

Does Political Instability Hamper Exports? An Empirical Evidence from Somalia

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Abstract: The purpose of this study is to assess the role of political instability in exports in Somalia. An econometric method of ordinary least square (OLS) and a time series data spanning 1985–2017 has been utilized. The empirical results indicate that political instability hamper exports in Somalia. Furthermore, control variables employed for the study have produced different results. Exchange rate and economic growth significantly undermine exports in Somalia. But foreign direct investment is statistically insignificant. It is worth mentioning that the model is free from all diagnostic tests such as, serial correlation, heteroskedasticity, model specification, normality, and multicollinearity. The study suggests several policy recommendations. First, deescalating the civil conflicts and implementing policies towards united and general accepted level of political agreements would attract both domestic and foreign investors which promote exports and domestic production.

Keywords: Ordinary Least Square (OLS), Political Instability, Exports, Somalia

JEL Classification: F50

1. Introduction

Political instability refers to a government collapse due to conflicts or various interest competitions of political parties (Alesina, Özler, Roubini, & Swagel, 1996). However, there is no consensus reached about the definition of political instability in the literature. Various researchers provided different definitions to it. But this study adopted the definition of (Lipset, 1960) who defined political instability as the absence of government form. And Alesina & Perotti, (1996) described political instability as “the propensity to observe government changes”. The change can occur within the boundaries of lawfully or coup forms. Various issues are attributed to trigger political instabilities including, inter alia, economic inequality, income, inflation, and social inequality (Andriamahery & Zhou, 2018). Political instability is considered one of the most significant bottlenecks to economic development and prosperity. More specifically, countries who counter unstable political environments grow less than stable countries (Barro, 1989). Political instability results in the reduction in human as well physical capital, rise crime, impedes

economic growth, reduces public service quality and discourages investments (Çela & Hysa, 2021; Jan, 2021). Additionally, political instability hampers the export of the home countries (Andriamahery & Zhou, 2018).

Somali international trade figures specifically exports deteriorated abruptly since 1988 as evidenced by Figure 1. The downward trend became consistent where export has been declining. From in 1985 to 1987, the export in Somalia had been increasing. It was 34 and 43 US million dollars in 1985 and 1986 respectively. But in 1987, the export has reached a record number high of 53 US million dollar. But unfortunately, this did not last long. In the next year – 1988 – the export plummeted in which it declined to 26 US million. This downtrend became persistence. Export reached to its lowest number – 3 million US dollar – in 1991 and 1992. Hence, this is attributed to the broke out of civil wars in Somalia in which the military government of the country has been couped. Moreover, the same low number of exports has been recorded in 2010 and 2011. And this is explained to the fact that severe droughts started in which later turned into severe malnutrition has adversely affected the exports. Moreover, civil wars and political instability were at their peak during this period. These crises did not only cause life casualties but also hampered exports in Somalia. It is notable that 93% of Somali's exports are from crop and livestock productions (Warsame, Sheik–Ali, Ali, & Sarkodie, 2021). As a result of droughts, – rain failure – crop and livestock productions were severely affected. Since, both crop and livestock productions are dependent on rainfall as water irrigation and drinking respectively. Somali exports are consistently suffering from natural and man–made disasters including, inter alia, droughts, civil unrest, political instability and lack of governance.

Political instabilities and conflicts impact economic decisions by rising transaction costs. Moreover, it increases feelings of uncertainty, risk aversion and fear (Karam & Zaki, 2016). More importantly, it is notable that political instability hampers gross domestic product which ultimately undermines exports. A reduction in domestic production does not only impede export but also fail to cover domestic demands which leads to a rise in imports (Khalil , et al., 2020). Somalia is considered a failed state where there is no rule of law, order, governance, and political stability since in 1991 (Adibe, 1998). The export of Somalia has significantly plummeted since 199. It is worth noting that agricultural production – typically crop and livestock productions– constitute 93% of Somali' export. And this sector has significantly suffered from the civil conflicts and political instabilities resulted from the ousting of the central government in 1991 (Warsame et al., 2021). The significant reduction in export is attributed to the broke out of political instabilities in Somalia. But there are no empirical studies which sheds to the lights the relationship

between political instability and export in Somalia. Nevertheless, there is a growing literature which examines the nexus of political instability and international trade (Glick & Taylor, 2010; Karam & Zaki, 2016), but still there are limited studies – Political instability and export – investigated in sub-Saharan African countries including Somalia. Hence, this study contributes to the literature by ascertaining the impact of political instability on export in Somalia.

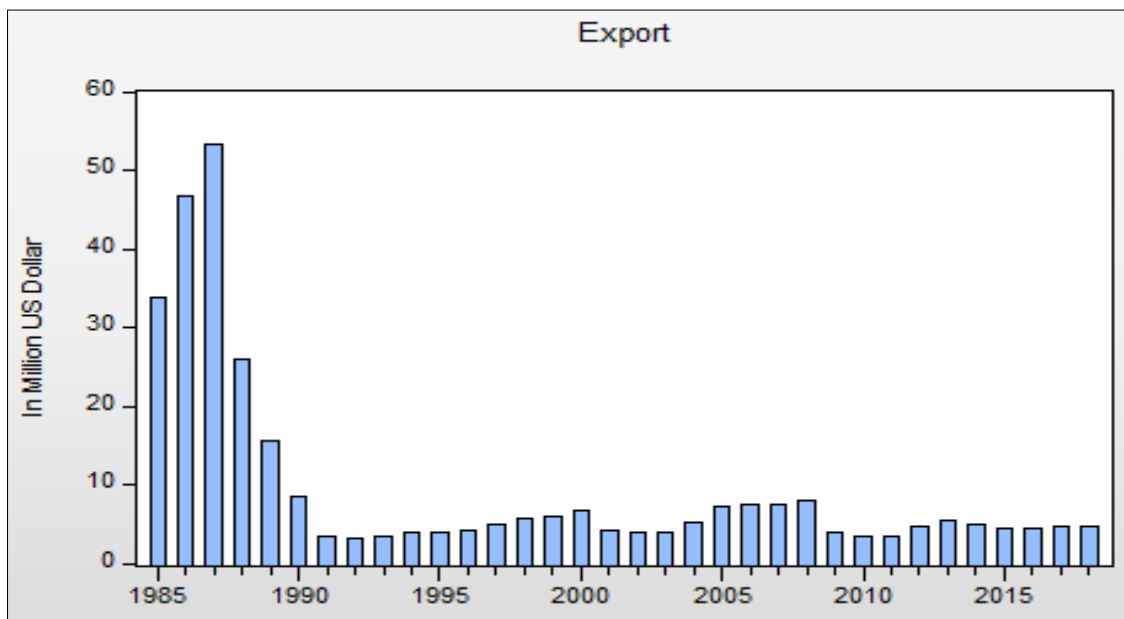


Figure 1. Somali Export (Source: OIC Database, 2019)

The study contains five chapters, and it is structured as follows; chapter two reviews relevant related literature of the study, chapter three present data sources, data descriptions and the methodology utilized. Result and discussion are reported in chapter four. Finally, chapter five summarizes the study and recommends policy implication.

2. The Empirical Literature Review

Political instability does not only hamper foreign investments but also exports through the undermining of domestic production. Extensive studies assessed the relationship between political and exports. Some of these studies will be reviewed in this section. Bashir & Xu, (2014) examined the impact of foreign political instability on Chinese exports using a panel data contains 134 countries and territories spanning 1992–2011. They utilized generalized method of moments (GMM). The study found that foreign

political instability enhances Chinese exports in these countries. It implies that whenever political unrest emerges in these scrutinized countries, Chinese exports to these countries rises. These effects are high in major trading partners of China. Even though most of the previous literature regarding political instability and exports focus on macro level data. Recently the literature turns to investigate the issue at disaggregate level. (Kapri, 2018) ascertained the effect of political instability on export using South Asian countries' firm level data. The probit model is used to analyze the model of the study. The empirical results reveal that an increase in political instability enhances the South Asian firms' entrance in foreign markets.

Recently, Bah, Atangana Ondo, & Kpognon, (2021) analyzed the impact of governance quality, including political stability on exports in Sub-Saharan African countries (SSA). The data used encompass 44 countries and 23 observations. Since, the data is micro panel the researchers utilized generalized methods of moment (GMM) as an econometric model analysis. The study found that political stability improves total exports, service exports, and manufacturing goods in these countries. In addition of another panel study, Karam & Zaki, (2016) ascertained the impact of wars on trade - imports, exports, and trade in Middle East and North African countries (MENA). The study employed augmented gravity model to address the endogeneity problem. The results revealed that wars hampers exports, imports and trade in MENA countries. political instability that results from wars undermine all kinds of trade in MENA region. It is notable that MENA is considered one of the high instable regions of the world.

Single country studies have also highlighted that political instability hamper exports of countries those experience political unrest. Andriamahery & Zhou, (2018) examined the impact of political instability on Madagascar vanilla exports. The main objective of the study is to quantify the 2009 political instability on vanilla exports in Madagascar. The study used different-in-different technique and Tobit model to analyze the data of the study. The results of the study uncovered that political instability hamper vanilla exports in Madagascar. Moreover, Cherry Khalil, Daniel Mirza, (2020) assessed the role of political instability on firm level exports in Egypt. The researchers measured riots and terrorist events for political instability. However, the study found that political instability reduces firm level exports. The adverse effect is more pronounced in the exports of small firms compared to medium and large firms. Nevertheless, the reviewed previous studies of political instability and export nexus have reached inconclusive conclusion. Some studies found that political instability enhance exports, whereas others have found that political instability hampers exports.

3. Material and Method

3.1. Data sources and descriptions

This study analysis the role of political instability in export in Somalia. The study selected Somalia as a case study because of the following reasons. First, Somalia has encountering political unrest since 1991 after the fallen of the military regime. Since from that time, the county did not have a fully functioning government that provides social services and make sure the law and order. Second, Somalia is an agriculturally based economy. And it is notable that the political unrest hampered this sector which undermined the export of the nation. Since crop production and livestock production represent 93% of the total exports. To uncover the relationship between political instability and exports in Somalia, the study employs several control variables such as; economic growth, foreign direct investment, and exchange rate. Regarding to the variables' measurement, political instability data – that represent main explanatory variable objective – is limited or insufficient in Somalia. Hence, we created a dummy variable of political instability of “0”, and “1”. A period of political stable is represented by “0”, whereas “1” is given for a period of political instability (Andriamahery & Zhou, 2018). However, detailed variables' descriptions and sources are presented in Table 1.

Table 1. Variable Descriptions and Sources

Variable	Description	Source
Export	In million US dollars	IMF
Real gross domestic product per capita	US dollar 2010 constant	SESRIC
Foreign direct investment	Net inflow in US million dollars	SESRIC
Political instability	Dummy variable	
Exchange rate	Somali shillings per 1 US dollar	FSNAU & IMF

3.2. Econometric Modeling

This study employs ordinary least square (OLS) regression method. The study selected this method because it assumes that the analysis is fitting the relationship between dependent and independent variables that reduces the sum of the squared errors (Zdaniuk, 2014). The difference between the predicted and actual outcome series is the error.

This research undertaking specifies a model that assesses the role of political instability, economic growth, foreign direct investment, and exchange rate in exports in Somalia. The model is expressed – by following the previous studies (Sekkat and Varoudakis, 1998; Kapri, 2018) – as follows:

$$\ln Exp_t = \beta_0 + \beta_1 \ln RGDP C_t + \beta_2 \ln FDI_t + \beta_3 \ln PI_t + \beta_4 \ln ER_t + \varepsilon_t \quad (1)$$

Where: – the subscripts t represents time periods respectively. β_0 and β_{1-4} represent the intercept and coefficient elasticities of the independent variables respectively.

$\ln Exp_t$ is the natural logarithm of export, $\ln RGDP C_t$ is the natural logarithm of economic growth, $\ln FDI_t$ is the natural logarithm of foreign direct investment, $\ln PI_t$ represent the political instability, and $\ln ER_t$ stands for the natural logarithm of exchange rate. ε_t represents the disturbance term.

4. Empirical Results and Discussion

In this section, the study presents the empirical results and discussion of the study. The study employed ordinary least square (OLS) regression and its diagnostic tests. And Table 2 shows the results of the ordinary least square that displays the relationship between the dependent variable and explanatory variables. The results exhibit that most of the explanatory variables are statistically significant such as; exchange rate, economic growth, and political instability. In the same vein, all of these variables harm export in Somalia. On the contrary, foreign direct investment is statistically insignificant because its probability value is greater than the 5% significance level. Interpretively, a 1% increase in the exchange rate will decrease export by 0.316%. Several studies have emphasized the importance of exchange rate depreciation on the export increase (Sekkat and Varoudakis, 1998; Dang, Zhang, Nguyen and Nguyen, 2020). But our result has found that exchange rate depreciation is bad for exports of Somalia. This could be explained by several reasons. First, the Somali government has been couped in 1991, since that time it has been struggling to stand its own feet. This has not spared to undermine the central bank of the country which is crucial for controlling the money supply and monetary policy. Nevertheless, the local currency – Somali shillings – circulates in the economy without the regulation of the central bank. This unregulated currency ultimately led to that its value declining dramatically. And Somali shillings are not used to be conducted in large transactions, instead of that, the US dollar is used for large transactions. To sum up, Somali shillings lost its value and this justifies our finding that the exchange rate hampers exports. Several previous studies support our result of the negative effect of exchange rate on exports (Doğanlar, 2002; Aftab, Abbas and Kayani, 2012).

Some of the striking findings of the study are that both economic growth and political instability substantially undermines the exports of Somalia. A 1% increase in economic

growth decreases exports by about 1.849%. This result is contradictory with several previous studies that concluded an increase in economic growth enhances export (Sankaran, Krishna, & Vadivel, 2021; Hussain, Hussain, & Alam, 2020). But our result could be explained to that Somali domestic production – economic growth – mainly depends on the agriculture sector (crop production and livestock production). And this sector constitutes 93% of the exports. It is notable that Somali main export destination nations – Gulf cooperation countries – are mainly concerned by the qualities of the products rather than quantities. There are several times in which these countries–imposed sanctions on Somali livestock exports due to poor quality concerns (Warsame, Sheik–Ali, Ali, & Sarkodie, 2021). Several studies concluded that economic growth does not relate to exports (Özguur Uysal & Abdulakadir Said Mohamoud, 2018).

Likewise, political instability hampers exports by about 1.227% if political instability increases in one unit. The adverse effect of political instability on exports could be attributed to the absence of a functioning Somali government. This has resulted in the destruction of every sector of the nation’s economy. The country shifted to depend on imports for covering domestic demands, even though, it does not cover all demands sufficiently. Political instability has also crippled the infrastructure of Somalia such as; roads, and telecommunication which are necessary for economic activities. Political instability discourages both local and foreign investors to invest in productive sectors of the country which are critical for domestic demands and exports. The negative effect of political instability on exports corroborates with several previous studies Karam & Zaki, 2016; Cherry Khalil, Daniel Mirza, 2020).

Furthermore, it is notable that our model is not spurious. Because the R–squared is less than the Durbin–Watson. The R–squared also shows goodness fit of the model. Interpretively, 82% of variation of the dependent variable of exports is explained by the scrutinized explanatory variables.

Table 2. Results of Ordinary Least Square (DV: Inexport)

Variable	Coefficient	Std. Error	t–Statistic	Prob.
InER	-0.316291	0.099016	-3.194357	0.0035
InFDI	0.074641	0.059876	1.246588	0.2229
InRGDPC	-1.849164	0.651942	-2.836392	0.0084
PI	-1.227133	0.398064	-3.082752	0.0046
C	13.89143	3.603157	3.855348	0.0006

After estimating the OLS regression method, we have to test that our result is free from diagnostic problems. We checked several diagnostic tests and its result is reported in

Table 3. One of the diagnostic tests is normality test. It presents whether the data is normally and identically distributed or not. The null hypothesis H_0 : the data is normally and identically distributed. Alternative hypothesis H_1 : the data is not normally and identically distributed. However, the p-value of Jarque-Bera is insignificant which indicates that the data is normally and identically distributed.

Sometimes the variance of the error term could be related. Hence, to confirm that the error term of the model is not correlated we test serial correlation. The null hypothesis H_0 : the variance of the error term is not correlated. Alternative hypothesis H_1 : the variance of the error term is correlated. Since the p-value of the serial correlation is insignificant, we conclude that the model is free from serial correlation.

One of the problems of econometric models could be that the variance of the error term is not constant (heteroskedasticity). The null hypothesis H_0 : the variance of the error term is constant.

Alternative hypothesis H_1 : the variance of the error term is not constant. Since the p-value of the model is insignificant, we conclude that the variance of the error term is constant.

The final diagnostic test is model specification. We check this test using Ramsey reset test. It presents whether the model is correctly specified or not. The null hypothesis H_0 : the model is correctly specified. Alternative hypothesis H_1 : the model is not correctly specified. Since the P-value of the F-statistics is insignificant, we conclude that the model is correctly specified.

Table 3. Diagnostic Tests

LM Test	2.5877
	(0.0646)
Heteroskedasticity	2.179
	(0.0978)
Normality Test	1.4056
	(0.4951)
Reset Test	2.1876
	(0.1507)
Adjusted R ²	0.82
Durbin-Watson	1.28

Finally, we examine whether explanatory variables are perfectly correlated to each other or not – multicollinearity – as reported in Table 4. We check this issue using variance

inflation factor. The rule of thumb is that if the coefficient variance is greater than 10, we conclude that the variables are perfectly correlated and vice versa. Since that all the variables have coefficients which are less than 10, we summarize that the variables are not perfectly related.

Table 4. Variance Inflation Factors

Coefficient Variable	Uncentered Centered		
	Variance	VIF	VIF
LER	0.009804	248.4800	10.98457
LFDI	0.003585	22.04977	1.498923
LRGDPC	0.425029	2923.134	5.772486
PI	0.158455	41.24570	7.499219
C	12.98274	4130.374	NA

5. Conclusion and Policy Implication

Exports are considered a key macroeconomic variable that participates a positive economic growth and employment. Different variables have been proposed to affect exports including, inter alia, exchange rate, inflation, foreign direct investment and several others. But the extant literature has ignored to consider the relationship between political instability and exports. To bridge that gap, this undertaking assesses the role of political instability in exports in Somalia. This east African country has been countering severe political turmoil, civil wars, and civil unrest for a long period of time. An econometric method of ordinary least square and a time series data spanning 1985–2017 has been utilized. The empirical results indicate that political instability hamper exports in Somalia. Furthermore, control variables employed for the study have produced different results. Exchange rate and economic growth significantly undermine exports in Somalia. But foreign direct investment is statistically insignificant. It is worth mentioning that the model is free from all diagnostic tests such as, serial correlation, heteroskedasticity, model specification, normality, and multicollinearity.

The study suggests several policy recommendations. First, deescalating the civil conflicts and implementing policies towards united and general accepted level of political agreements would attract both domestic and foreign investors which promote exports and domestic production. Second, finding a unique monetary policy which is controlled by the nation's central bank would help the reduction of inflation. The monetary policy in Somalia is malfunctioning, hence, a functionable monetary policy – by printing new Shilling Somali currency – can participate in the reviving of the exports.

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