

# The Effect of External Conflicts on the Economic Growth: Evidence from Emerging and Developed Countries

Elham Jafarzadeh<sup>1,\*</sup>, He Shuquan<sup>2</sup>

<sup>1</sup>International Trade, Shanghai University, Shanghai, China

<sup>2</sup>School of Economics, Shanghai University, Shanghai, China

\*Corresponding author: [Jafarzadehelham50@gmail.com](mailto:Jafarzadehelham50@gmail.com)

Received February 01, 2022; Revised March 01, 2022; Accepted March 08, 2022

**Abstract** The current study examined the effect of the external conflicts on the economic growth of countries in both developed and emerging markets. The current study has used data collected from world bank for the period of 1996 to 2016 with a total 128 countries used for the estimation. The results of the regression using the Hausman test showed that external conflicts adversely affected the economic growth of a country. Moreover, GDP growth, employment, inflation rate, gross capital formation economic freedom, trade freedom and business freedom and foreign reserves are found to have a significant and positive influence on the economic growth of a country. Therefore, the improvement of international trade and economic prosperity the countries are required to be devised such strategies that could constrained the external conflicts and bring economic growth in a country.

**Keywords:** effect, external conflicts, economic growth

**Cite This Article:** Elham Jafarzadeh, and He Shuquan, "The Effect of External Conflicts on the Economic Growth: Evidence from Emerging and Developed Countries." *Journal of Finance and Economics*, vol. 10, no. 1 (2022): 13-19. doi: 10.12691/jfe-10-1-3.

## 1. Introduction

Nowadays, conflicts in countries weakened by repeated civil wars cause serious and prolonged disruptions, causing the total collapse of economic activities and infrastructure, and constitute major constraints to development in many countries. Intense trade with neighbors reduces the duration as well as the intensity of conflicts. This trade reduces the incentives of contiguous countries to fuel civil strife among their neighbors. These incentives can be particularly strong in regions, such as much of sub-Saharan Africa, where there are strong cross-border ethnic ties. Trade with neighbors is also associated with a lower risk of conflict when such trade takes place under regional trade agreements. Various studies have been carried out to explain the factors that affect the country's economic growth and its heterogeneity in determinations among developed and emerging economies Blazejowski, Kwiatkowski & Gazda, [1]; Ciccone, & Jarocinski, [2]. In addition to macroeconomic factors, military spending is seen as a significant obstacle to economic growth. For example, "There is now a large body of empirical literature studying the economic effects of military spending, with little consensus on what those effects might be (Dunne, Smith & Willenbockel, [3]. Vally Koubi [4] found that war had a negative and significant effect on economic growth during the Cold

War. However, Organski & Kugler [5] and Olson [6] found that external conflicts lead to the destruction of resources and the reconstruction of the same assets with more advanced techniques that promote higher level economic growth. Considerable attention has been paid to influence on the tourism industry and a number of studies have been conducted to test the effect of terrorism on the performance of the tourism industry (Bilson et al., [7]; Drakos and Kutun, [8]. Likewise, studies are also conducted on the effect of terrorism on other industries and have found a negative effect on the agricultural sector (Singh, [9]); decreasing effect on trade and mineral resources (Ashby and Ramos, [10]); trade between partner countries (Nitsch and Schumacher, [11]; Oetzel et al., [12] and its negative effect on foreign direct investment and capital inflows into the country. Ethnic and income inequalities play a positive role in creating conflict (Esteban and Ray, [13]. The study found a positive association between income inequality and the splitting index. Collier and Hoeffler, [14]; Miguel, E., Satyanath, S. and Sergenti, E., [15] also used fractionalization index and conflict has weak relationship. Østby, et al., [16] suggested a positive and significant association between the socioeconomic welfare and conflict. The study suggested that education and income inequality are the main reasons of conflicts in developing countries (Alesina, Baqir and Easterly, [17]; Collier and Hoeffler, [18]; Easterly and Levine, [19]; Fearon and Laitin, [20]). A good number of studies have investigated the influence

of the armed conflicts on the investments patterns and business in developing countries (Glick & Taylor [21]; Nitsch & Schumacher [11]; Bayer & Rupert, [22]). It is generally believed that terrorist's insurgence is likely to adversely affect the confidence of the investors and discourage bilateral trade (Li & Vashchilko, [23]) and mostly research is done on the examining the role of the terrorism on the economy of a country (Bussmann, [24]; Benassy-Quere et al., [25]; Nitsch and Schumacher, [11]; among others). Drakos and Kutan [8] considered tourism industry and examined that how terrorist activities could directly and indirectly influence the foreign direct investments. By direct they mean that these terrorists activities causing damages to assets and human capital of investors whereas the indirect affect showed that terrorists activities has increased the cost of advertisement to be done to attract the tourists and costs of construction of the tourists spots damaged and thus negatively influence the foreign direct investments. The literature shows that conflicts affect the firm profits in two ways; the direct effect due to damage in property, infrastructure goods and services and loss to human resources, while the indirect effect is due to the cost of transactions which adversely affect the industry prevailing in a country and creates hindrance in the economic growth of a country. Another stream of studies reported that high level of conflicts damages the private and social capital and shifts it to the unproductive sectors such as purchase of weapons and recruitment of more soldiers (Murdoch and Sandler [26]). Moreover, Barro [27]; Imai and Weinstein [28] suggested that civil conflicts in country adversely affected the economic growth due to less domestic and foreign capital inflows to the country. Conflicts between countries lead to change in the economic and political policy towards foreign business or cross border trade. This change in hostile policies may lead to expropriation of assets and profits and confiscation of property or assets of firms operating in the enemy countries which discourage the foreign direct investments and adversely affect the economic growth. Leblang and Satyanath [29] highlighted that conflicts between countries discourage the investors to invest in such countries which directly affect the foreign currency reserve used for the foreign trade purpose. Therefore, decrease in the foreign currency reserves and would constraint the foreign trade due to non-availability of foreign currency (Sobek, [30]). The internal or external conflicts effect the political institutions that regulate industry and enforce contracts. In times of conflicts these institutions failed to compensate firms in case of any discrepancy in contract (Sobek, [30]). Another stream of studies has examined the influence of the foreign direct investments stock provide an incentive to increased country security. Oetzl et al., [12] and Nitsch and Schumacher [11] are of the opinion that flow of funds between the countries in terms of bilateral trade help the partnering countries to improve their respective countries security and networking in the region. Therefore, it is followed from the results that agreement between the host and home country of foreign direct investments has negative effect of the conflicts. The reason of this negative effect can be due to the fact that bilateral agreements make the country to improve their security up to the level that they could easily managed the insurgencies due to global

competition for international resources. For instance in the case of Ivory Coast, substantial "foreign military presence may increase the likelihood that foreign investors will retain confidence to continue investing". Economic growth has been considered as an important topic to academia, researchers, policymakers and regulatory bodies. Various studies have been conducted that explain factors that affect the economic growth of country and its heterogeneity in determents among the developed and emerging economies (Blazejowski, Kwiatkowski & Gazda, [1]; Ciccone, & Jarocinski, [2]). In addition to macroeconomic factors, military expenditures are considered as an important detriment of economic growth. For instance, "There is now a large body of empirical literature investigating the economic effects of military spending, with little consensus as to what these effects might be (Dunne, Smith & Willenbockel, [3])." The literature shows that the cost of war is damaging the host country even if it is very small. Vally Koubi [4] found that war has a negative and significant effect on the economic growth during the Cold war. However, Organski & Kugler [5] and Olson [6] found that external conflicts lead to destruction of resources and rebuilding the same assets with more technological advance techniques leads to which promote higher level economic growth. As argued by Sandler [31] reported that countries show their concern over the external conflicts which affect the business and their functions and negatively affect the capital inflows to the country (De Groot, [32]. Murdoch and Sandler [33] investigated the spill over effect of the war on the countries economic growth and found that wars negatively affect the economic growth of the country and also the economic growth of the intensive trading partners (Dunne & Tian, [34]. "All wars are fought for money" is the anti-war slogan attributed to Socrates, and George Orwell wrote in a book review that War against a foreign country only happens when the moneyed classes think they are going to profit from it".

The main objective of this study is to examine the effect of external conflicts on the economic growth of the country. It aims at answering the following question:

What is the effect of external conflicts on the economic growth of the country?

From the general objective derive the specific objectives which will be:

- Identify the indicator of measuring external conflicts on the economic growth;
- Understand the effect of external conflicts on the economic growth through these indicators.

This study is distributed as follows: first present the research methodology and then proceed to the statistical description of the data for a better understanding and presentation of the results of the statistical tests for the analysis of the results and recommendations. (This what I added in your study and was not specify)

## 2. Methodology

This study aims to examine the effect of external conflicts on the economic growth of the country. This is an applied study that follows explanatory research design for testing the already established hypotheses.

## 2.1. Data Source and Processing

The database used for the estimation of this study was collected from the World Bank database. This study has used a total of 128 countries for the estimation. The time period of the data start from 1996 to 2016 and will be processed using STATA software.

## 2.2. Model Specification

The model is part of a framework dealing with the issue of external conflicts on the economic growth. The study followed the baseline model of Aker [35] for imports with inclusion of external conflicts and economic freedom used by Singhania and Saini [36] Byrne and Fiess [37]. Furthermore, for the exports the model of Majeed and Ahmad [38] and Zada, Muhammad and Bahadar [39]. The study has followed panel data analysis for the estimation of regression models.

The model is econometrically estimated as follow:

$$\begin{aligned} GDP\ growth_{it} &= \beta_0 + \beta_1 Ext\ conflicts_{it} + \beta_2 EFI_{it} + \beta_3 Infl\ R_{it} \\ &+ \beta_4 Int\ R_{it} + \beta_5 BF_{it} + \beta_6 TF_{it} + \beta_7 E_{it} + \beta_8 GCF_{it} \quad (1) \\ &+ \beta_9 Tax_{it} + \beta_{10} Imports_{it} + \beta_{11} Exports_{it} \\ &+ \beta_{12} FR_{it} + \beta_{13} EFI_{it} + \varepsilon_{it} \end{aligned}$$

With  $\beta_0$  the constant and  $\varepsilon_{it}$ : the error term,  $\beta_1 = \beta_{12}$

Coefficient of independent variables

BF = Business freedom

TF = Trade freedom

E = Employment

CGF = Gross capital formation

Ext Conft = External conflicts

EFI = Economic freedom index

Infl R = Inflation rate

Int R = Interest rate

FR = Foreign reserve

## 2.3. Definition of the Variables

### 2.3.1. External Conflicts

The current study has measured external conflicts as ratings assigned to each country for the sample period of the International country risk guide. Further the same was converted in to percentage change as to avoid scaling problem as most of the variables used in the study are in percentage form.

### 2.3.2. Economic Growth

Economic growth is measured through the gross domestic product. The study has used growth in the gross domestic product as a proxy for the economic growth. The growth has been computed from changes in gross domestic product from current year minus previous year scaled by previous year (Dunne & Tian, [34]).

### 2.3.3. Imports and Exports

Imports and exports are used as proxy for international trade. The study has taken imports and exports in dollars and the same is divided by the gross domestic products in

order to have the value in terms of ratios of both import to gross domestic products and exports to gross domestic products (Aker, [35]). Furthermore, the study has also used total trade done in a country and the same is divided by gross domestic products used as a robust measure for the imports and exports (Zada, Muhammad & Bahadar, [39]).

### 2.3.4. Economic Freedom

In order to control of the business environmental factors, the study has used an economic freedom composite index as computed by Heritage foundation that has been proved to be an important factor that can affect the country business and trade. This study also considered economic freedom and also its sub components that are more related to business such as trade freedom and business freedom as a proxy for the overall business conducive environment that could affect imports, exports and overall trade of a country (Singhania & Saini [36]).

### 2.3.5. Control Variables

The study also considered various macroeconomic variables to control for their effect on the main variables of interest i.e. imports, exports and total trade. The control variables include inflation rate, employment rate of a country, gross capital formation to gross domestic products, foreign reserves to gross domestic products, tax on trade and custom duties are taken as macroeconomic variables used in the study to account for the country specific variables.

## 3. Empirical Results and Discussion

This section will present the empirical results obtained during the regression of our data on the STATA software from 1996 to 2016 which the general purpose to see if the external conflicts has an effect on the economic growth of the country. The section includes various types of statistical tests results such as descriptive statistics, Pearson correlation, pool regression, random effect and fixed effect regression models.

### 3.1. Descriptive Statistics

Table 1 of the research analysis represents the descriptive statistics of the variables used in the study. The average value of import to gdp is 0.479, export to gdp is 0.432 and total trade to gdp is 0.886 percent. Moreover, the average value of the external conflicts 0.992. It shows that the sample countries are having more external conflicts. Furthermore, the study used control variables such as GDP growth which is an average value of 0.038, inflation rate is 0.057, foreign reserve for trade 0.048, gross capital formation to total gdp is 0.234, average interest rate is 0.038, average employment rate is 8.8percent, economic freedom has an average value of 1.78, whereas, on average tax rate is 1.87%, trade freedom has an average value of 1.87 and business freedom has an average value of 1.808. The descriptive statistics showed that the data is normal and there is no significant higher deviations or outliers in the data.

**Table 1. Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
Imp_gdp	1485	.479	.381	0	4.276
Exp_gdp	1485	.432	.334	0	2.29
Ext confit	1485	.992	.057	.73	1.079
GDP growth	1485	.038	.055	-.621	1.231
Inflation rate	1485	.057	.078	-.276	.753
Foreign reserve	1485	.048	.059	0	.792
GCF	1485	.234	.089	0	.582
Interest rate	1485	.038	.061	-.132	.49
Empl	1485	8.813	2.844	0	13.524
EFI	1485	1.785	.08	1.33	1.955
Tax	1485	1.87	.082	1.515	2
TF	1485	1.876	.071	1.176	1.978
BF	1485	1.808	.129	1	2

Source: Author from STATA.

### 3.2. Pearson Correlation

Table 2 represents the results of the Pearson correlation between the variables used in the study. The correlation is used to find-out that how each variable is connected with the other variables and to find-out the direction and strength of the connection among different variables. The results reported in the Table 2 showed that import to gdp, exports to gdp and total trade to gdp have negative association with the external conflicts faced by a country. Thus, these negative linkages showed that external conflicts have adverse effect on the imports, exports and total trade of a country. Moreover, in case of control variables taxes and duties on trade and inflation rates are found negative in effect on the import, export and total trade of a country. Whereas, the results also portrays that there is a positive association of gdp growth, inflation, foreign reserves for trade, capital formation, employment rate, economic freedom, trade freedom and business freedom. Thus, increase in the gdp growth of a country and more foreign reserves, more employment in a country and high capital formation would significantly improve the imports, exports and overall trade in a country. Moreover, the relatively higher level of economic freedom of a country with trade freedom and business freedom would have higher level of imports, exports and total trade.

### 3.3. Pool Effect, Random Effect and Fixed Effect Regression Models

Table 3 represents results of the regression models that are estimated with the aim to test the hypothesis of effect

of external conflicts on the economic growth of a country. Therefore, the study considered economic growth as measured through GDP growth and also take in to account the main explanatory variables such as external conflicts. Moreover, the study also assumed control variables of country specific factors such as capital formation, employment rate, interest rate, foreign reserves, imports and exports. Moreover, the business environment variables include economic freedom, trade freedom and business freedom.

The results reported in Table 3 for regression Model-1, Model-2 and Model-3 represents pool effect, random effect and fixed effect regression models respectively. The results of the Hausman test are used to decide among the three mentioned models that could better fit the data. The results of the Hausman test showed that the Hausman test significant value i.e. 25.65(0.000) is more than the critical value and its p-value is less than 5percent. Thus, random effect modelling could better fit the data relative of the other two. Therefore, the results of the random effect will be interpreted only.

The results of the random effect regression model showed that external conflicts have negative and significant effect on the economic growth of a country. Therefore, countries with more internal conflicts have adverse effect on the economic growth of a country. Therefore, the policymakers and the government may focus on such strategies to reduce external conflicts only than they would be able to put themselves on the road of economic growth. It is pertinent to mentioned that most of the countries with internal can have a very low economic growth and poor wellbeing of the general public. So if the political leadership may succeed in managing conflicts could make it possible to progress.

The estimates of other variables such as exports are found to have a positive and significant influence on the economic growth of a country, whereas, the imports are found significant but with negative effect on the economic growth of a country. Thus, increase in exports and decreases in imports could also improve economic growth of a country. However, this could only be true for the high level imports as optimal imports are expected to have no adverse effect on the economic growth. Furthermore, no country is self-sufficient in all goods or services and they do import so goods or services, however, these results could be attributed to a situation where more imports if done that could harm the economic growth through various channels.

**Table 2. Pearson Correlations Matrix Test**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Imp_gdp	1.000													
(2) Exp_gdp	0.067	1.000												
(3) tt_gdp	0.100	0.973	1.000											
(4) Ext confit	-0.025	-0.303	-0.295	1.000										
(5) GDPG	0.013	0.036	0.032	-0.040	1.000									
(6) Inf	0.077	-0.125	-0.126	-0.140	0.148	1.000								
(7) FR	0.039	0.064	0.116	-0.097	0.002	0.018	1.000							
(8) GFC	0.014	0.137	0.174	0.027	0.184	0.059	0.067	1.000						
(9) IR	-0.027	-0.120	-0.096	0.031	0.053	0.123	0.166	-0.025	1.000					
(10) Empl	0.062	0.116	0.110	0.014	0.004	-0.041	-0.025	0.285	-0.076	1.000				
(11) EFI	0.159	0.383	0.359	0.286	-0.123	-0.279	-0.126	0.109	-0.046	0.144	1.000			
(12) Tax	-0.103	-0.076	-0.083	-0.116	0.126	0.182	0.196	0.137	0.256	-0.024	-0.010	1.000		
(13) TF	0.052	0.310	0.293	0.314	-0.062	-0.170	-0.104	0.052	0.016	0.091	0.672	-0.065	1.000	
(14) BF	0.103	0.283	0.265	0.188	-0.101	-0.135	-0.121	0.133	-0.055	0.113	0.793	-0.095	0.518	1.000

Table 3. Regression results of Economic growth

Economic growth	(Model-1) Pool Effect	(Model-2) Random Effect	(Model-3) Fixed Effect
External conflicts	-0.070** (0.031)	-0.091*** (0.031)	-0.134** (0.060)
Export	0.011 (0.011)	0.014** (0.006)	0.084*** (0.017)
Import	-0.004** (0.002)	-0.005** (0.002)	-0.008*** (0.001)
Inflation	0.060** (0.026)	0.055*** (0.020)	0.006 (0.021)
Foreign Reserve	0.059 (0.138)	0.088*** (0.028)	0.679*** (0.063)
GCF	0.106*** (0.036)	0.108*** (0.018)	0.116*** (0.025)
Interest	-0.039* (0.020)	-0.049** (0.022)	-0.071 (0.065)
Employment	-0.001 (0.000)	0.003** (0.001)	0.002* (0.001)
Economic freedom index	0.099 (0.080)	0.158*** (0.040)	0.393*** (0.085)
Tax Burden	0.039 (0.041)	0.034*** (0.012)	0.281*** (0.060)
Trade freedom	0.028 (0.035)	0.046** (0.022)	0.142*** (0.037)
Business freedom	-0.014 (0.028)	0.041** (0.020)	0.185*** (0.031)
_cons	0.037 (0.173)	0.067 (0.067)	0.427*** (0.151)
Obs.	1485	1485	1485
R-squared	0.099	0.165	0.172
Hausman Statistics	25.65(0.000)		

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Source: Author from STATA.

The results of other control variables such as country specific factors including gross capital formation, inflation rate, employment rate and foreign reserves have a positive and significant impact on the economic growth of countries. So, higher level of capital formation, more employment rate, and higher inflation rate could lead to economic growth of a country. However, higher level of interest rate has negative and significant influence on the economic growth of a country. Thus, countries with higher interest rate could have a negative economic growth.

The results of business environment related variables showed that economic freedom, business freedom and trade freedom have positive and significant influence on the on the country economic growth. Therefore, it can be concluded that countries with more economic freedom, trade and business freedom could be able to have relatively high economic growth which would leads to more economic prosperity.

## 4. Conclusion

The current study investigated on the effect of the external conflicts on the economic growth of a country in both developed and emerging markets. The study has used a data collected from the World Bank database for the period of 1996 and 2016. The study used panel data analysis for the estimation with a total of 128 countries. The results of the regression showed that external conflicts affected the economic growth of a country. Therefore, we argued that external conflicts play a vital role in the

reduction of country economic growth. Furthermore, these conflicts are found to have a devastating effect on the economic growth of these countries.

## 4.1. Recommendations

For the improvement of international trade and economic prosperity the countries are required to be devised such policies that could constrained the external conflicts and which could only be possible to bring economic growth in a country.

## 4.2. Limitations of the Study

This study does not aim to answer or deal with all the questions concerning the effect of the external conflicts on the economic growth.

One of the limitation of this study is due to the small sample size of the study period included in the data sample. For example, this study only covers a 21 years' period from 1996 to 2016, leading to certain limitations in the total validation of our study because of the small sample size.

## 4.3. Areas for Further Research

Several other questions remain open for further studies with the construction of other variables that can better represent and empirically explain the impact of external conflict in a larger dimension. Other econometric techniques can be used to solve this problem at all levels. Extending the use of other empirical tests on a complementary basis would go a long way to solving the problem; such as, for example, cross-sectional estimation, analysis by the method of cointegration (to detect trends in the relationship between external conflicts and long-term economic growth). The theme of the question, which has not been studied in depth in this work, deserves to be integrated into the methods which have not been cited to better detect the impact of external conflict on economic growth.

## References

- [1] Błażejowski, M., Kwiatkowski, J. and Gazda, J., (2019). Sources of economic growth: A global perspective. *Sustainability*, 11(1), p.275.
- [2] Ciccone, A. and Jarociński, M., (2010). Determinants of economic growth: will data tell? *American Economic Journal: Macroeconomics*, 2(4), pp.222-46.
- [3] Dunne, J.P., Smith, R.P. and Willenbockel, D., (2005). Models of military expenditure and growth: A critical review. *Defense and peace economics*, 16(6), pp.449-461.
- [4] Koubi, V., (2005). War and economic performance. *Journal of Peace Research*, 42(1), pp.67-82.
- [5] Organski, A.F. and Kugler, J., (1977). The costs of major wars: the phoenix factor. *American Political Science Review*, 71(4), pp.1347-1366.
- [6] Olson, M., (1982). *Rise and Decline of Nations: Economic Growth*.
- [7] Bilson, C., Brailsford, T., Hallett, A. and Shi, J., (2012). The impact of terrorism on global equity market integration. *Australian Journal of Management*, 37(1), pp.47-60.
- [8] Drakos, K. and Kutun, A.M., (2003). Regional effects of terrorism on tourism in three Mediterranean countries. *Journal of Conflict Resolution*, 47(5), pp.621-641.

- [9] Singh, G., (2012). *Changing Media, Changing China* by Susan L. Shirk (ed.) Oxford University Press, New York, 2011, 288 pp., ISBN-13 978-0199751976.
- [10] Ashby, N.J. and Ramos, M.A., (2013). Foreign direct investment and industry response to organized crime: The Mexican case. *European Journal of Political Economy*, 30, pp.80-91.
- [11] Nitsch, V. and Schumacher, D., (2004). Terrorism and international trade: an empirical investigation. *European Journal of Political Economy*, 20(2), pp.423-433.
- [12] Oetzel, J., Getz, K.A. and Ladek, S., (2007). The role of multinational enterprises in responding to violent conflict: A conceptual model and framework for research. *Am. Bus. LJ*, 44, p.331.
- [13] Esteban, J. and Ray, D., (2011). A model of ethnic conflict. *Journal of the European Economic Association*, 9(3), pp.496-521.
- [14] Collier, P. and Hoeffler, A., (2004). Greed and grievance in civil war. *Oxford economic papers*, 56(4), pp.563-595.
- [15] Miguel, E., Satyanath, S. and Sergenti, E., (2004). Economic shocks and civil conflict: An instrumental variables approach. *Journal of political Economy*, 112(4), pp.725-753.
- [16] Østby, G., Nordås, R. and Rød, J.K., (2009). Regional inequalities and civil conflict in Sub-Saharan Africa. *International Studies Quarterly*, 53(2), pp.301-324.
- [17] Alesina, A., Baqir, R. and Easterly, W., (1999). Public goods and ethnic divisions. *The Quarterly journal of economics*, 114(4), pp.1243-1284.
- [18] Collier, P. and Hoeffler, A., (1998). On economic causes of civil war. *Oxford economic papers*, 50(4), pp.563-573.
- [19] Easterly, W. and Levine, R., (1997). Africa's growth tragedy: policies and ethnic divisions. *The quarterly journal of economics*, 112(4), pp.1203-1250.
- [20] Fearon, J.D. and Laitin, D.D., (2003). Ethnicity, insurgency, and civil war. *American political science review*, 97(1), pp.75-90.
- [21] Glick, R. and Taylor, A.M., (2010). Collateral damage: Trade disruption and the economic impact of war. *The Review of Economics and Statistics*, 92(1), pp.102-127.
- [22] Bayer, R. and Rupert, M.C., (2004). Effects of civil wars on international trade, 1950-92. *Journal of Peace Research*, 41(6), pp.699-713.
- [23] Li, Q. and Vashchilko, T., (2010). Dyadic military conflict, security alliances, and bilateral FDI flows. *Journal of International Business Studies*, 41(5), pp.765-782.
- [24] Bussmann, M., (2010). Foreign direct investment and militarized international conflict. *Journal of Peace Research*, 47(2), pp. 143-153.
- [25] Bénassy-Quéré, A., Coupet, M. and Mayer, T., (2007). Institutional determinants of foreign direct investment. *World economy*, 30(5), pp.764-782.
- [26] Murdoch, J. and Sandler, T., (2002). Civil wars and economic growth: A regional comparison. *Defense and Peace Economics*, 13(6), pp.451-464.
- [27] Barro, R.J., (1991). Economic growth in a cross section of countries. *The quarterly journal of economics*, 106(2), pp.407-443.
- [28] Imai, K. and Weinstein, J.M., (2000). Measuring the economic impact of civil war. *CID Working Paper Series*.
- [29] Leblang, D. and Satyanath, S., (2006). Institutions, expectations, and currency crises. *International Organization*, 60(1), pp.245-262.
- [30] Sobek, D., (2013). *The causes of war*. John Wiley & Sons.
- [31] Sandler, T., (2010). Terrorism shocks: Domestic versus transnational responses. *Studies in Conflict & Terrorism*, 33(10), pp.893-910.
- [32] De Groot, O.J., (2010). The spillover effects of conflict on economic growth in neighboring countries in Africa. *Defense and peace economics*, 21(2), pp.149-164.
- [33] Murdoch, J.C. and Sandler, T., (2002). Economic growth, civil wars, and spatial spillovers. *Journal of conflict resolution*, 46(1), pp.91-110.
- [34] Dunne, J.P. and Tian, N., (2013). Military expenditure and economic growth: A survey. *The Economics of Peace and Security Journal*, 8(1).
- [35] Aker, J.C., (2008). Rainfall shocks, markets, and food crises: Evidence from the Sahel. *Center for Global Development Working Paper*, (157).
- [36] Singhanian and Saini (2017). Determinants of FPI in Developed and Developing Countries; *Global Business Review*; Volume: 19 issue: 1, page(s): 187-213.
- [37] Byrne, Joseph P. & Fiess, Norbert. (2016). "International capital flows to emerging markets: National and global determinants," *Journal of International Money and Finance*, Elsevier, vol. 61(C), pages 82-100.
- [38] Majeed and Ahmad (2006); Determinants of Exports in Developing Countries; *The Pakistan Development Review*, 2006, vol. 45, issue 4, 1265-1276.
- [39] Zada, Muhammad and Bahadar (2011). Determinants of Exports of Pakistan: A Country-wise Disaggregated Analysis; *The Pakistan Development Review*, vol. 50, issue 4, 715-732.

## Appendix

### Countries List

Albania	Egypt	Latvia	Qatar
Algeria	El Salvador	Lebanon	Romania
Angola	Estonia	Liberia	Russia
Argentina	Ethiopia	Libya	Saudi Arabia
Armenia	Finland	Lithuania	Senegal
Australia	France	Luxembourg	Sierra Leone
Austria	Gabon	Madagascar	Singapore
Azerbaijan	Germany	Malawi	Slovenia
Bangladesh	Ghana	Malaysia	South Africa
Bahrain	Greece	Mali	South Korea
Belarus	Guatemala	Malta	Spain
Belgium	Guinea	Mexico	Sri Lanka
Bolivia	Guinea-Bissau	Moldova	Sudan
Botswana	Guyana	Mongolia	Suriname
Brazil	Haiti	Morocco	Sweden
Bulgaria	Honduras	Mozambique	Switzerland
Burkina Faso	Hong Kong	Namibia	Syria
Cote d'Ivoire	Hungary	Netherlands	Tanzania
Cameroon	Iceland	New Zealand	Thailand
Canada	India	Nicaragua	Togo
Chile	Indonesia	Niger	Tunisia
China	Iran	Nigeria	Turkey
Colombia	Iraq	Norway	Uganda
Congo	Ireland	Oman	Ukraine
Costa Rica	Israel	Pakistan	United Kingdom
Croatia	Italy	Panama	United States
Cuba	Jamaica	Papua New Guinea	Uruguay
Cyprus	Japan	Paraguay	Venezuela
Czech Republic	Jordan	Peru	Vietnam
Denmark	Kazakhstan	Philippines	Yemen
Dominican Republic	Kenya	Poland	Zambia
Ecuador	Kuwait	Portugal	Zimbabwe

Source Author World bank with a total of 128 countries



© The Author(s) 2022. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).