rents	132.10	147.45	69.49	49.53
broad_money	1558.36	1796.07	592.33	567.73
broad_money_growth	122.82	264.94	291.14	230.00
labor_participation	54.23	92.58	125.25	154.96
export_index	1305.27	2797.88	21590.33	41249.11
demography	21.47	20.83	31.02	10.74
pop_growth	3.96	1.93	0.94	0.63

Table 4: Descriptive Statistics-3

Range of Variables by Income Group				
Variable	High Income	Upper-Middle Income	Lower- Income	Low- Income
unemployment	18.86	37.07	28.11	16.48
gross_fixed_capital_formati on	30.43	50.95	76.00	58.63
gdp_capita	99746.12	30689.45	11556.10	3474.95
gdp_growth	19.72	137.17	38.93	70.02
inflation_deflator	58.88	215.49	221.93	116.84
rural_pop_growth	25.05	15.48	6.13	6.53
urban_pop_growth	19.55	17.75	8.58	7.24
net_migration	8.76	11.33	18.24	3.39
crop_production_index	205.12	138.23	135.91	142.85
oil_rents	54.09	65.16	55.95	42.30
broad_money	217.61	254.70	140.40	161.21
broad_money_growth	150.58	240.31	249.98	151.95
labor_participation	36.83	44.47	53.00	51.08
export_index	197.20	534.60	2628.36	1486.10
demography	27.22	20.37	21.99	15.43
pop_growth	19.17	17.07	5.91	5.86

Table 5: Descriptive Statistics-4**Count of Countries by Income Group and Region**

	Income Group				
Region	High income	Upper middle income	Lower middle income	Low income	Total
East Asia & Pacific	5	6	9	0	20
Europe & Central Asia	8	13	4	1	26
Latin America & Caribbean	5	14	4	1	24
Middle East & North Africa	5	6	5	1	17
North America	2	0	0	0	2
South Asia	0	1	4	1	6
Sub-Saharan Africa	0	6	14	18	38
Total	25	46	40	22	133

Table 6: Breusch Pagan Test**Breusch Pagan Test**

	World	Low Income	Upper middle Income	Lower Middle Income	High Income
P-Value	0	0	0	0	0
Robust SE	Yes	Yes	Yes	Yes	Yes

Table 7: F-Test**F-Test**

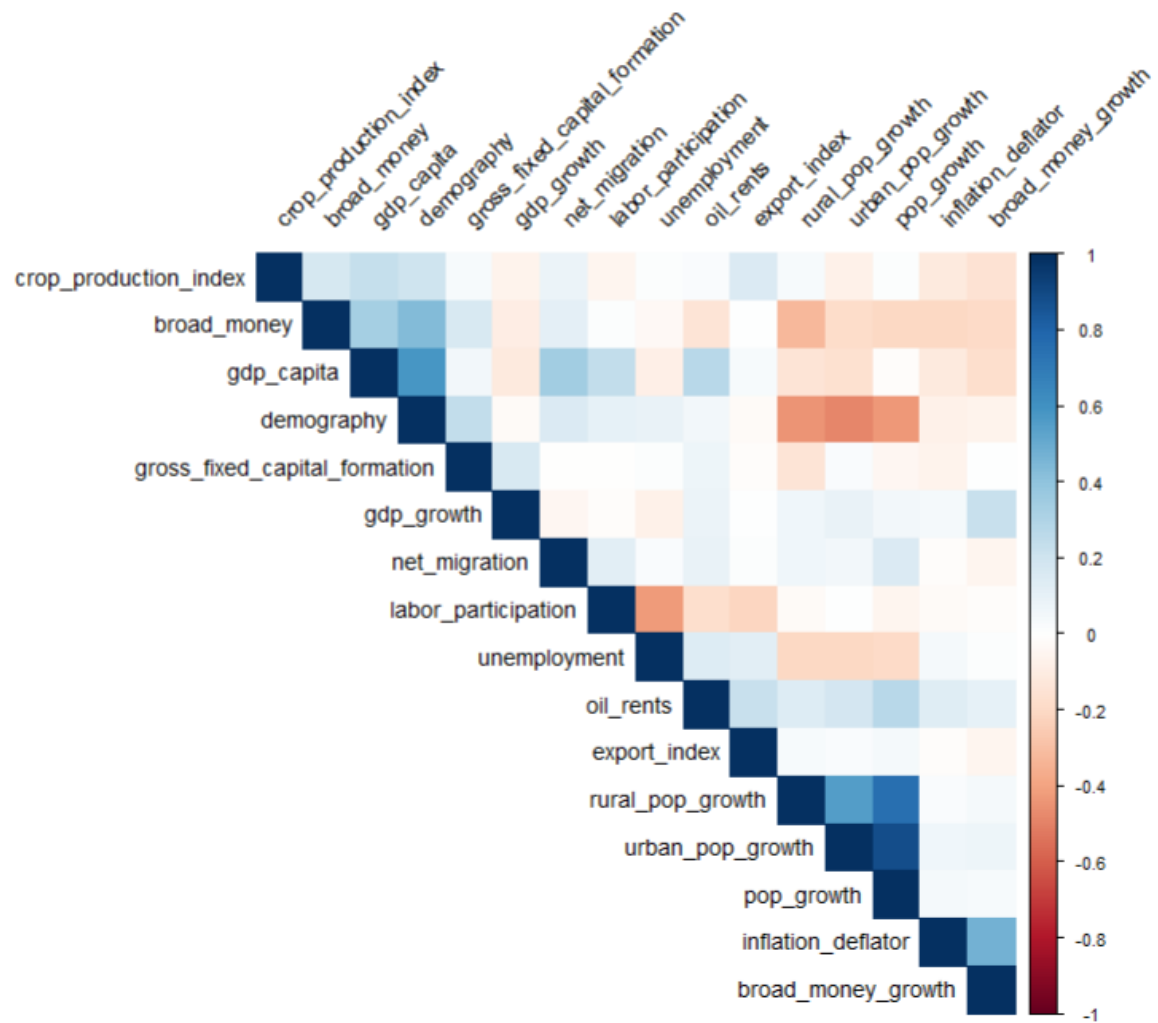
	World	Low Income	Upper middle Income	Lower Middle Income	High Income
2-Way Fixed Effects	0	0	0	0	0
Model	2-way	2-way	2-way	2-way	2-way

Table 8: Hausman Test**Hausman Test**

	World	Low Income	Upper middle Income	Lower Middle Income	High Income
P-value (alpha=0.05)	0	0.999	0.739	0.847	0.279
Model	RE	RE/FE	RE/FE	RE/FE	RE/FE

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Figure 1: Correlation Map



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Figure 2: Chart of Unemployment Trends by Income Groups

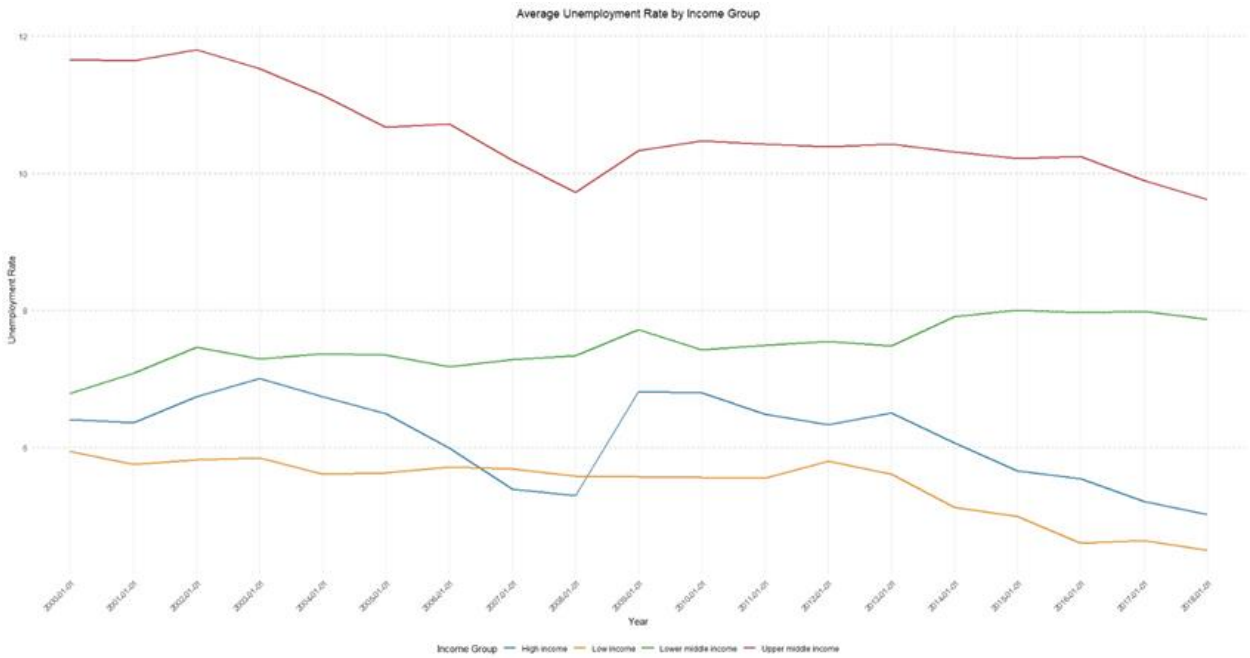
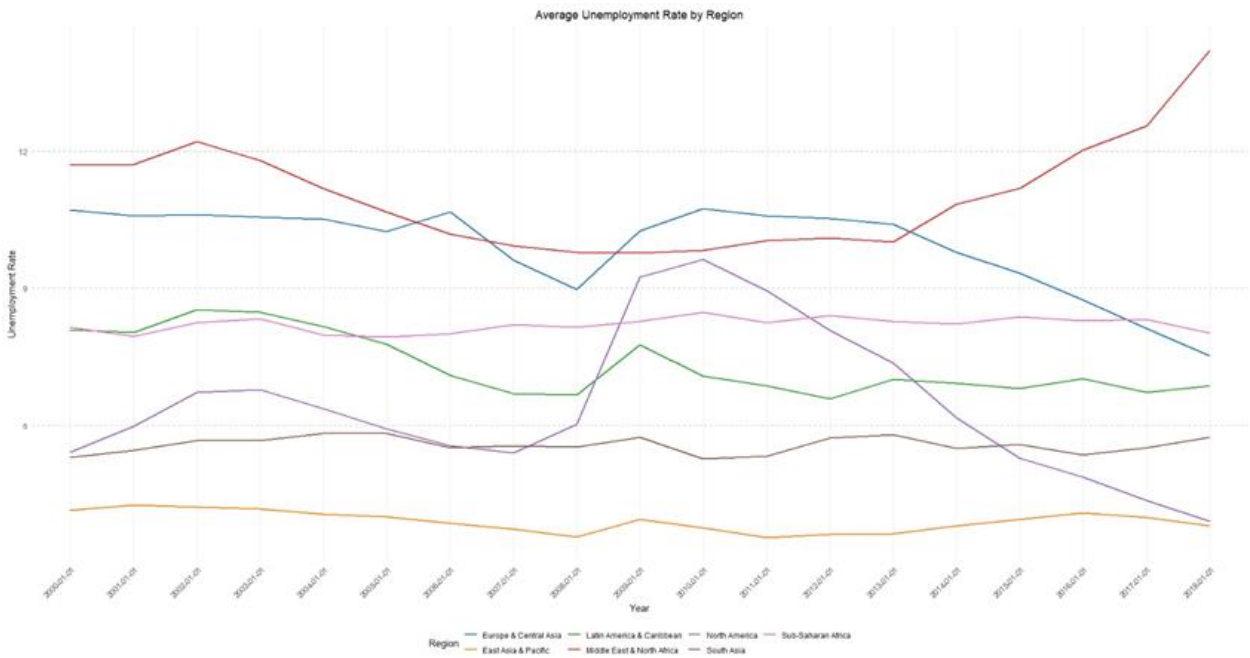


Figure 3: Chart of Unemployment Trends by Region



Mapping Unemployment Across Nations

Regression Output ¹:

Two-Way LSDV Results					
	Y = Unemployment				
	Global	High Income	UpperMiddle Income	LowerMiddle Income	Low Income
	-1	-2	-3	-4	-5
Constant	6.03	10.73*	-5.23	4.51	25.01*
	-4.03	-5.54	-8.72	-7.4	-13.61
gross_fixed_capital_formati on	-0.05**	-0.05	-0.08**	-0.05**	-0.03
	-0.02	-0.04	-0.04	-0.02	-0.02
gdp_growth	-0.01	-0.14**	0.001	-0.01	-0.002
	-0.01	-0.06	-0.01	-0.02	-0.02
inflation_deflator	0.001	-0.01	-0.01	0.01	-0.004
	-0.01	-0.01	-0.02	-0.005	-0.01
urban_pop_growth	-0.11	0.16	-0.25	-0.18	-0.45**
	-0.09	-0.14	-0.17	-0.22	-0.22
rural_pop_growth	0.06	-0.19*	-0.02	0.21	0.05

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For full output including the fixed effects- <https://drive.google.com/file/d/1-aKwRwTtoptpWbdsQ-Ot-7DVUe99rWdI/view?usp=sharing>.

To see the Pooled OLS output: https://drive.google.com/file/d/18edKY5Npote4_1WprJ3i-a3qWHfwpBxs/view?usp=sharing

Mapping Unemployment Across Nations

	-0.07	-0.1	-0.14	-0.21	-0.22
net_migration	-0.09	0.02	0.17	-0.24***	0.5
	-0.09	-0.27	-0.17	-0.06	-0.38
crop_production_index	-0.01*	0.01	-0.03**	-0.02**	0.01
	-0.01	-0.01	-0.01	-0.01	-0.01
oil_rents	-0.03	0.04	0.001	-0.08***	-0.03**
	-0.02	-0.04	-0.03	-0.03	-0.01
broad_money	0.004	0.04***	-0.003	0.01	0.02
	-0.01	-0.02	-0.02	-0.01	-0.02
labor_participation	-0.10**	-0.33***	0.04	-0.01	-0.07
	-0.04	-0.08	-0.08	-0.07	-0.07
export_index	-0.0005	-0.02**	-0.01	0	0.002
	-0.001	-0.01	-0.01	-0.0002	-0.001
demography	0.13**	0.25***	0.30***	0.07	-0.17
	-0.06	-0.09	-0.11	-0.1	-0.19
N	2,308	443	809	659	397
R ²	0.93	0.79	0.93	0.96	0.96
Adjusted R ²	0.93	0.76	0.92	0.96	0.95
F Statistic	179.46*** (df = 162; 2145)	26.76*** (df = 54; 388)	127.55*** (df = 75; 733)	213.21*** (df = 69; 589)	146.69*** (df = 51; 345)
***Significant at the 1 percent level. **Significant at the 5 percent level. *Significant at the 10 percent level.					