

Impact of Defense Spending on Economic Growth: Evidence from Developing Nations of Asia

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Abstract

The purpose of this paper is to explore the relationship between economic growth, defense expenditure and other regionally essential variables of 12 emerging countries of South East Asia for the year 1990 to 2015. Random and Fixed effect models along with the unit root tests are used to analyze if the data is stationary or not. Variance decomposition and impulse response coefficient are estimated after the implication of the cointegration analysis. According to the result, defense expenditure has a positive and significant impact on the growth of the emerging economies. The defense spendings affect the infrastructure of the particular country that results in more efficiency in the labor market hence stimulating economic growth (Looney Fredrickson 1992). Also, the economic growth of the country is triggered by more and more external debt and total investment. Therefore, we have a positive and significant relationship.

Keywords: Economic development; Defense Expenditures; Emerging economies

1. Introduction

The question military spending has a positive or a negative impact on economic growth is an empirical rather than a theoretical question. After World War II, countries once again rebuild their infrastructure, countries spend a lot of funds on education, health transportation but on the other hand, countries increase their spending on defense expenditure to overcome the war risk and protect countries peoples and country. After 1970 external debt, defense expenditure and economic growth relationship comprehensively examined to find the defense expenditure relationship with economic growth.

Some studies have claimed that military expenditure was a crucial variable to explain the rise of foreign debt in developing countries. If a state is an importer of military-related items its foreign debt increase, so this will create a need for foreign exchange. If the economy has lacks foreign exchange, it will need to obtain it from an external source. So in this case country borrow debt from other countries.

Increase in arms imports and military expenditure increase the debt of the countries. Some researcher found a negative relationship and some found positive between military spending and economic growth. Increase in terrorism in entire world defense expenditure increase continuously, and that's why economic growth become slow from last few days.

Although the increase in the volume of studies on this topic yet not provide one significant relationship between defense spending and economic growth. Some scholar argues the negative association, and some argue positive impact. Most of the studies conducted in United States scholars (Atesoglu 2002, Atesoglu 1993) find out a positive relationship while (Goldstein 1998, Heo and Eger 2005; Mintz and Hunang 1990, 1991 ward Davis 1995) indicate negative impact between economic growths and defense spending using United States Data.

Many studies have tested the potential channels through which military spending affected the economy. Researchers concentrated either on the neo-classical supply-side models or the demand-side the Keynesian model Dunne year (2001). According to the theory of Keynesian, military expenditure probably improves the aggregate demand through the increased utilization of capital stock and higher investment and therefore excites economic growth.

In a past study, both positive and negative impact was found between defense spending and economic growth. Usually, this relationship examines a developed nation like U.K, USA and other developed countries. In this, we focus on developing nation to find out this relationship. Asian developing nation took understudy for the analysis of the relationship between economic growth and defense spending. Some other variable also includes for review, and investigate the relationship with economic growth.

From developing Asian economy view, minor work was done in the past to investigate the relationship between military spending and economic growth. This study is the expansion of Gulay Gunluk Senesen, (2004) and Adem Y. Elveren, (2012) who investigated the relationship on turkey. This study finds out this, military spending and economic growth relationship using twelve developing nation belonging to the Asia using 26-year data of each country.

2. Literature Review

Many researchers have studied the relationship between the defense expenditures and economic growth, and the results are quite contrasting. Some studies explored the impact of defense expenditures on the economic growth to be positive (Smith 1980, Looney 1983, Deger 1986, Biswas 1992, Sezgin 1992, Brumm 1997). According to these studies, the defense expenditures triggers the labor market that has an impact on the economic growth. On the contrary, studies carried out by Biswas and Ram, (1986); Chaudhary, (1991); DaKurag et al., (2001) found a negative and insignificant relationship between the two variables.

Some analysts argue that defense spending has long-term adverse effects on capital formation, productivity, and economic growth in the United States (see, e.g., Kaldor, 1981; DeGrasse, 1983; Melman, 1983; Dumas, 1986). Furthermore, defense spending has decreased dramatically in the last twenty years until 2001. This is because of the attribution of the end of the cold war, which reduced military expenditure and security obligations all over the world. But with the event of 9/11, and U.S and allied forces invading terrorists in Afghanistan, Iraq and other countries the dependency of the countries on defense expenditures again arose.

Gulay Gunluk Senesen, (2004), conducted a study to investigate the role of defense and external debt on economic growth using Turkey data from the period (1980-2004). The result of the survey indicates that foreign debt put a negative impact on turkey budget, rise in foreign debt, increases the budget deficit. Military import also set an adverse effect on the economic growth of the countries. This study also showed what the optimal level of military import for the country is? To avoid a budget deficit and economic growth decline. The result suggested that the policies of the government should support to decline the current account deficit of the country.

Uk Heo, (2010) examined the relationship between economic growth, GDP, country investment and growth of labor. Two model was used, Feder Ram-Based model and augmented Solow model to investigate the relationship among these macroeconomic variable using data period (1954-2005) of U.S economy. The result of the study showed military spending does not significantly impact the U.S economy and GDP, Contrary total investment and labor growth showed the positive and significant impact on the U.S economy.

Augier et al., (2015), conducted a study on the relationship between defense spending and economic growth of China. Data period (1952-2012) was used to investigate the result of two defense model Feder Ram-Based model and augmented Solo model. Feder Ram-Based model explains the weak economic growth of the china. The effect of the

augmented Solo model indicates that a 1% increase in defense expenditure increases economic growth (0.15-0.19) % approximately.

The relationship between the defense expenditures and economic growth cannot be generalized among the countries over time (Kollias et al., 2004). So, this research is an effort to explore the impact of defense expenditures and some other important variables on the economic growth of the developing Asian countries. Accordingly, we propose the following hypothesis:

Ho: Ceteris paribus, defense expenditure has a positive effect on economic growth in developing Asian countries.

3. Methodology:

For this study, we select all Asian countries (East Asia, South Asia, and Central Asia) as a population. Further, we exclude developed nations from the population. Finally, we select only those countries that are in the developing phase. Finally, we also exclude those countries that are have not a proper structural organized army and also not have a structural procedure to record the defense expenditure. At last, we selected a sample of twelve Asia developing countries that are have organized government and organized militaries. Appendix 1 gives complete information on selected countries with their geographical existing in the part of Asia.

For conduct this study six variables are selected, these variables are Gross National Income (GNI), Defense Expenditure (DEFEXP), Total Investment (TI), External Debt (EXDT), Export of Goods and Services (EXGS) and Import of Goods and Services (IMGS). Find out the impact of defense expenditure on economic growth data is collected from the World Bank (WI), International Monetary Fund (IMF) and SIPRI websites. Macroeconomic variables data collected from the World Bank and IMF publications and Military Expenditure Data gather from SIPRI year's publications from 1990 to 2015. To find out the result natural log of all variables is collected to overcome multicollinearity. So, we used the following equation for our analysis.

$$\text{Ln(GNI)} = \beta_0 + \beta_1 \text{Ln(DEFEXP)} + \beta_2 \text{Ln(TD)} + \beta_3 \text{Ln(TI)} + \beta_4 \text{Ln(EXGS)} + \beta_5 (\text{IMGS}) + \epsilon \quad (1)$$

4. RESULTS

The descriptive statistics of our variables are taken first to analyze the data properties. In the first table, the Jarque-Bera shows that the variables are normally distributed. Overall 312 observations were captured and analyzed.

Table: 1. Descriptive Statistics

	GNI	DEFEXP	EXDT	TI	EXGS	IMGS
Mean	25.05416	21.29105	24.23536	23.62785	23.73931	23.94159
Median	25.2106	21.43768	24.28169	23.71915	23.84863	24.01393
Maximum	28.2473	24.62794	26.78136	27.29917	26.87989	27.07119
Minimum	21.95127	17.38311	20.87634	20.30399	19.76063	20.47539
Std. Dev.	1.435859	1.450753	1.230225	1.466386	1.576785	1.394939
Skewness	-0.293599	-0.519138	-0.402238	-0.122884	-0.294429	-0.210796
Kurtosis	2.573976	3.53752	2.750405	2.747209	2.449797	2.596231
Jarque-Bera	6.841862	17.7703	9.223219	1.615973	8.44319	4.430007
Probability	0.032682	0.000138	0.009936	0.445755	0.014675	0.109153
Sum	7816.899	6642.807	7561.431	7371.89	7406.664	7469.777
Sum Sq. Dev.	641.1856	654.557	470.6838	668.7396	773.2238	605.1612
Observations	312	312	312	312	312	312

Table 2 shows the Pearson correlation result among all the variables, and we can see a strong positive relationship between the GNI and all the other variables showing all the independent variables have a positive effect on the economic growth.

Table: 2. Correlation Result

	GNI	DEFEXP	EXDT	TI	EXGS	IMGS
GNI	1					
DEFE	0.90626	1				
ED	0.94112	0.89348	1			
TI	0.98362	0.89547	0.92917	1		
EGS	0.90368	0.82987	0.92671	0.9145	1	
IGS	0.91832	0.84663	0.9208	0.93257	0.99073	1

Panel Regression Analysis

The regression results reveal that there is a positive and significant effect of defense expenditures on economic growth. Our results are the same as proposed by Frederickson and Looney, Stewart (1992), Atesoglu (2002 and 2009), and Dunne et al., (2001). These authors postulated that defense spending arouses the economic growth through the stimulation channel. Generally, defense spending has an impact on the infrastructure which in turns triggers the labor market. All this effort increases the economic growth (MacNair, 1995). As the defense expenditures increase the reliance of the government on external debt also increases (Sensen, 2002). So this is the reason the external debt and total investment has a positive and significant relationship with economic growth.

Table: 3. Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.966987	0.409561	2.36103	0.0189
DEFEXP	0.067419	0.022455	3.00238	0.0029
EXDT	0.244713	0.038638	6.33351	0.012
TI	0.787075	0.032379	24.3083	0.024
EXGS	-0.047385	0.070706	-0.67017	0.5033
IMGS	-0.031366	0.083291	-0.37658	0.7067
R-squared	0.974689	Mean dependent var		25.0542
Adjusted R-squared	0.974276	S.D. dependent var		1.43586
S.E. of regression	0.230295	Akaike info criterion		-0.07987
Sum squared resid	16.22898	Schwarz criterion		-0.00789
Log-likelihood	18.45915	Hannan-Quinn criteria.		-0.0511
F-statistic	2356.732	Durbin-Watson stat		0.15885

Fixed and Random effect Model:

Now we check whether the data is stationary or not with the help of Fixed and Random effect model as shown below. Then we use the Hausman test to elaborate on which model

is more appropriate. Since the p-value is higher than 5%, therefore we reject the Null hypothesis that the fixed effect model is appropriate. So we accept alternate hypothesis that Random effect is appropriate.

Table: 4. Fixed and Random effect Model

Tests				
Variables	Fixed Effect		Random Effect	
	Coefficient	t-Statistic	Coefficient	t-Statistic
C	1.456316	2.883195**	1.298814	2.827275**
DEFEXP	0.033444	0.803651	0.03581	0.936397
EXDT	0.151175	4.180505**	0.162899	4.679186**
TI	0.542194	10.6219**	0.571306	12.04913**
IMGS	0.010894	0.127608	-0.017243	-0.219509
EXGS	0.259077	4.115618**	0.251022	4.186**
Hausman Test				
Test Summary	Chi-Sq. Statistic		Chi-Sq. d.f.	Prob.
Cross-section random	3.804143		5	0.5779

Unit Root Test:

First, we took the natural logs of all the variables under analysis. Since we are using the panel data, therefore, we used Levin-lin-chu unit root tests and Lm, Pearson and shin w-stat to check the unit root of the data. From the first table it can be seen that all the variables are not stationary, but when we take the first difference, then the data becomes its stationary as the P values become less than 5%.

Table: 5. Unit Root Tests

Unit Root Tests			
Variables	Levin-Lin-Chu	Im, Pesaran and Shin W-stat	Results
GNI	3.31691	6.46408	Unit Root
Defexp	0.74300	2.16191	Unit Root
Exdt	-0.89237	1.76058	Unit Root
TI	2.60347	4.54675	Unit Root
Exgs	-1.47514	2.34237	Unit Root
Imgs	0.58724	4.03960	Unit Root
Δ GNI	-5.1562**	-5.67687**	No Unit Root
Δ Defexp	-5.82281**	6.0739**	No Unit Root
Δ Exdt	-7.41441**	-7.37745**	No Unit Root
Δ TI	-6.07099**	-6.24791**	No Unit Root
Δ Exgs	-7.14356**	-6.98829**	No Unit Root
Δ Imgs	-8.35636**	-7.45716**	No Unit Root

FMOLS Panel Cointegration:

To find out the deterministic trend in data we have used fully modified ordinary least square (FOMLS) Cointegration test. From the table 7, it can be concluded that there is a significant long-term relationship between the growth and external debt as well as with total investment. Since emerging economies rely on the internal as well as external funds for their growth, therefore, external debt combined with the total investment has a significant long-term impact on the growth of these countries. While all the other variables have no significant long-term relationship with growth.

Table: 7. FMOLS Panel Cointegration:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEFEXP	-0.065025	0.0818	-0.79497	0.4273
EXDT	0.221153	0.06876	3.21655	0.0014
TI	0.646858	0.09736	6.64392	0
EXGS	0.191983	0.12234	1.569255	0.1177
IMGS	0.01601	0.16456	0.097289	0.9226
R-squared	0.990892	Mean dependent var		25.0897
Adjusted R-squared	0.990377	S.D. dependent var		1.43278
S.E. of regression	0.140548	Sum squared resid		5.5903
Long-run variance	0.063517			

Variance Decomposition:

In table 8 below, we have analyzed the variance decomposition for both short term and medium term information. Variance decomposition decomposes variation in an endogenous variable into the component shocks to the endogenous variables in the VAR. The forecast errors of GNI, Defexp, Exdt, TI, Imgs, and Exgs for ten years ahead has been estimated. We assume that all the variables are stationary because the VAR model needs stationary data to run it all the time. And also lag selection criteria has advised us to take four lags in VAR model to be optimum lags.

The most important result came out to be of Gni. 53% of the variation in Gni was caused by its innovation while Defexp caused 46% with one step ahead. Looking ten years ahead 42% and 46% variation was caused by Gni and Defexp respectively. The other significant variable explains the change in Gni is Exgs that accounts for 6%.

The result of Defexp predicts 100% of the variance by its innovation one step ahead. By taking ten years forward, 92% of the variation in Defexp was due to its innovation while the other significant was caused by Exgs which is 3.25% approximately.

The variance in Exdt was caused by 96% by its innovation one year ahead. Looking ten steps ahead, 65% variation is caused by its innovation while 17% and 8% is caused by Defexp and Exgs respectively.

Looking at TI, Exgs, and Images one year ahead, their variations are 25%, 70%, and 20% respectively. This means that TI and Imgs are more influenced by shock in other variables rather than their innovation. Similarly looking at ten steps ahead TI is influenced 36% by Defexp while 44% by Gni, Exgs has a variation of 67% by its innovation while 11% and 10% by Defexp and Gni respectively by looking ten years ahead. In the end, if we see Imgs, 30% of its variation was due to its innovation while defexp and Gni caused variation of 25% and 23% respectively by forecasting for ten years.

Table: 8.Variance Decompositions

Variance Decomposition of GNI:							
Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.110894	46.65097	53.34903	0.000000	0.000000	0.000000	0.000000
2	0.158134	45.67022	53.08035	0.062066	0.853348	0.228749	0.105270
3	0.192375	44.66348	53.35811	0.047045	0.601521	1.034310	0.295532
4	0.225090	44.63924	52.44865	0.118300	0.449636	1.726076	0.618104
5	0.250428	44.45876	51.68429	0.220964	0.488343	2.538496	0.609141
6	0.268228	44.23313	50.81269	0.340979	0.732880	3.344473	0.535847
7	0.282331	43.98520	49.91558	0.522138	1.049584	4.041899	0.485598
8	0.294982	43.52524	48.93615	0.705777	1.604075	4.763982	0.464777
9	0.306244	42.85207	47.88634	0.842618	2.436118	5.485690	0.497170
10	0.316347	42.08486	46.82820	0.942527	3.397187	6.177127	0.570095

Variance Decomposition of DEFEXP:

Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.151575	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.220036	98.94475	0.382875	0.001651	0.277415	0.236823	0.156486
3	0.271355	98.29206	0.707318	0.004018	0.192143	0.699595	0.104869
4	0.319929	97.03047	1.601597	0.131602	0.162866	0.993660	0.079810
5	0.358733	95.97563	1.966020	0.330733	0.160651	1.472796	0.094168
6	0.388326	95.25634	1.884850	0.562433	0.222135	1.911368	0.162872
7	0.412665	94.50451	1.739829	0.865621	0.326238	2.283612	0.280191
8	0.433818	93.54510	1.596748	1.186937	0.577950	2.640092	0.453172
9	0.452102	92.39673	1.471125	1.470314	1.000735	2.966676	0.694420
10	0.468244	91.16063	1.374411	1.718671	1.521254	3.258723	0.966307

Variance Decomposition of EXDT:

Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.073463	0.853258	1.684828	97.46191	0.000000	0.000000	0.000000
2	0.118869	1.199173	1.953959	96.35254	0.320008	0.011341	0.162980
3	0.154110	3.345787	4.069836	91.80612	0.256288	0.368833	0.153137
4	0.188405	7.426843	5.452626	85.67330	0.257206	1.087422	0.102603
5	0.219300	10.16321	6.316426	81.09096	0.243132	2.071646	0.114632
6	0.245833	12.43303	6.865142	77.10530	0.195073	3.201306	0.200152
7	0.269027	14.41898	7.294787	73.35422	0.163070	4.424012	0.344924
8	0.289382	15.84584	7.459416	70.17833	0.140948	5.772514	0.602951
9	0.307263	16.82042	7.438973	67.46553	0.125022	7.141483	1.008572
10	0.323276	17.50390	7.337895	65.01631	0.112944	8.507167	1.521781

Variance Decomposition of TI:

Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.198277	33.46368	40.81246	0.321767	25.40209	0.000000	0.000000
2	0.280565	38.00542	43.83203	0.364035	17.77562	0.022783	0.000110
3	0.332812	36.50283	46.08238	0.411519	16.25625	0.678805	0.068213
4	0.373872	36.52722	44.96851	0.329966	16.98066	1.061125	0.132517
5	0.406192	36.81075	44.89487	0.297490	16.39138	1.493240	0.112269
6	0.427391	37.02889	44.82188	0.300258	15.73072	1.991912	0.126337
7	0.442730	37.07444	44.71794	0.342093	15.23586	2.410968	0.218710
8	0.455661	37.03637	44.68195	0.419406	14.67369	2.843992	0.344589
9	0.466355	36.91107	44.68018	0.497319	14.09400	3.301935	0.515493
10	0.475264	36.69244	44.65713	0.564482	13.58607	3.763880	0.735992

Variance Decomposition of EXGS:

Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.106706	10.57552	17.38653	0.171157	1.931667	69.93513	0.000000
2	0.152595	12.54284	17.73827	1.182763	2.278967	66.15745	0.099710
3	0.187198	10.27853	15.97261	2.808311	3.539327	67.21456	0.186657
4	0.221992	10.31792	13.78519	2.673606	5.713526	67.36941	0.140361
5	0.252509	10.84724	12.83937	2.540701	6.383097	67.21403	0.175565
6	0.278033	10.83680	11.94629	2.656267	6.594442	67.68585	0.280354
7	0.300885	10.83318	11.30870	2.649116	7.014299	67.80882	0.385886
8	0.322493	11.00141	11.03225	2.574393	7.290529	67.64195	0.459475
9	0.342526	11.14472	10.91198	2.525596	7.367324	67.51429	0.536091
10	0.361047	11.22500	10.85572	2.484606	7.431664	67.38359	0.619414

Variance Decomposition of IMGS:

Period	S.E.	DEFEXP	GNI	EXDT	TI	EXGS	IMGS
1	0.138244	19.97724	28.67403	0.427391	13.29934	16.76690	20.85511
2	0.195364	24.55618	29.42715	0.984631	10.74462	17.88766	16.39975
3	0.233586	24.16616	30.18876	1.454552	10.04966	20.68978	13.45110
4	0.267645	24.47546	27.71970	1.241890	11.50035	22.05370	13.00890
5	0.298084	25.12645	26.35356	1.021059	11.87493	23.52588	12.09812
6	0.321730	25.52836	25.51709	0.891504	11.60089	25.29448	11.16767
7	0.340241	25.58662	24.81467	0.799553	11.51687	26.82163	10.46067
8	0.357363	25.59074	24.24596	0.727047	11.41600	28.16896	9.851298
9	0.373039	25.59154	23.85835	0.673749	11.13495	29.45224	9.289170
10	0.386788	25.50277	23.55868	0.632542	10.81891	30.69615	8.790967

Impulse Response Coefficient:

The impulse response coefficient tends to trace one standard deviation shock in one variable to all the other endogenous variables. In our analysis, we have used the panel data and found out the response of endogenous variable to the shock in Gni and Defexp 40 steps years ahead. The figure for the impulse response coefficient is given in Appendix 1.

The response of Gni to one standard deviation shock in Defexp is close to zero which means that the looking ahead defense expenditures and Growth have a linear relationship. On the contrary, the effect of Defexp on external debt has a positive impulse response looking futuristic. Our result is same as of Karagol's (2005). Therefore as the defense expenditures of the developing nation's increases, the indebtedness also increase meaning that these countries rely on foreign aid and loans to cover their defense

expenditures. The impulse response function of the variance of TI to shocks in Defexp is negative overall looking at 40 steps year's period. The countries having more and more defense expense have less confidence of the investors and therefore have a negative relationship with the defense expenditures. Looking at the last two variables i-e Imports and exports; the shock in defense expenditures have an overall import and export base again taking the same logic of investor's sentiments.

In figure 2 the responses of endogenous variables to the shock in Gni. All the results show a positive shock impact of growth on defense expenditures, external debt, total investments, imports, and exports.

Figure 3 shows the shocks in external debt and endogenous variables. In the long run, the shock in external debt has a negative impact on the growth. This is very much true for the developing countries as the payment of installments, refinancing hinder the economic activity. Also, the shock in external debt has a negative impact on defense expenditure in the long run.

Figure 4 shows how shock in the investment expenditures and its impact on endogenous variables. The shock in total investment has a negative effect on growth, external debt and defense expenditure. Similarly, figure 5 and figure 6 shows shocks in imports and exports variables respectively and the impulse responses of endogenous variables. The impulse response of gni to shock in imports for the first five years looking into future is not noteworthy, however looking at the broader picture the growth tend to increase over the entire period with the shocks in imports. On the contrary, the shocks in imports tend to even out the responses in defense expenditures, debt and total investments. By looking at 40 steps years ahead, we can conclude that the earnings response coefficients of all the endogenous variables tend to behave positively with a unit shock in exports as depicted in figure 6.

5. Conclusion:

Our paper focused on the relationship between economic growth, defense expenditure and other regionally essential variables of 12 emerging countries of South East Asia for the year 1990 to 2015. Random and Fixed effect models along with the unit root tests are used to analyze if the data is stationary or not. Variance decomposition and impulse response coefficient are estimated after the implication of the cointegration analysis.

According to the result, defense expenditure has a positive and significant impact on the growth of the emerging economies. The defense spendings affect the infrastructure of the particular country that results in more efficiency in the labor market hence stimulating economic growth (Looney Fredrickson 1992). Also, the economic growth of the country is triggered by more and more external debt and total investment. Therefore, we have a positive and significant relationship.

The impulse response coefficient of GNI due to defense expenditure has a positive trend, by looking one year ahead it has 46% impact while this trend continues and has a positive effect after that for the looking ten steps forward. There is also a positive correlation between the GNI and export of goods and services. As the exports increase the foreign reserves of the country also increases and hence economic growth takes place.

Defense expenditures have a positive effect on the external debt meaning that the emerging economies rely a lot on the foreign funding to meet their defense expenditures. Also, the external debt has a positive relationship with economic growth meaning that the funds being generated are used in the infrastructure or other growth-related variables. The countries having more and more defense expense have less confidence of the investors and therefore have a negative relationship with the defense expenditures. Looking at the last two variables i.e Imports and exports; the shock in defense expenditures have an overall import and export base hence having less investor's confidence.

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Appendix: 1

S. No	Country
1	Pakistan
2	India
3	Bangladesh
4	Sri Lanka
5	Indonesia
6	Malaysia
7	Philippines
8	Thailand
9	Egypt
10	Turkey
11	Jordan
12	Nepal

Appendix: 2

Figure 1

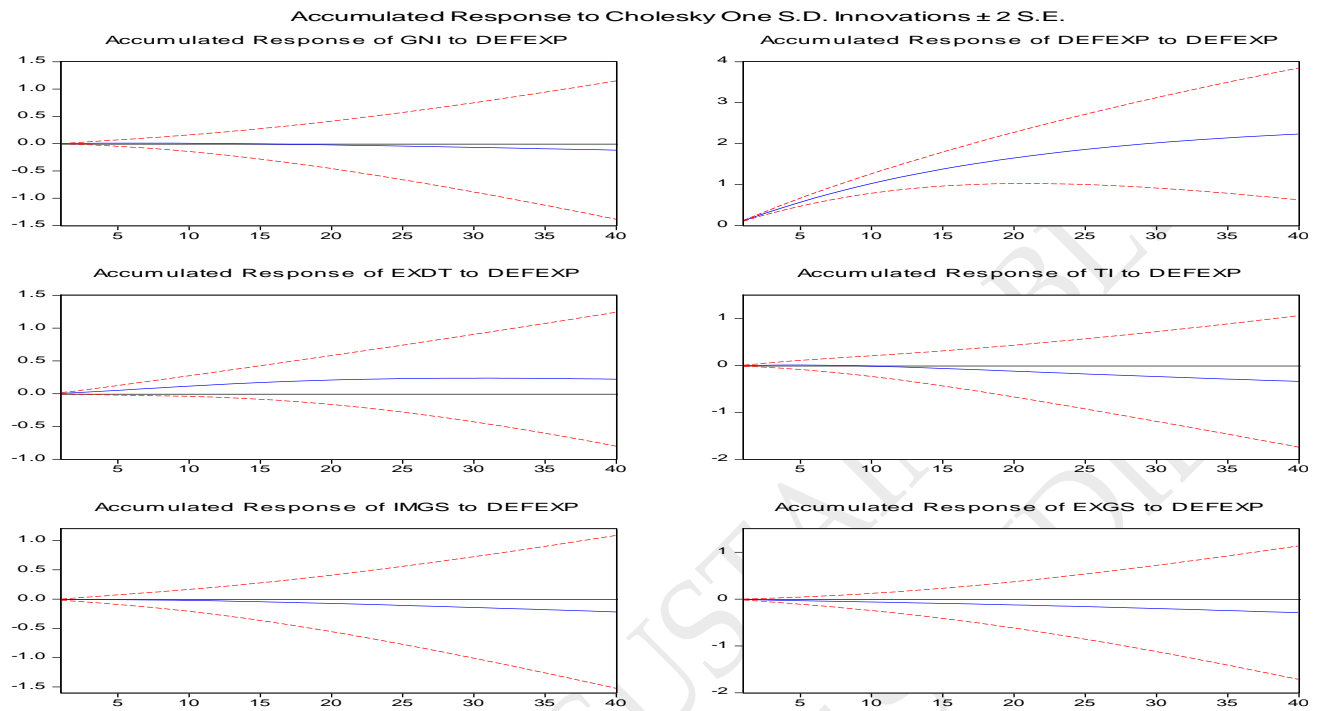


Figure 2

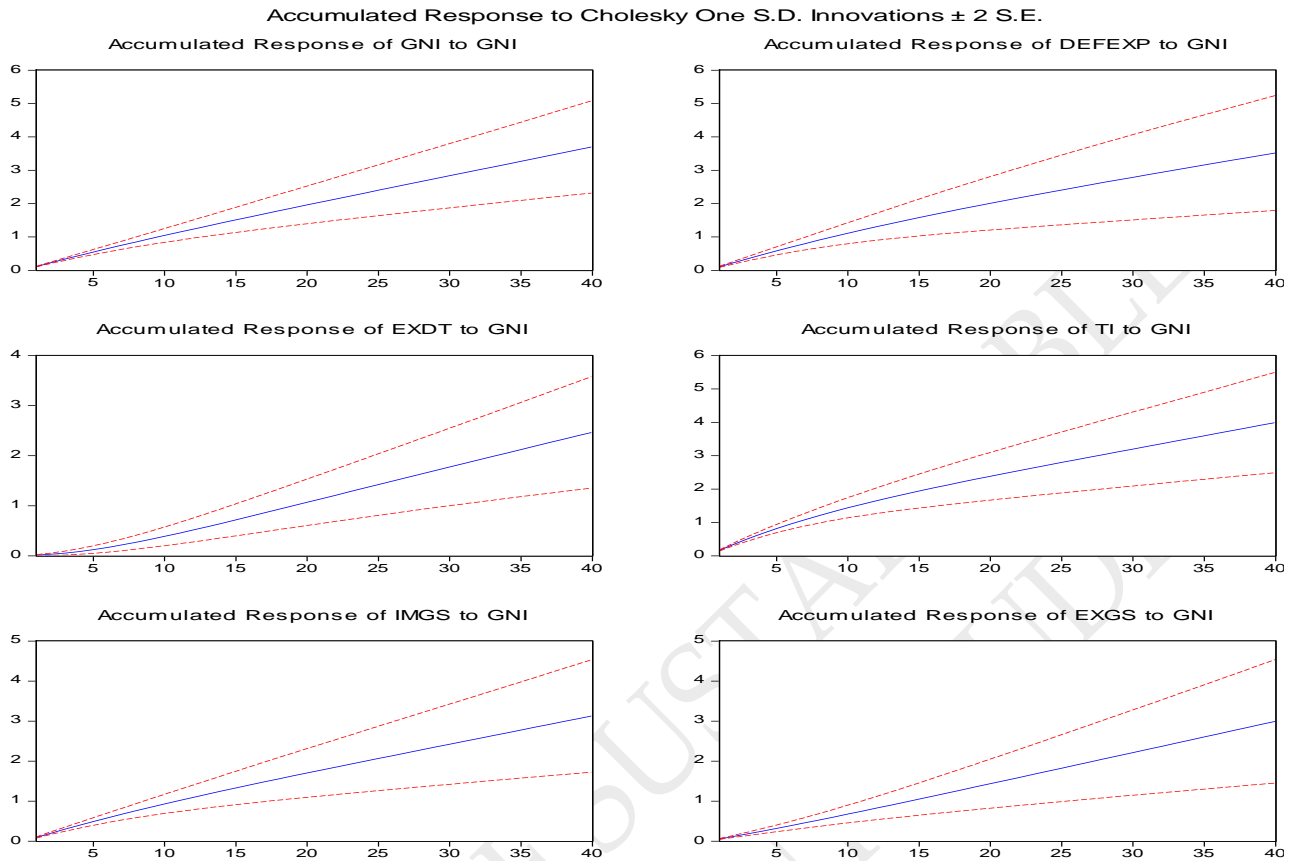


Figure 3

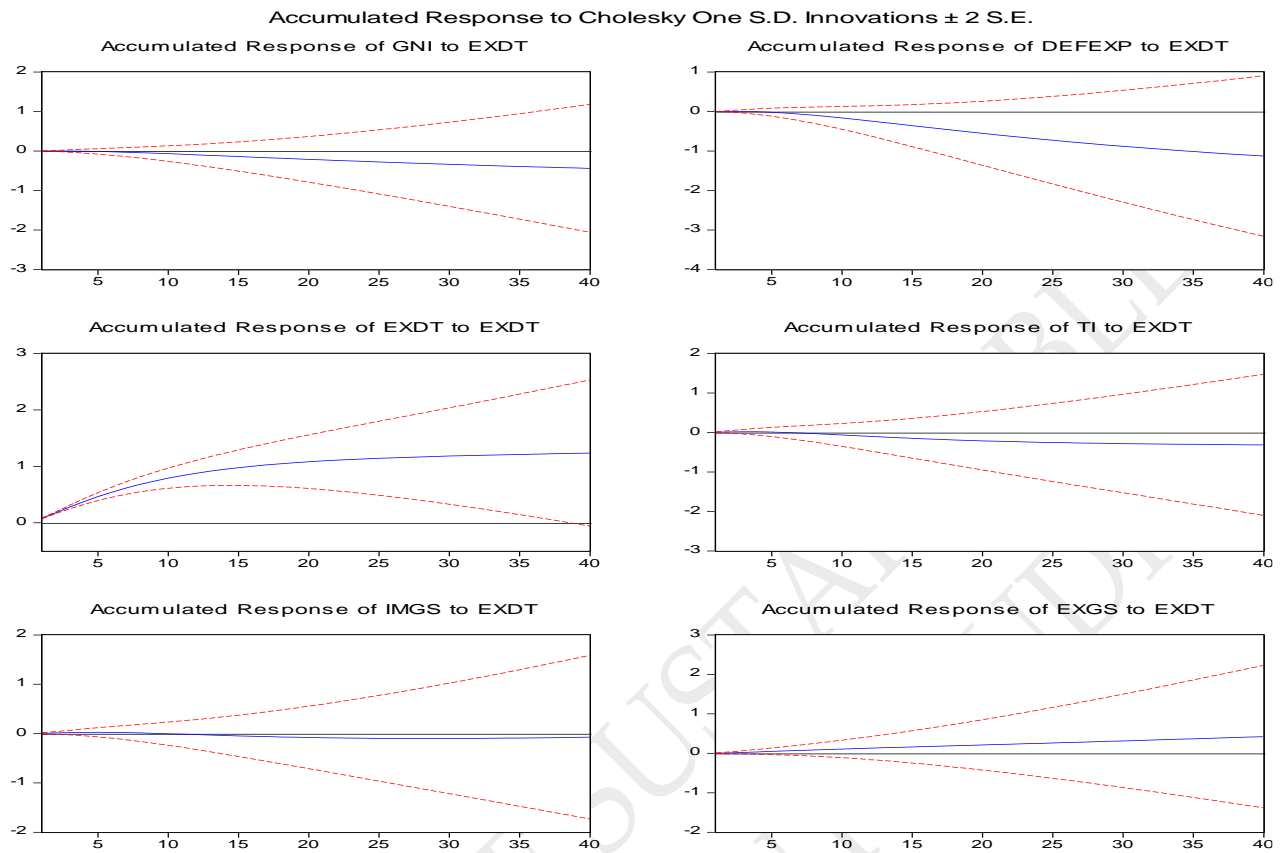


Figure 4

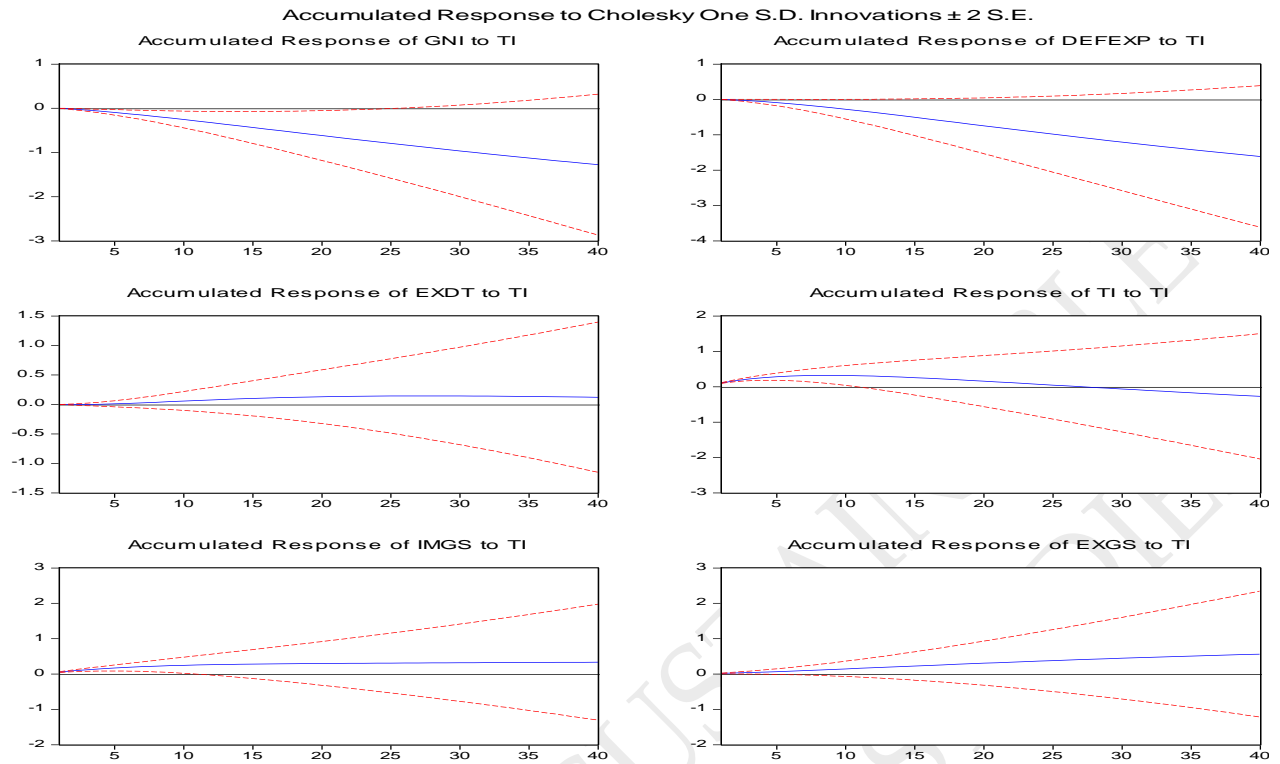


Figure 5

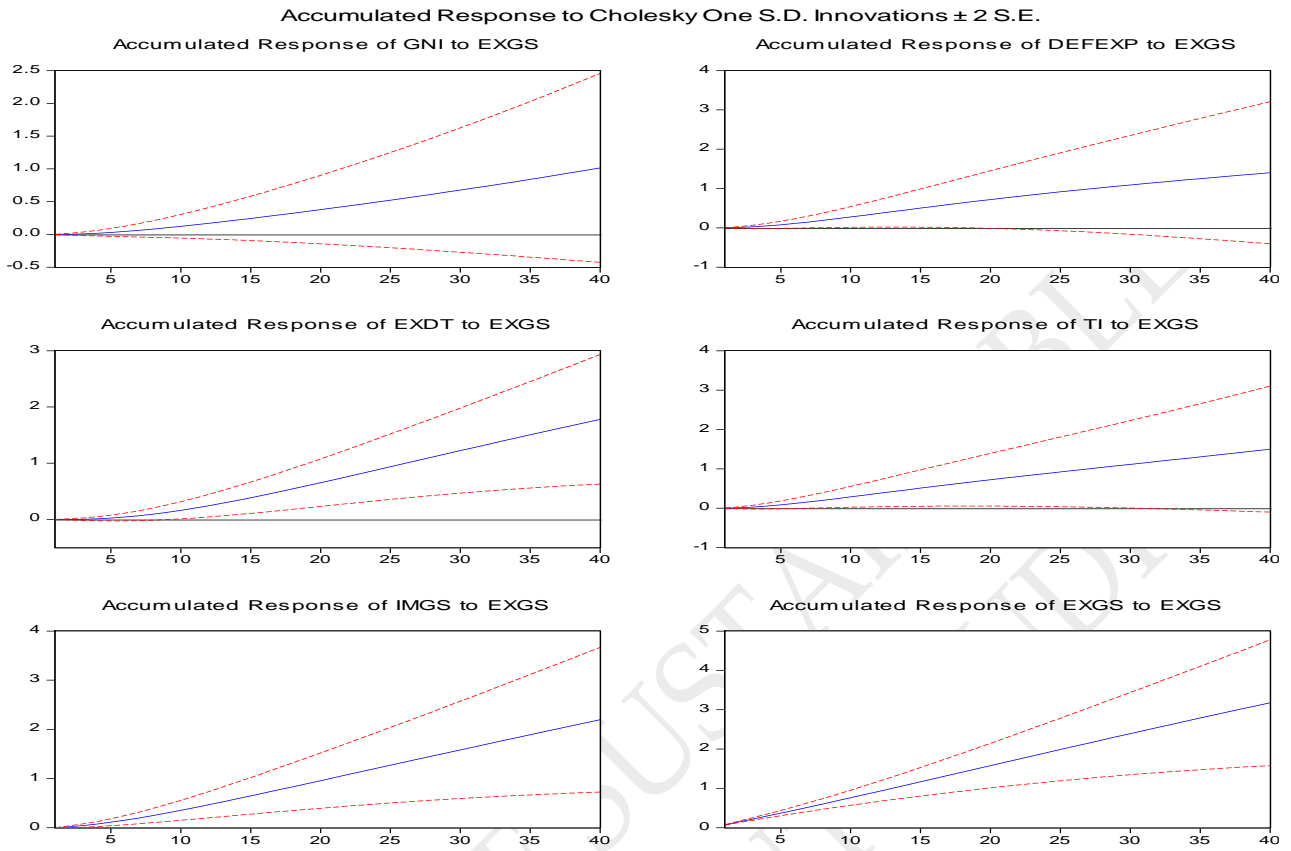


Figure 6

