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Terrorism and capital flows: the missed impact of terrorism in big cities

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ABSTRACT

This study investigates the effects of four types of terrorist attacks on three types of capital flow. We extend the literature by introducing a new measure of terrorist attacks, namely '*attacks in big cities*' and empirically investigate its impact on capital flow. Drawing from a sample of seven South Asian countries over a time period of 27 years spanning 1990–2016, we found that terrorist attacks in big cities and capital flows are negatively related. In particular, the results show that terrorist attacks in big cities, in comparison to the other terrorist attacks forms, have the highest negative impact on the three types of capital flow.

I. Introduction

Investigating the macroeconomic consequences of terrorism remains a challenging task for policymakers, international institutions and scholars (Enders, Sandler, and Parise 1992; Enders and Sandler 2002; Feridun and Sezgin 2008; Abadie and Gardeazabal 2008; Polyxeni and Theodore 2019). Needless to say, there is a growing consensus among researchers and international institutions that terrorism will continue to be a major threat to global economic development (GTI 2017; Radic´ Nikši 2018). Theoretically speaking, terrorism is known to damage a country's infrastructure and negatively affect its production activities, financial strength and stability (Blomberg, Hess, and Orphanides 2004; Fielding 2003), foreign trade (Nitsch and Schumacher 2004), tourism sector (Enders and Sandler 1991; Charfeddine and Goaied 2019), and inherently its capital flows (Enders and Sandler 1996). Furthermore, the obvious increased security costs and insurance premium ultimately result in a raise in uncertainty, instability as well as the cost of doing business (Gupta et al. 2004; Hotchkiss and Pavlova 2009). From an empirical standpoint, accumulated evidence shows that terrorist attacks have drastic effects on the performance of several economic indicators (Blomberg, Hess, and Orphanides 2004; Bandyopadhyay, Sandler, and Younas 2014).

Although recent research offers answers to some important questions related to the macroeconomic consequences of terrorism, other questions remain unanswered (Bagchi and Paul 2018). In particular, the question of whether or not different types of terrorism have the same impact on macroeconomic indicators is still yet to be addressed. In this paper, we focus on this very research question by investigating the effects of different types of terrorist attacks on distinct types of capital flow. More precisely, in addition to the existing types of terrorist attacks, we adopt a new approach by introducing a new measure, namely *terrorism in big cities*. The story line of the current research is to demonstrate that this newly introduced type of terrorist attacks will outperform the existing measures (i.e., global, domestic and transnational terrorism) in capturing the effect of terrorism on capital flows.

Terrorism is expected to disrupt production and commercial activities more severely in big cities than in small cites. This is mainly due to the fact that the majority of industrial and services organizations are logcated in big cities where it is easy to get access to talent and skilled labour as well as to plentiful resources and materials (Huang and Wei 2014). Of course, as suggested by the location

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theory, accessibility to various forms of resources is the key determinant of industrial location and capital flows (Huang and Wei 2014). In the same vein, Glaeser and Shapiro (2002) support the view that big cities, historically, were the target of terrorist attacks inasmuch as terrorists expect that the damage will be of large scale in urban areas, especially in big cities. In fact, '*cities are more susceptible to this form of political violence (terrorism) than rural areas because of the likelihood of greater impact and visibility*' (Beall 2006?). It goes without saying that foreign investors will become more reluctant and cautious to invest in countries where big cities are often targeted by terrorism (Glaeser and Shapiro 2002; Beall 2006).

Although the adverse effects of terrorist attacks in big cities have been alluded to in the literature, there are no empirical attempts that investigated its relative economic impact in comparison to other kinds of terrorist attacks. The current research pursues this line by empirically testing the following proposition:

Proposition: "*Terrorist attacks in metropolitan and big cities might affect economic conditions more severely than terrorist attacks in small cities or in the borders of the country*".

Particularly, we believe that the South Asian region is a good case in point. Despite its high ranking in regional trends of terrorism, the South Asian region has rarely been investigated in the terrorism literature. In fact, this region was ranked second in 2017 (GTI 2017).[1] The South Asian countries have spent millions of dollars on counter-terrorism and military expenditures. However, these countries are still unable to foster a stable economic environment. In worldwide terrorism, the majority of terrorist attacks happened in Afghanistan (23%), India (9%) and Pakistan (7%). As a result, South Asia is associated with an economic environment of insecurity, high risk and instability (Shahzad et al. 2020). One particularity of the South Asia region is that capital flows are the main driver of the economic development of this region (Filer and Stanišić 2016). In this regard, the high terrorism-related risks hinder the expansion of capital flows and investment decisions in South Asia (Abadie and Gardeazabal 2008; Filer and Stanišić 2016). As such, the South Asia region represents a plausible context to empirically investigate the link between terrorist attacks in big cities and capital flows.

II. Data and materials

Data and description of the variables

The dataset used in this study covers a time period of 27 years (from 1990 to 2016). It includes a sample of seven South Asian countries: Afghanistan, Bangladesh, India, Indonesia, Nepal, Pakistan and Sri Lanka.[2] The data on the capital flow types (foreign direct investment (FDI), portfolio investments and external debt), the real GDP per capita, military expenditure as a percentage of GDP, terms of trade and exchange rates were drawn from the 2017's World Development Indicators. The financial openness data were gathered from financial openness index[3] developed by Chinn and Ito (2016). Finally, the terrorist attack data were extracted from the Global Terrorism Database (https://www.start.umd.edu/gtd/).

Figure 1 shows the evolution of the number of terrorist attacks by type (total, domestic, transnational and attacks in big cities). It shows that transnational attacks are small in number compared to the three other types of terrorist attacks. This is confirmed by the results reported in Table 1, which depicts the number of total, domestic, transnational, and big city attacks as a percentage for each country over the period 1990–2016.

Table 2 shows evidence of a negative correlation between the different types of terrorist attacks (total, domestic and big city attacks) and the three variables of capital flow (FDI, portfolio investments and debt stocks) for 10 out of 12 cases. In

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[1]The South Asian region has witnessed 3430 terrorist attacks with 7664 causalities (GTI 2017).
[2]Major attacks in South Asia: Mumbai attacks (2008) known as 26/11 in India, APS Peshawar attacks (2014) in Pakistan, Church attacks in Indonesia in 2016 to 2018.
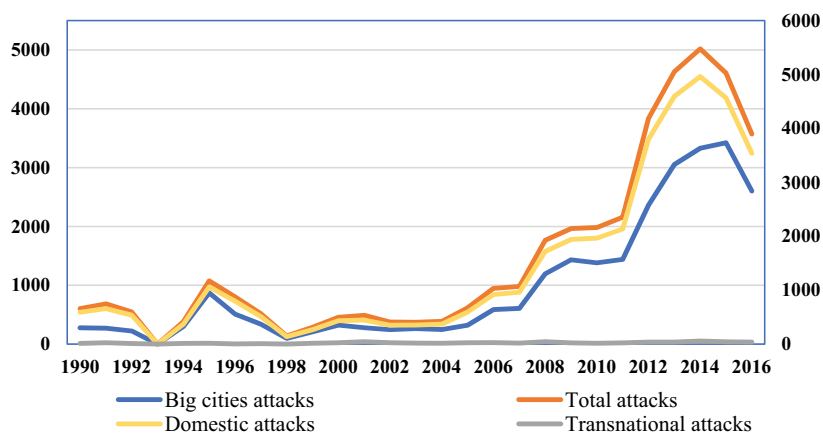[3]See the International Monetary Fund's Annual Report on Exchange Agreements and Exchange Restrictions at http://www.cesifo-group.de/ifoHome/facts/DICE.html.

Figure 1. Terrorist attacks by types over the period 1990–2016.

Table 1. Number and percentage of terrorist attacks per country (1990–2016).

Terrorism types Countries	Total attacks	Domestic attacks	Transnational attacks	Big cities attacks
Afghanistan	11,206 (100%)	11,188 (99%)	18 (1e-4%)	9008 (80%)
Bangladesh	1507 (100)	1500 (99%)	7 (4e-5%)	943 (62.6%)
India	9726 (100)	9295 (95%)	431 (5%)	7012 (72%)
Indonesia	721 (100%)	686 (95.1%)	35 (4.8%)	384 (53%)
Pakistan	13,409 (100%)	13,306 (99%)	103 (0.76%)	7547 (56%)
Nepal	958 (100)	938 (98%)	20 (2%)	456 (47.6%)
Sri Lanka	1658 (100%)	1658 (100%)	0 (0%)	1658 (100%)

particular, big city terrorist attacks have the highest negative correlation with portfolio investments and debt stocks, and the lowest correlation with FDI.

Materials and methods

We use a dynamic panel data model, which takes the general form given by:

$$CF_{i,t} = \alpha + \rho CF_{i,t-1} + \beta' TA_{i,t} + \delta' X_{i,t} + \vartheta_i + \tau_t + \varepsilon_{i,t}, \quad (1)$$

where, ϑ_i denotes time-invariant country fixed effects, τ_t are year fixed effects that account for time-varying common shocks, $CF_{i,t}$ refers to the type of capital inflow (FDI, portfolio investments or external debt) expressed as a share of GDP for country i in time t, TA denotes the type of terrorist attack (total, domestic, transnational and big city attacks) measured per 100,000 persons and $X_{i,t}$ is a vector of control variables (GDP per capita, military expenditure, trade openness, financial openness, exchange rate and terms of trade). In all the considered equations, the real GDP per capita and military expenditure were used as control variables. Military expenditure was used to control for peace, stability and lowering the risk in that country, expressed as percentage of GDP (Enders and Sandler 1993; Feridun and Shahbaz 2010). Moreover, other specific control variables were used for each type of capital flow. For instance, we

Table 2. Descriptive statistics and correlation analysis.

	Descriptive statistics		Correlation			
	Mean	SD	Domestic attacks	Trans. attacks	Big Cities attacks	Total attacks
FDI	0.0111	0.0169	−0.033	0.061	−0.020	−0.032
Portfolio Investments	0.0023	0.0059	−0.069	0.021	−0.076	−0.069
Debt stocks	0.0202	0.0314	−0.153*	−0.092	−0.146*	−.154*
Economic growth	6.5123	0.7678	0.148*	0.134	0.126	0.150*
Military expenditures	2.3072	1.4048	0.089	0.147	0.053	0.092
Trade	0.0912	0.0947	−0.143	−0.210*	−0.126	−0.147
Exchange Rate	4.7106	1.7126	−0.147*	−0.133	−0.154*	−.149*
Financial Openness	−0.6435	1.0414	−0.192*	−0.207*	−0.213*	−.194*
Terms of trade	4.5698	0.2328	−0.067	−0.099	0.071	−0.071

Notes: This table displays the descriptive statistics and the pairwise correlations between the dependent variables (Domestic attacks, Transnational (Trans.) attacks, Big cities attacks, and Total attacks). * denotes significance 5%.

have included trade and financial openness in the FDI equation. In addition, exchange rate and terms of trade were used as control variables for the portfolio investment and external debt stock equations. We expect that depreciation in the local currency will attract more capital inflow, as this makes the country's exports more competitive internationally. Similarly, terms of trade, depicting the level of uncertainty in the balance of payments and fiscal positions, are expected to have a significant impact on external debts and portfolio investments.

For the sake of the results' robustness, we use different econometric techniques including fixed effect models (where the lagged dependent variable is dropped from Equation 1) and dynamic models estimated using different techniques such as the feasible generalized least squares, the difference generalized method of moments, and the system of generalized methods of moments estimation techniques.[4]

III. Results and discussion

A summary of the results is reported in Table 3 where only the estimated coefficients associated with the four variables (total, domestic, transnational and big city attacks) are reported.[5] Except for the transnational type of terrorist attack, the results show that for all the other three types of terrorist attacks, the coefficients are in the expected

direction (i.e., negative sign) and most of them are significant at conventional levels (5%). Interestingly, big city terrorist attacks have the greatest magnitude of effect on foreign investments, implying that the geographical location of the terrorist attack is a key determinant of FDI flows. This suggests that, as opposed to the earlier literature, domestic and transnational attacks might not be very relevant variables for accessing economic disruption. In fact, the study's results show that when countries experience terrorist attacks in big cities, the amount of FDI in these countries decreases significantly in comparison to the other types of terrorist attacks.

The results for the portfolio investments equation reveal evidence of a negative impact for all types of terrorist attacks (again with transnational attacks being reported as an exception). Similar to the FDI equation, the impact of terrorist attacks in big cities is much higher than those of the two other types. Also, the results show that the domestic, total, and big city terrorist attacks have significant negative effects on external debt. In particular, the results show that attacks in big cities and urban areas have a greater adverse impact on external debt stocks and government borrowings than total and domestic terrorist attacks. This result is consistent with the findings of Hotchkiss and Pavlova (2009), who conclude that the 9/11 attacks reduced labour force participation during working hours because of an increased risk.

Regarding the control variables, we find that GDP, financial openness, trade and terms of trade have a positive significant impact on the three capital flow types. This result is consistent with previous studies (Bandyopadhyay, Sandler, and Younas 2014; Polyxeni and Theodore 2019). The trade and financial openness findings imply that economic openness and low restrictions on capital transactions play a positive role in attracting investment flows. Military expenditure has a significant negative impact on all types of capital flows, which is in line with some prior studies (e.g., Polyxeni and Theodore 2019). Also, we find that currency depreciation has a negative impact on capital flows.

Table 3. Results estimations of the terrorist attacks impact on capital flows by component.

	FGLS		DGMM		SGMM	
	Coef.	z-stat	Coef.	t-stat	Coef.	z-stat
Panel A: Foreign direct investment equation						
TA	−0.247**	−1.980	−1.071**	−2.100	−0.928**	−2.340
DA	−0.254**	−1.930	−1.088**	−2.210	−0.999**	−2.340
TRANS	10.83**	2.340	3.315	0.410	12.552	0.510
BigCities	−0.283	−1.240	−2.000*	−1.920	−2.01***	−2.830
Panel B: Portfolio investments equation						
TA	−0.188**	−2.130	−0.211*	−1.680	−0.188**	−2.080
DA	−0.181**	−1.980	−0.199	−1.540	−0.181*	−1.940
TRANS	−1.785	−0.360	−3.759	−0.490	−1.785	−0.350
BigCities	−.333***	−2.640	−0.419**	−2.360	−0.331***	−2.570
Panel C: External debt equation						
TA	−1.014*	−1.800	−1.447**	−2.140	−1.014*	−1.840
DA	−0.908	−1.580	−1.496**	−2.250	−0.91***	−3.370
TRANS	−24.67	−0.770	12.865	0.770	−24.67**	−2.030
BigCities	−1.278	−1.600	−1.721**	−2.220	−1.28***	−2.620

* Stands for 10% significance level. ** Stands for 5% significance level. *** Stands for 1% significance level.

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[4]The main reason behind the use of these different estimation techniques is that each method has some advantages as solving the endogeneity problem (see Baltagi, Demetriades, and Law 2009; Shahzad et al. 2020).
[5]The detailed results based on all the estimated methods are reported in the Appendix Tables A1, A2 and A3.

IV. Concluding remarks

We introduced a new measure of terrorist attacks, namely terrorism in big cities to investigate the effect of different types of terrorism on capital flows for a sample of seven South Asian economies. The results show that terrorism in big cities or metropolitan areas, in comparison to other terrorist attacks types, has the highest adverse effects on all the three forms of capital flows. The results indicate that terrorist attacks in big cities are a key hindrance for capital flows in South Asian countries. Consequently, more attention should be paid to this type of terrorism.

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Disclosure statement

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Appendix

Table A1. Empirical results of fixed effects, FGLS, DGMM and SGMM (dependent variable: FDI).

	Fixed effects			FGLS			DGMM			SGMM		
	1	2	3	1	2	3	1	2	3	1	2	3
Lagged FDI	-	-	-	0.603 (9.200)	0.604 (9.280)	0.612 (9.310)	0.101 (0.860)	0.101 (0.860)	0.101 (0.850)	0.069 (1.200)	0.069 (1.200)	0.068 (1.190)
TA	-1.093^b (−2.230)	-	-	-0.2473^b (−2.100)	-	-	-1.071^b (−2.100)	-	-	-0.928^b (−2.340)	-	-
DA	-	-1.113^b (−2.200)	-	-	-0.254^b (−1.930)	-	—	-1.080^b (−2.210)	-	-	-0.990^b (−2.340)	-
TRANS	-	3.570 (0.130)	-	-	10.839^b (2.340)	-	-	3.315 (0.410)	-	-	12.55 (0.510)	-
BigCities	-	-	-2.007^b (−2.270)	-	-	-0.2831 (−1.240)	-	-	-2.000^c (−1.920)	-	-	-2.017^a (2.830)
GDP per Capita	0.030^a (6.510)	0.029^a (6.360)	0.031^a (6.570)	0.036^b (2.470)	0.004 (2.930)	0.037^a (2.760)	0.028^a (2.830)	0.028^a (2.740)	0.029^a (2.820)	0.033^a (7.820)	0.032^a (7.710)	0.034^a (7.940)
Trade Openness	0.274^a (5.950)	0.273^a (5.860)	0.283^a (6.080)	-0.027 (−0.710)	-0.009 (−0.370)	-0.021 (−0.450)	0.251 (2.800)	0.250^b (2.720)	0.261^a (2.830)	0.279^a (6.730)	0.278^a (6.690)	0.286^a (6.840)
Military exp.	-0.003 (−1.480)	-0.003 (-1.330)	-0.0029 (−1.480)	0.012 (0.270)	0.014 (1.320)	0.020 (−0.850)	-0.03^c (1.620)	-0.003^c (−1.680)	-0.002 (−1.520)	0.001 (0.300)	0.021 (0.170)	0.001 (0.420)
Exchange rate	-0.011^a (−2.310)	-0.010^b (−2.300)	-0.011^b (−2.370)	-0.009 (−1.450)	-0.001 (−1.540)	0.008 (1.380)	-0.010^a (−5.000)	-0.010^a (−5.130)	-0.010^a (−5.190)	-0.009^b (−5.280)	-0.009^a (−5.310)	-0.009^a (−5.420)
Financial openness	0.008^a (2.690)	0.008^a (2.680)	0.008^a (2.740)	0.021 (0.740)	0.0004 (0.540)	0.005 (0.600)	0.009 (1.110)	0.009 (1.100)	0.009 (1.130)	0.012^a (5.510)	0.012^a (5.560)	0.012^a (5.600)
Constant	-0.138^a (−4.360)	-0.137^a (−4.210)	-0.146^a (−4.490)	-0.014 (−1.510)	-0.016^b (−1.820)	-0.015^b (−1.650)	-	-	-	-0.175^a (−5.680)	-0.172^a (−5.580)	-0.184^a (−5.860)
# of Obs.	189	189	189	189	189	189	189	189	189	189	189	189
F-statistic/ Wald-Chi^2	9.08	7.73	7.88	272.2	270.9	263.8	262.6	214.3	308.0	115.5	115.4	117.5
Sargan	-	-	-	-	-	-	0.085	0.060	-	0.19	0.18	0.17
Autocorrelation				No	No	No	0.174	0.17	-	0.12	0.13	0.13
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: a, b, c denotes significance level at 2.58, 1.96, and 1.64 as normal distribution. Z-statistic values are reported in parenthesis. Fixed effects is applied on static model. In GMM specifications, Autocorrelation test denotes no autocorrelation while Sargan test denotes valid instruments. 1, 2 and 3 shows the preferred models: 1 as total attack, 2 with domestic and transnational attacks and 3 with big cities attacks for each type of capital flows.

Table A2. Empirical results of fixed effects, FGLS, DGMM and SGMM (dependent variable: Portfolio stocks).

	Fixed effects			FGLS			DGMM			SGMM		
	1	2	3	1	2	3	1	2	3	1	2	3
Lagged Portfolio	-	-	-	0.309[a]	0.310 [a]	0.300 [a]	0.269 [a]	0.269 [a]	0.2542 [a]	0.309 [a]	0.310 [a]	0.300 [a]
				(4.150)	(4.160)	(4.040)	(3.450)	(3.430)	(3.270)	(4.050)	(4.060)	(3.940)
TA	−0.314 [b]	-	-	−0.188 [b]	-	-	−0.211 [c]	-	-	−0.188 [b]	-	-
	(−2.580)			(−2.130)			(−1.68)			(−2.080)		
DA	-	−0.300 [b]	-	-	−0.181[b]	-	-	−0.199	-	-	−0.181 [c]	-
		(−2.390)			(−1.980)			(−1.540)			(−1.940)	
TRANS	-	−4.200	-	-	−1.785	-	-	−3.759	-	−	−1.785	-
		(−0.540)			(−0.360)			(−0.490)			(−0.350)	
BigCities	-	-	−0.567 [a]	-	-	−0.333[a]	-	-	−0.419 [a]	-	-	−0.331 [a]
			(−3.320)			(−2.640)			(−2.360)			(−2.570)
GDP per Capita	0.081[a]	0.077 [a]	0.018[a]	0.052 [a]	0.052 [a]	0.052 [a]	0.062 [a]	0.061 [a]	0.062[a]	0.052[a]	0.051 [a]	0.052 [a]
	(8.060)	(8.040)	(8.390)	(6.050)	(6.060)	(6.264)	(5.320)	(5.310)	(5.600)	(5.920)	(5.920)	(6.110)
Military exp.	−0.016 [b]	−0.015 [b]	−0.016[b]	0.012	0.013	0.014 [a]	−0.016 [c]	−0.012	−0.011[b]	0.014	0.012	0.011
	(−2.260)	(−2.170)	(−2.400)	(0.570)	(0.560)	(6.260)	(−1.68)	(−1.590)	(−1.860)	(0.560)	(0.550)	(0.770)
Exchange rate	−0.042[a]	−0.041[a]	−0.052[a]	0.023	0.015	0.012	−0.004[a]	−0.004[a]	−0.041 [a]	0.031	0.014	0.012
	(−3.120)	(−3.060)	(−3.310)	(1.290)	(1.320)	(0.790)	(−2.640)	(−2.580)	(−2.800)	(1.260)	(1.29)	(1.520)
Terms of trade	0.008 [a]	0.079 [a]	0.0086 [a]	0.045[a]	0.051 [a]	0.061[a]	0.006 [a]	0.006 [a]	0.007[a]	0.005 [a]	0.054 [a]	0.062 [a]
	(3.870)	(3.830)	(4.320)	(3.100)	(3.090)	(3.550)	(2.890)	(2.850)	(3.190)	(3.031)	(3.010)	(3.410)
Constant	−0.059 [a]	−0.059[a]	−0.064[a]	−0.048 [a]	−0.047[a]	−0.051[a]	-	-	-	−0.048[a]	−0.047[a]	−0.051[a]
	(−5.270)	(−5.280)	(−5.710)	(−5.330)	(5.320)	(−5.620)				(−5.210)	(−5.201)	(5.490)
# of Obs.	189	189	189	189	189	189	189	189	189	189	189	189
F-statistic/ Wald-Chi²	18.62	15.49	19.97	161.46	161.71	166.21	14.6	12.32	15.11	154.30	154.18	158.39
Sargan	-	-	-	-	-	-	0.37	0.367	0.399	0.39	0.470	0.507
Autocorrelation				No	No	No	0.552	0.52	0.532	0.532	0.54	0.548
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: a, b, c denotes significance level at 2.58, 1.96, and 1.64 as normal distribution. Z-statistic values are reported in parenthesis. Fixed effects is applied on static model. In GMM specifications, Autocorrelation test denotes no autocorrelation while Sargan test denotes valid instruments. 1, 2 and 3 shows the preferred models: 1 as total attack, 2 with domestic and transnational attacks and 3 with big cities attacks for each type of capital flows.

Table A3. Empirical results of fixed effects, FGLS, DGMM and SGMM (dependent variable: External debts).

	Fixed effects			FGLS			DGMM			SGMM		
	1	2	3	1	2	3	1	2	3	1	2	3
Lagged Debt	-	-	-	0.268^a (3.670)	0.265^a (3.630)	0.273^a (3.750)	0.147^a (5.370)	0.146^a (5.260)	0.153^a (5.210)	0.268^a (3.750)	0.265^a (5.190)	0.273^a (5.280)
TA	−1.671^b (−2.200)	-	-	−1.014^c (−1.800)	-	-	−1.447^b (−2.140)	-	-	−1.014^b (−1.840)	-	-
DA	-	−1.750^b (−2.240)	-	-	−0.908 (−1.580)	-	-	−1.496^b (−2.250)	-	-	−0.908^a (−3.370)	-
TRANS	-	21.23 (0.440)	-	-	−24.67 (−0.770)	-	-	12.86 (0.770)	-	-	−24.67^b (−2.030)	-
BigCities	-	-	−2.025^c (−1.870)	-	-	−1.278 (−1.600)	-	-	−1.721^b (−2.220)	-	-	−1.278^a (−2.620)
GDP per Capita	0.015^b (2.510)	0.015^b (2.420)	0.016^b (2.490)	0.008^b (1.890)	0.008^b (1.970)	0.007^b (1.830)	0.011^b (2.520)	0.011^b (2.500)	0.011^b (2.340)	0.081^b (1.930)	0.082 (1.600)	0.071 (1.370)
Military exp.	−0.075^c (−1.710)	−0.078^c (−1.760)	−0.071 (−1.600)	0.012 (0.690)	0.013 (0.720)	0.012 (0.580)	−0.053 (−0.730)	−0.052 (−0.760)	−0.041 (−0.670)	0.012 (0.700)	0.013 (0.850)	0.015 (0.690)
Exchange rate	−0.036^a (−4.320)	−0.036^a (−4.330)	−0.037^a (−4.340)	0.015 (0.120)	0.014 (0.210)	0.014 (0.140)	−0.024^a (−4.160)	−0.025^a (−4.070)	−0.025^a (−3.890)	0.023 (0.120)	0.023 (0.230)	0.024 (0.150)
Terms of trade	−0.021^c (−1.640)	−0.021 (−1.590)	−0.017 (−1.340)	−0.061 (−0.110)	−0.062 (−0.140)	0.062 (0.150)	−0.020^a (−2.720)	−0.020^a (−2.740)	−0.017^b (−2.460)	−0.012 (−0.110)	−0.014 (−0.180)	0.016 (0.190)
Constant	0.213^a (3.020)	0.215^a (3.030)	0.193^a (2.750)	−0.032 (−0.630)	−0.032 (−0.630)	−0.042 (−0.810)	-	-	-	−0.032 (−0.640)	−0.032 (−0.640)	−0.042 (−0.790)
# of Obs.	189	189	189	189	189	189	189	189	189	189	189	189
F-statistic/ Wald-Chi^2	5.05	4.23	4.75	28.70	29.34	27.89	550.78	64.87	361.64	29.96	30.30	29.05
Sargan	-	-	-	-	-	-	0.201	0.186	0.189	0.207	0.272	0.276
Autocorrelation				No	No	No	0.082	0.084	0.084	0.052	0.047	0.051
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: a, b, c denotes significance level at 2.58, 1.96, and 1.64 as normal distribution. Z-statistic values are reported in parenthesis. Fixed effect method is applied on static model. In GMM specifications, Autocorrelation test denotes no autocorrelation while Sargan test denotes valid instruments. 1, 2 and 3 shows the preferred models: 1 as total attack, 2 with domestic and transnational attacks and 3 with big cities attacks for each type of capital flows.