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Impact of Domestic and Transnational Terrorism on Capital Flight: Moderating role of Military Expenditure and Institutional Quality. Evidence from Asian & MENA Countries

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ABSTRACT

This research is fundamentally concerned with the issue of terrorism and its impact on capital flight from Asian countries and MENA countries. Terrorism remains an active research topic with respect to economic consequences; such that increase in terrorism causes political instability, which gives a poor economic outlook, hence investors tend to shift their money out of the victimized country. Furthermore, this study has explored the distinct impacts of domestic and transnational terrorism simultaneously for capital flight. Moreover, this study has discovered the role of military expenditure as a policy variable to combat terrorism. Besides this, the study also highlights the prominence of institutional quality because the effectiveness of government institutions plays a significant role to ameliorate the uncertainty arising due to terrorism and hence cause a reduction in capital flight. Panel data comprising of 9 Asian and 5 Mena countries from 2006 to have been used in this study. Generalized Method of Moment for empirical testing has been applied to address the issue of capital flight trap and endogeneity among variables. Findings reveal that both dimensions of terrorism have a significant impact on capital flight.

Keywords: MENA, Transnational terrorism, GMM,

1. INTRODUCTION

Complementing the growing strand of literature on terrorism and capital flight with respect to developing countries, this study is an attempt to fulfill the gap in the context of Asian and Mena countries. Recent studies were mostly conducted in sub-

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Saharan African countries on terrorism. The fostering consequences of terrorism have an importance for both the academics and policymakers. (Efobi et al., 2016, Asongu et al. 2017). Terrorism creates dissatisfaction in the community and reduce happiness and coordination in the community (Wouter and Piotr, 2018) The consequences of 9/11 terrorist attacks on stock markets, Madrid 2004 and in London 2005 have shown that terrorism is a new facet of risk that investors and financial institutions may be fronting (Marc Chesney et al, 2011). In fact, terrorist activities can have strong economic concerns that may disturb economic indices, FDI flows, and movement of productive resources across open economies. The terrorist activities badly affect the tourist industry and increase economic uncertainty, which ultimately affects decision making process of investors. (Abadie and Gardeazabal, 2008). Although terrorism has been studied a lot dimensionally terrorism has not been much discussed in past studies. Moreover, the consequences of a domestic terrorist event are only felt at home and there are no damaging spillovers or implications for other countries. In contrast, transnational terrorist events have ramifications for two or more countries. (Todd Sandler, 2010).

Another tinted feature of this study is that it has used military expenditure as a moderator which is used in notion with the recent study of Simplice A.Asongua and Joseph Amankwah-Amoah (2017). Moreover, the government's reaction to terrorists' attacks greatly differs between domestic and transnational terrorism. For domestic terrorist attacks, the government has no choice but to be self-sufficient and discover a fitting blend of defensive and proactive measures. In contrast, transnational terrorist attacks may persuade governments to involve in strategic tactics, whereby they wait for another targeted government to eradicate the threat of terrorism. (Arce and Sandler 2005, Sandler and Siqueira, 2006). On this note, it is important to explore the role of military expenditure as a policy variable whether the increase in military spending by government is helpful to fight against terrorism in a distinct manner for both the domestic and transnational terrorism. Nevertheless, the role of military expenditure is underexplored and there still exist conflicts both theoretically and empirically that either increase in military spending has a positive or negative impact on terrorism. For instance, a study reports in this regard that an increase in military expenditure is not necessarily effective

to fight against terrorism. (Mete Feridun, and Muhammad Shahbaz, 2010). Silk (2005) argued that violent counter-terrorism measures tend to incite further terrorist attacks rather than precluding them. In a similar manner, another study reports that if more percentage of GDP is utilized for defensive measures while ignoring other developmental disquiets, it can fuel terrorist activities if the fruit of economic development can't trickle down to poor sectors (Muhammad Shahbaz, 2013).

Third emphasized the feature of the study is that it is using institutional quality as a moderator in a unique manner. Authors have shown that capital flight is driven by private actors due to political and institutional instability, less developed financial system, macroeconomic uncertainty, and a higher rate of return differentials abroad (Boyce and Ndikumana, 2003, Ajayi, 2007, Ndiaye, 2011). Another study reports that poor institutional quality has a positive relationship with capital flight, as theoretically expected. It implies that government should increase the effectiveness of institutions to reduce capital flight (Marko Kwaramba, Nyasha Mahonye and Leonard Mandishara, 2015). Subsequently, it is vital to study the role of institutional quality between terrorism and capital flight. This research has been conducted to investigate empirically whether military expenditure plays moderating role between terrorism (domestic and transnational terrorism) and capital flight and to investigate whether institutional quality plays moderating role between terrorism (domestic and transnational terrorism) and capital flight or not.

The remainder of this article comprises of following subdivisions. Section 2 describes logical foundations through associated literature and hypothesis formulation. Section 3 scrutinizes the data and methodology. Section 4 describes empirical results. Last section 5 concludes the research and highlights the limitations, implication and future research directions.

2. LITERATURE REVIEW AND HYPOTHESIS

In this section, a literature review of capital flight and terrorism has been conducted stepwise, which ends with a hypothesis statement in each subsection.

1.1. Association between Terrorism and Capital Flight

Terrorism is the premeditated use or threat to use violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate non-combatant victims (Enders and Sandler, 2012,). Charles Townshend (2002) defined terrorism as “the calculated use or threat of violence to inculcate fear, intended to coerce or intimidate governments or societies. Nevertheless, there exists large literature on the impact of terrorism on foreign direct investment (FDI). Li (2011) views terrorism as an extreme form of political instability that disturbs the FDI. Another study reported that FDI inflows to 136 developing countries were significantly affected by terrorism (Alomar and El-Sakka, 2011).

Terrorism augments the general level of uncertainty, which redirects FDI to safer venues. (Walter Enders, Adolfo Sachisda and Todd Sandler, 2006) Similarly, using an event study methodology, another study finds that terrorist attacks adversely affect Pakistani stock market, they also report that the magnitude of this impact is positively related to the severity of the attack (Aslam and Kang, 2015). Many other studies have also revealed that economic and political instability factors such as civil unrest and terrorism decrease economic growth (Sana and Maiuam, 2018). Growing terrorism leads to the insecurity of lives and properties, also motivates an investor to transfer their wealth outside the economy (Ayodele Thomas, 2014). In similar pattern recent study which is conducted in 29 African countries to explore the impact of domestic and transnational terrorism suggests that both the forms of terrorism are positively associated with capital flight (Uchenna Efobi and Simplice Asongu, 2016). Empirically, there are several factors which contribute to capital flight. Furthermore, capital flight is the result of government policies, political and economic circumstances of country, feeble government structure, macroeconomic instability, lack of property rights protection, complex banking system, inadequate access to financial investment, high imposed taxes, substantial illegal activities, and elevated corruption (De Boyrie, Nelson, & Pak, 2007; Mulino, 2002).

Another study results show that political risk has a positive and significant relationship with capital flight. In other words, this means that capital flight will increase as political risk increases (Puah et al., 2016). Another study which reflects that the main

factors driving capital flights are corruption and economic instability, inflation and exchange rate (Ondo and Taylor, 2012). However, incorporating game theory in a unique manner. A game theory which allows uncertainty and behavior under risk and ambiguity which explains decision making and behaviors in strategic environments, in other words making safe strategies appear relatively more attractive (Evan M. Calford, 2015).

In line with game theory, terrorists' act is the planned strategy intended to coerce or intimidate governments or societies which ultimately creates an atmosphere of uncertainty and promotes political instability. In such a situation of political instability and conflicts, which are highly associated with uncertainty in the future returns, investors and companies lose their confidence in the host country and opt safe strategy and shift their capital from terror stricken country to safe one. So, this study is proposing the first hypothesis as follows

H₁ (a): Domestic terrorism has a significant positive impact on capital flight.

As we have used both the dimensions simultaneously in accordance with game theory, in transnational terrorism it seems the planned strategy of terrorists to target or intimidate different nations or governments at the same time so, increase in transnational terrorism generates an atmosphere of uncertainty. In such a situation when transnational terrorism prevails investors and companies will lose their confidence while opt safe strategy and they will transfer their capital abroad for safekeeping.

H₁ (b): Transnational terrorism has a significant positive impact on capital flight

1.2. Association between Terrorism and Military expenditure.

Military expenditure may or may not reduce terrorism. Landes (1978), Sandler (2005) and Silke (2005) argue that forceful counterterrorism measures incline to provoke further terrorist attacks rather than preventing them. In the same manner, a study in this regard reported that the increase in military expenditures is not necessarily effective to fight against terrorism (Mete Feridun and Muhammad Shahbaz, 2010). Likewise, this narration is quite consistent that counterterrorism efforts by the U.S instead of decreasing terrorism further powered terrorism (Lum et.al. 2006). However, in this regard, a most recent study in which threshold military expenditure approach has been opted to see the mitigating effect of military expenditure on the relation of terrorism and capital flight

studied. Their findings are based on threshold approach and focus on how much percentage of GDP should be utilized for military expenditure to mitigate the effect of terrorism on capital flight. They further suggest to extend the inquiry in different countries. Studies suggest that governments' response to domestic (homegrown) terrorism is more effective than their response to transnational terrorism (Cronin 2006; White 2003). As terrorism incidences are increasing, so many governments are deploying a large amount of financial resources to dampen the effect of terrorism. (Czinkota, Knight, Liesch and Steen, 2010). However, findings of a recent study which reveals that military expenditures play important in mitigating the positive effect of terrorism on capital flight. Furthermore, military expenditure is effective against combating both the domestic and transnational terrorism (Simplice Asongu et.al 2017). Additionally, game theory is an excellent tool to study counterterrorism interactions among terrorists and governments (Todd Sandler 2015, Carter, 2015). According to game theory terrorists' strategies are planned to intimidate governments and societies, so when terrorism increases in the country, the government opt defensive strategy and increase military expenditure to fight against domestic terrorism. Hence this study proposes its hypothesis H_2 (a) and H_2 (b) as follows:

H_2 (a): Military expenditures weaken the relationship between domestic terrorism and capital flight.

H_2 (b): Military expenditures weaken the relationship between transnational terrorism and capital flight.

1.3. Association between institutional quality and capital flight.

Institutions play an extremely important role in fighting against terrorism (Asongu et al. 2018a and Asongu et al 2018b). Institutional quality is a broad concept that apprehensions law, individual rights, and high quality government regulation services. (Bonnie G. Buchanan, Quan V. Le, Meenakshi Rishi, 2012). Stein and Daude (2001) use five out of six governance indicators provided by kaufman and show that inward FDI can be increased by the quality of institutions like political instability and violence regulatory burden and rule of law. Higher institutional quality will also result in procedural justice to counter-terrorism financing sanctions' affected people (Thomas,

2018). Another study argues that government policy perceived by residents will encourage them to hold their wealth abroad (Niels Hermes and Robert Lensink, 2001). Tun et al. (2012) argue that countries with better institutional quality should be able to attract more investment due to a decrease in both the cost of doing business and in uncertainty. Javorcik and Shang-Jin (2009) showed that bad institutional quality such as corruption reduce inward FDI. Empirical studies have concluded that poor or inefficient institutions discourage foreign investment and encourage capital flight. Findings of the study revealed that the interaction between institutional quality and macroeconomic uncertainty reduces the negative effect on the flow of FDI by economic uncertainty (Michael Effah Asamoah, Charles K.D. Adjasi and Abdul Latif Alhassan, 2016). Furthermore, a study analysed large panel data of developing and emerging market for 1970- 2001, the result of the study reported that weak institutions spur capital flight, such that better quality institutions and good public governance can improve the flight of capital (Valerie Cerra, Meenakshi Rishi and Sweta C. Saxena,2008).

H₃ (a): Institutional quality moderates the relationship between domestic terrorism and capital flight in such a manner that institutional quality will weaken the relationship between terrorism and capital flight.

H₃ (b): Institutional quality moderates the relationship between transnational terrorism and capital flight in such a manner that institutional quality will weaken the relationship between terrorism and capital flight.

3. RESEARCH METHODOLOGY

1.4. Data

The final sample consists of 14 countries out of which 9 are Asian countries (Afghanistan, Bangladesh, India, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and 5 MENA countries (Algeria, Iraq, Lebanon, Turkey, Yemen). All are those countries which are more prone to terrorism. Sample period consists of 10 years from 2006 to 2015. Overall panel data constructed with 140 observations for final estimation. For data collection, four different databases have been used. World development indicators (WDI), International Monetary Fund (IMF), Global Terrorism Database (GTD) and World Governance Indicators (WGI).

Capital flight has been measured using the residual method of World Bank. (Erbe 1985, World Bank 1985). It is computed as follows:

$$cap. fi, t = EXTERNALDEBT_{i,t} + FDI_{i,t} - (CA_{i,t} + \Delta RES_{i,t}) + MISIN_{i,t}$$

Whereas external debt is the change in the stock of external debt outstanding, FDI is net foreign direct investment, CA is the current account deficit, and RES is net additions to the stock of foreign reserves and MISIN refers to trade mis invoicing (Efobi et al. 2015, James K. Boyce and Leonce Ndikumana, 2010).

The capital flight has been measured via a residual method with the adjustment of trade mis invoicing figures taken from Global Financial Integrity Report (2015). Among several methods, the residual method has mostly adopted the method. This method calculates capital flight as a residual difference between sources and uses, sources of funds mean all net official inflows (net increase in external debt and a net inflow of foreign direct investment) while uses mean current account deficit and additions to foreign reserves. Another refinement in residual has been done for trade mis invoicing suggested by (James K. Boyce and Leonce Ndikumana, 2010). Trade mis invoicing can hide capital flight figures and it can be calculated by comparing statistics of reporting country and its trading partner. However, this study calculated trade mis invoicing figure from (GFI) to compare with other variables and then capital flight divided by current GDP.

Terrorism has been measured as yearly (Ln) domestic incidents and (Ln) transnational incidents. Terrorism data on its two dimensions have been obtained from the Global Terrorism Database (GTD). The decomposition of data for domestic and transnational terrorism has been done by ensuing five steps of (Enders et.al, 2011). This decomposition is necessary to contrast the differential impact of domestic and transnational terrorism for capital flight. However, those five steps stated as follows:

First, the nationality of the target examined with the nationality of venue country. Nationality up to three targets has been provided by GTD. Nationality differs for any victim, target or perpetrator terrorism is transnational. Second target types look up, such that attacks against diplomats, consulates and embassies considered as transnational,

attacks against diplomatic staff, their families and non-governmental organizations which are multinational all those attacks are transnational. Third, target entities such that attacks against venue country that occur outside the venue country are considered as transnational. In the same manner, terrorists' incidents against international entities (NATO infrastructure, UN agencies, and foreign businesses) are considered as transnational. Fourth, we have to use information on country victims, hostage, and country detailed demands to filter incidents as transnational. If, a hostage event that happened outside venue country and ransom for the hostage commanded by venue country terrorism will be transnational.

Finally, we utilize information from GTD where kidnappings or hijacking take place. Incidents in which plane diverted to another country such that more than one country included any such incident is transnational. After filtering incidents as domestic and transnational, taking log natural of yearly reported domestic and transnational incidents, terrorism has been measured following Simplice et.al. (2017). Military expenditure, also known as a defense budget, reflects the amount of financial resources employed by a nation to rising and upholds armed forces or methods vital for defense purpose. Military expenditure has been measured as a percentage of GDP (Asongu, 2015, Uchenna Efobi 2016).

This study used a composite measure of institutional quality from World Governance indicators (Daude and Stein, (2007), and Buchanan et al, (2012). Institutional quality comprises six dimensions named as Political Stability, Voice, and Accountability, Government Effectiveness, Regulatory Quality, Rule of Law and Corruption Control. Globerman and Shapiro, (2002) suggested that these dimensions are highly correlated, so it is toiling to use them all in a single regression. The correlation matrix in the appendix (1) reports almost the same correlation existing with past studies thus, following those studies the first principal component is extracted for six governance indicators by using factor analysis. The value of the original index ranges from -2.5 to 2.5 on the negative side indicating poor institutional quality and on positive side reflecting good institutional quality. The values calculated for this study through factor analysis ranges from -2.009 to 1.459 the mean value of this index is 0 while the standard deviation

is 0.929 in comparison to Gliberman and Shapiro (2002) estimates 0.01 and 0.96 respectively.

The controls according to past literature in our study are Trade openness, which has been measured as a natural determinant of capital flight. In past literature it has mixed results, if trade openness is high which improves economic stability, capital flight decreases and vice versa (Seuang-Gwan Baek .Doo young Yang, 2010). Trade openness has been measured by “Exports plus Imports of Commodities as a percentage of GDP (Ndikumana and Boyce, 2011, Asongu, 2015 and Bandyopadhyay et al. (2014) Seung-Gwan Baek and Doo Yong Yang, 2010). Increase in GDP can have a positive effect on capital flight. Some studies suggest that the countries experiencing higher GDP growth signal higher investment opportunities within the country and boost investors to invest domestically which ultimately reduce capital flight and vice versa (M.Imam Alam and Rahim M Quazi,2003, Conesa,1987, Lessard & Williamson, 1987). The FDI investment may positive or negative relationship with capital flight, therefore, theoretically, GDP has the vague type of relationship with capital flight.

1.5. Estimation Techniques

For testing hypothesis, this study has used GMM, which controls endogeneity. This technique uses regressors as instrumental variables. GMM is also a superb choice when cross sections are more than time period. Cross country variations were also considered through GMM. (Asongu et.al. 2017). This study used 2 steps dynamic GMM panel estimation suggested by (Arellano and Bond (1991) and Blundell and Bond (1998). Total six models have been estimated. Regression models

$$\text{Capf it} = \beta_0 + \beta_1 \text{ D.Tit} + \beta_2 \text{ MEit} + \beta_3 \text{ IQit} + \sum \text{Wit} + \epsilon_{it} \quad (1)$$

$$\text{Capf it} = \beta_0 + \beta_1 \text{ Tr.Tit} + \beta_2 \text{ MEit} + \beta_3 \text{ IQit} + \sum \text{Wit} + \epsilon_{it} \quad (2)$$

$$\text{Capf it} = \beta_0 + \beta_1 \text{ D.Tit} + \beta_2 \text{ ME} * \text{Tit} + \sum \text{Wit} + \epsilon_{it} \quad (3)$$

$$\text{Capf it} = \beta_0 + \beta_1 \text{ D.Tit} + \beta_2 \text{ IQ} * \text{Tit} + \sum \text{Wit} + \epsilon_{it} \quad (4)$$

$$\text{Capf it} = \beta_0 + \beta_1 \text{ Tr.Tit} + \beta_2 \text{ ME} * \text{Tit} + \sum \text{Wit} + \epsilon_{it} \quad (5)$$

$$\text{Capf it} = \beta_0 + \beta_1 \text{ Tr.Tit} + \beta_2 \text{ IQ} * \text{Tit} + \sum \text{Wit} + \epsilon_{it} \quad (6)$$

Capfit is capital flight of country i at time t; β_0 is a constant; (D.T), Domestic terrorism (Tr.T) transnational terrorism ME, Military Expenditure, I.Q, Institutional

Quality ME* D.T interaction term between military expenditure (ME) and Domestic Terrorism (T) IQ*D.T, Interaction between institutional quality and domestic terrorism ME* Tr.T is interaction term between transnational terrorism and military expenditure. IQ*Tr.T is an interaction term between institutional quality and transnational terrorism. W is the vector of control variables and $\epsilon_{i,t}$ is the error

4. EMPIRICAL RESULTS

3.1. Descriptive statistics and correlation Matrix

3.1.1. Interpretation.

The table below summarizes descriptive statistics of all variables. The above table reports mean value, standard deviation, minimum, maximum and number of observations for all the variables included in this particular study.

The Capital flight which is a dependent variable of the study, according to the table above mean value of the capital flight is 11.749 representing that most of the countries have a high level of capital flight. Countries like Bangladesh, Indonesia, and India on the average experience more capital flight. The minimum value for the sample under study reported as 5.198 and maximum value as 16.153 while standard deviation which represents the samples dispersion level of all variables, here for capital flight reported as (SD= 2.358).

The Terrorism with its two broad classifications has been used as independent variables in this study. On average domestic attacks reported are more in number than transnational terrorist's attacks. The mean value of domestic terrorism is 4.611 while the maximum value is 7.934 and minimum value for domestic terrorism is 0.693.

Table No. 1- Descriptive Statistics				
Column1	Mean	Standard Deviation	Minimum	Maximum
CAPF	11.749	2.358	5.198	16.153
LN(D.T)	4.611	1.814	0.693	7.934
LN(TR.T)	2.345	1.625	0	7.034
M.E	2.482	1.298	0.575	6.274
I.Q	0	0.929	-2.008	1.459
GDP	4.81	3.039	-7.445	14.435
FDI	1.618	1.284	-1.582	6.078
TRADE	63.764	25.57	27.655	140.437

Notes : (Capf) is Capital flight, LN(D.T) is natural logarithm of yearly reported domestic incidents, LN(Tr.T) is the natural logarithm of yearly reported transnational incidents, M.E is military expenditure as %age of GDP, I.Q is institutional Quality by World Governance Indicator. GDP is annual growth from World Development Indicator. The FDI is a percentage of GDP taken from WDI. Trade represents Trade openness is from WDI imports plus exports as %age of GDP. Some countries like Afghanistan, Turkey, Yemen, and Lebanon also reports a higher number of transnational terrorist incidents. According to the table above the average value of transnational terrorism incidents indicated as 2.345 with the maximum value of 7.034 while minimum value is 0 as countries like Bangladesh, Sri Lanka and Nepal for some years report no as such incidents of transnational terrorism.

The Military expenditure has been used as a moderator in the model of the study. The mean value of 2.482 indicates the average spending of the percentage of GDP for defense budget with the minimum value of 0.575 and the maximum value of 6.274 while standard deviation reported as 1.298. This indicates that spending varies from country to country like Algeria and Iraq spends more on defense budget while Indonesia and Bangladesh utilize less for military expenditure. Most countries in the sample under study score on the negative side representing poor institutional quality. The mean value of index is 0 with the maximum value of -2.008 and a minimum value of 1.459 while the standard deviation for this index reported as 0.929. In the **above** table GDP, FDI and trade openness are control variables in this study in line with existing literature.

Table No. 2 Correlation Matrix								
Variables	CAPF	LN(D.T)	LN(TR.T)	M.E	I.Q	TRADE	GDP	FDI
CAPF	1.000							
LN(D.T)	0.328	1.000						
LN (TR.T)	0.209	0.766	1.000					
M.E	-0.286	-0.077	0.177	1.000				
IQ	0.006	-0.322	-0.576	-0.253	1.000			
TRADE	0.054	0.042	-0.101	0.048	0.105	1.000		
GDP	0.107	-0.025	-0.052	0.014	-0.116	-0.192	1.000	
FDI	-0.078	-0.098	-0.097	0.094	0.319	0.392	-0.105	1

3.1.2. Interpretation.

Table no. 2 summarizes correlations among all variables of the study. Above table shows the correlation among major variables as expected. Further consistent with expectations domestic terrorism is 32.8% positively correlated with capital flight. As depicted in table transnational terrorism is 20.9% positively correlated with capital flight? The Military expenditure is -28.6% is negatively correlated to capital flight. Institutional quality is positively correlated with capital flight. Trade is with the value of 0.054 is positively correlated with capital flight. GDP is with capital flight correlated with the value of 0.107. FDI is 0.078 negatively correlated with capital flight.

Table No. 3: Impact of Domestic and Transnational terrorism on a capital flight		
Dependent Variable	Capf	
	Model 1	Model 2
Capital flight(-1)	-.428 (0.147)	-.202 (0.340)
Constant	15.590*** (0.000)	13.579*** (0.000)
LN(D.T)	.428** (0.021)	
LN(TR.T)		.705*** (0.001)
M.E	.522 (0.332)	.478 (0.18)
I.Q	1.977 (0.531)	.064 (0.18)
GDP	.049 (0.147)	0.032 (0.217)
FDI	-.272*** (0.007)	-.214** (0.04)
TRADE	-0.018* (0.05)	-0.239** (0.03)
No.of observations	112	112
Sargan (P)	0.332	0.143

Notes: Dependent variable is capital flight, the p-value is in parenthesis, ***, **, * show significance levels at 1%, 5%, and 10% the validity of the instrument are given by sargan test which is valid for both the models.

3.1.3. Interpretation.

In this particular study with both the domestic and transnational terrorism GMM regression models used individually to better see the impact of domestic and transnational terrorism in line with the existing literature. The above results strongly support the proposed hypothesis that domestic and transnational positively affect capital flight. In both the models, terrorism causes an increase in capital flight. Here, domestic terrorism and transnational terrorism are having statistically significantly impact on a capital flight which is consistent with the recent literature (Asongu et.al 2017, Efobi et.al 2016).

However, transnational terrorism impact is more worrisome in the context of Asian and Mena countries as shown in the above table. Again, these results are quite consistent with the past studies in which domestic and transnational terrorism have been used simultaneously. The results of those studies for FDI found more pronounced than domestic. (Walter Enders, Todd Sandler, and Khusrav Gaibulloev, 2011). In model 1 and model 2, GDP has a positive impact on capital flight, which is quite consistent with past literature. (M. Imam Alam and Rahim M Quazi, 2003, Conesa, 1987, Lessard & Williamson, 1987). Trade openness which is considered to be the natural determinant of capital flight is negatively significantly impacted capital flight while FDI is also negatively significant related. These results are also in line with the past literature. (Efobi et.al. 2016).

Table No. 4 (Models 3, 4, 5,6): Impact of Interaction terms on the direct linkage of terrorism & capital flight

Dep.Variable	Model 3	Model 4	Model 5	Model 6
Capital Flight	LN(D.T)_M.E	LN(D.T)_IQ	LN(TRT)_M.E	LN(TRT)_IQ
Lag Capital Flight	-.463**(0.016)	-.075(0.753)	-.279**(0.014)	-.294(0.069)
Constant	17.734***	12.444***	15.613***	13.658***
LN(D.T)	.247 (0.141)	.243 (0.145)		
LN(TRT)	--	--	.485** (0.017)	.501** (0.027)
LN(D.T)*M.E	.102*** (0.005)	--	--	--
LN(D.T)*IQ	--	.017 (0.889)	--	--
LN(TRT)*M.E	--	--	--	-
LN(TRT)*IQ	--	--	--	-.329 (0.158)
GDP	.039 (0.132)	.036 (0.280)	0.033* (0.079)	.020 (.725)
FDI	-.292** (0.019)	-.321 (.495)	-.266*** (0.004)	-.276 (.156)
TRADE	-0.110*** (0.006)	-.007 (.653)	-.027** (0.013)	-.026 (.339)
Sargan(P)	0.286	1.000	0.145	0.188
No.of obs	112	98	112	98

Notes: Dependent variable is capital flight, the p-value is in parenthesis, ***, **, * show significance levels at 1%, 5%, and 10% the validity of the instrument are given by sargan test which is valid for all the models.

3.1.4. Interpretation.

Model 3 represents the results after introducing interaction term. The result is quite consistent with the expectation as the coefficient of domestic terrorism become

insignificant, which proves that military expenditure is helpful in reducing the negative impact of terrorism. The interaction term itself is significant. These results are quite consistent with the past studies (Asongu, 2016 and 2017). Model 5 represents the result after introducing the interaction term of military expenditure with transnational terrorism. Here, we can conclude that the interaction term moderates the relationship in such a manner that coefficient value reduces from 0.701 to 0.485 while interaction term itself is statistically significant. This result is also significant in line with existing studies. In other words, military expenditure is effective to mitigate the effect of terrorism but does not completely eliminate its impact as it does in case of domestic terrorism. These findings are consistent with those of Asongu et.al (2017). Rest of the controls are significant with expected signs in both the models. Model 4 and 6 describe the results after introducing interaction terms of domestic and transnational terrorism with capital flight. In both, the model coefficients value of domestic and transnational terrorism becomes insignificant, which reveal that we can say better institutional quality play an effective role in reducing the impact of terrorism on capital flight. These are consistent with the study in which institutional quality has been used as a moderator in mitigating the negative impact of macroeconomic uncertainty on FDI. (Michael Effah Asamoah, Charles K.D. Adjasi and Abdul Latif Alhassan, 2016). All our 4 hypotheses are proved by empirical evidence. Anyhow controls in these models are again showing expected signs but not significant as in first 4 models. For robustness of GMM estimation, we have applied Sargan test which is valid for all the six models.

5. CONCLUSION

As far as the theoretical contribution of this study is concerned, this research is an addition to the growing literature on capital flight. In addition, this study is an empirical addition to both dimensions of terrorism, especially in Asian and MENA countries. In the modern era, terrorism and government policies to fight against terrorism is a hot debate, at the same time capital flight is a rich research area, this research is surely significant addition in both the perspectives.

According to objectives stated, this study draws the conclusion that both the

dimensions, namely domestic and transnational terrorism are highly associated with increasing capital flight from both the Asian as well as MENA countries. Capital flight is considered to have growing economic concerns for both the policy makers and academia. This study substantiates the notion that terrorism creates political instability which leads to uncertainty in future returns. Consequently, investors move their money from terror-stricken countries to relatively safer venues. Besides this, rapid movement of domestic capital abroad increases a country's dependence on external borrowing and also creates a hindrance for foreign direct investment and ultimately, investors become reluctant while investing in countries experiencing terrorism. In this era terrorism and factors to combat terrorism have great significance for government to formulate the policies. This study prominently proved the role of military expenditure in combating terrorism's impact on terrorism. Numerous studies proved that institutional quality is a most influential factor influencing capital flight. (Seung-Gawan, Baek Doo Yong Yang, 2010). Institutional development plays an effective role to fight against terrorism. (Seung-Whan Choi 2010). This study also provides an evidence that institutional quality plays an effective role in ameliorating negative consequences of terrorism.

Recommendations.

This study made following recommendations on the basis of conclusions drawn:

- Governments should pay special attention to military expenditures that on average how much GDP is utilized that terrorism-caused economic consequences can be better tackled.
- While formulating policies, both domestic and transnational terrorism should be treated differently so, that their economic cost analysed separately.
- Last but not least, governments should make efforts to enhance the efficiency of institutions as it will help simultaneously to control capital flight and fight against terrorism.

Limitations and Future research Directions.

One thing which is quite certain about research that every research has some limitations, there is always room for improvements so as this research. There are few limitations of this study stated below:

- The sample of this study comprises both the Asian and MENA countries, but this study does not provide results for country-specific factors. Asongu (2014) found that oil exporting countries encountered more capital flight. In future research, this limitation can be controlled by introducing country-specific factors in the model.
- Regarding military expenditures, some countries spend more on military expenditure and some spend less on generalizability and to get better applicable magnitude, future research should apply the threshold approach in line with the recent literature. (Asongu et.al., 2017).
- Finally, this study has used a composite measure of institutional quality, future research should use institutional quality dimensionally to see which dimension is highly effective. Besides this, other policy variables should be studied to mitigate the impact of terrorism.

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Appendix (1)

Correlation of Governance Indicators						
Variables	P.Stability	Voice & Acct	Govt.Eff	Reg.Qual	Rule of law	Corr Control
P.Stability	1					
Voice & Acct	0.644	1				
Govt.Eff	0.789	0.669	1			
Reg.Qual	0.707	0.574	0.905	1		
Rule of law	0.789	0.712	0.878	0.843	1	
Corr Control	0.674	0.681	0.847	0.812	0.900	1

Notes: (P.Stability) Political Stability, (Voice & Acct), Voice and Accountability, (Govt.Eff) Government effectiveness (Reg.Qual), Regulatory Quality, Rule of law,(Corr Control), Corruption Control.