The impact of external debt on economic growth in emerging economies: investigating the role of capital formation

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Abstract: The emerging economies rely on external debt for their economic development (Hawkins and Turner, 2000). We investigate capital formation as one of the channels through which external debt impacts the economic growth of emerging economies. The study utilises unbalanced panel data estimation models on economic data of 24 emerging economies1 for the period 1990 to 2019. Unbalanced panel data regression models are developed to identify the impact of: 1) growth of external debt stock (EDS) on GDP growth; 2) capital formation growth on GDP growth; 3) growth of EDS on capital formation growth in these economies. The findings indicate that EDS growth in the emerging economies had a negative impact on GDP growth, while capital formation growth had a significant positive impact on GDP growth. Further, the EDS growth had a significant negative impact on capital formation. Findings indicate that the debt raised has hindered capital formation in emerging economies.

Keywords: external debt; emerging economies; capital formation; crowding out; debt overhang; GDP per capita.

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1 Introduction

According to the latest Global Debt Monitor report by the Institute of International Finance (IIF), global debt has exceeded the world gross domestic product (GDP) by 322%, reaching a total of $253 trillion (Tiftik et al., 2020). The emerging markets accounted for about 30% of this global debt, amounting to $72 trillion. These markets have witnessed a more than two-fold increase in external debt since 2010, facilitated by the historically low-interest rates. The public debt raised from multinational agencies such as IMF, WB, and ADB, commercial banks, and through bilateral agreements, could act as a stimulator for growth and a means to bridge fiscal deficit, without burdening the domestic financial sector. From the investor point of view, the higher growth rate of these economies positions them as an attractive option.

For this study, we have considered external debt stock (EDS) as a proxy for external debt levels of a country (Ijirshar et al., 2016; Zaman and Arslan, 2014). EDS is defined as the sum of public, publicly guaranteed, and private non-guaranteed long-term debt, use of IMF credit, and short-term debt. Table 1 shows the high level of EDS to GNI ratio across the emerging economies considered.

However, except for a few economies such as the Philippines, the GDP growth during the same period has not shown any steady improvement, as showing in Figure 1. For increasing EDS to lead to economic growth, it should be invested in capital formation (CF), which refers to the outlays on additions to fixed assets, plus the net change in inventories (Abdullahi et al., 2016). Fixed assets include plant, machinery, equipment, and buildings, all used to create goods and services. Though the emerging economies rely on external debt raised through sovereign bond issues and borrowings from international agencies to finance their economic growth (Jayaraman and Lau, 2009; Safdari and Mehrizi, 2011; Zaman and Arslan, 2014), existing literature indicates that higher levels of external debt lead to debt overhang, crowding out and liquidity constraints in the emerging economy which could restrict CF. Further, if the emerging economies utilise capital raised through external debt for paying off the existing debt, closing the fiscal deficit or revenue expenditure rather than enhancing CF, the increasing EDS will not lead to economic growth. Inefficient government spending could further increase external debt and lead to economic stagnation in emerging economies (Nikensari et al., 2019). For instance, it has been empirically shown that the increase in external debt in South Africa was mainly due to sluggish economic growth and high government spending on infrastructure (Murwirapachena and Kapingura, 2015).

Table 1 EDS as a % of GNI (EDS-GNI) statistics of major emerging economies (1990–2019)

Country	*Mean*	*Median*	*Max*	*Min.*	*Std. dev.*	*Obs.*
Argentina	50.7	41.4	159.9	26.2	32.2	29
Bangladesh	27.8	26.9	44.5	16.6	8.3	29
Brazil	27.2	26.8	47.2	15.9	9.3	29
Bulgaria	86.6	85.7	119.4	56.3	18.6	29
China	13.8	14.0	19.4	8.2	2.5	29
Colombia	31.7	30.9	43.6	20.0	7.1	29
India	22.2	21.7	33.2	14.9	4.7	29
Indonesia	57.0	56.3	168.2	25.3	30.9	29
Mexico	29.3	28.6	48.1	17.8	8.3	29
Morocco	46.6	43.5	85.4	22.8	17.0	29
Pakistan	38.1	36.3	54.7	23.2	11.0	29
Peru	46.9	50.1	81.8	28.3	14.1	29
Philippines	44.9	51.1	71.9	19.7	19.1	29
Romania	39.7	40.7	71.8	2.9	19.7	29
Russian Federation	37.1	32.8	95.7	17.5	15.6	27
South Africa	28.5	25.1	53.3	15.8	11.9	25
Thailand	44.1	38.4	96.0	23.7	17.4	29
Turkey	43.2	41.4	59.0	33.4	7.1	29
Ukraine	59.6	55.8	130.6	0.7	35.2	27
Venezuela, RB	46.0	44.1	69.4	23.1	13.6	25

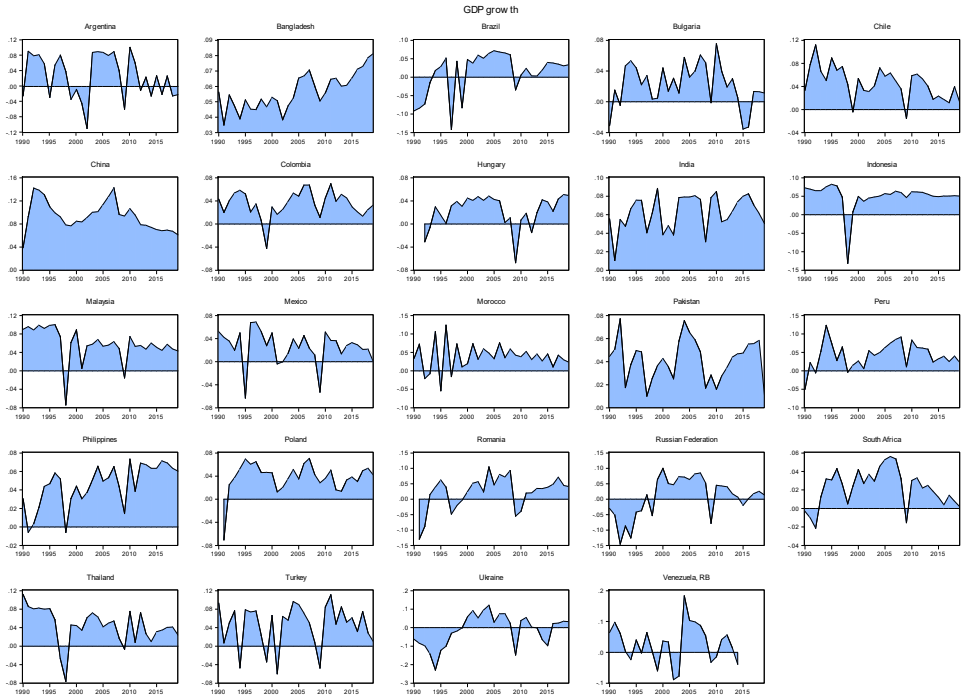
Source: World Bank

In this context, our study attempts to understand whether the increasing EDS in emerging economies are leading to a growth in CF. To understand the impact of EDS on GDP growth through the CF route, we consider the macroeconomic parameters of 24 emerging economies during the period 1990–2018. The countries considered for the analysis are Argentina, Bangladesh, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, Turkey, Ukraine, and Venezuela. The analysis consists of three steps – in the first step we estimate the impact of EDS growth on GDP growth. In case there is a significant positive impact then we analyse whether the positive impact of EDS growth on GDP growth is driven by growth in CF. If the impact of EDS growth on GDP growth is insignificant, we determine whether this is due to a lack of CF growth during the period. In addition to the above variables, we include the FDI, exchange rate, trade openness, inflation, and real interest rate as control variables.

Our paper contributes to the literature on increasing sovereign debt in emerging economies. Though these countries are raising external debt to boost economic growth, the utilisation of the funds needs scrutiny. In this regard, our paper will be of interest to the policymakers in emerging economies to adjust their strategies on raising and utilising external debt. It will also be of interest to lenders as it demands better monitoring of the funds released for supporting economic growth. The paper is structured in five sections, Section 2 covers the theoretical framework and the literature review followed by a

detailed description of the research methodology in Section 3, Section 4 covers the findings and discussion, and we conclude in Section 5.

Figure 1 GDP growth during 1990–2019 of major emerging economies (see online version for colours)



Source: World Bank

2 Theoretical framework and literature review

Economic theories indicate that a reasonable amount of debt would assist the economic development of both developed and developing countries. The existing literature utilises theories on debt overhang and on liquidity constraints to analyse the implications of external debt on economic growth (Cohen, 1993; Krugman, 1988; Sachs, 1989). According to the debt overhang theory proposed by Krugman and Cohen, excessive debt accumulation can impact the credibility of the debtor. Further, the need to repay external debt leads to increased government borrowing from domestic markets, which in turn increases the interest rate, making the cost of borrowing more expensive. The private sector would find it expensive to raise the capital required for economic growth, thereby leading to liquidity constraints. This phenomenon called as crowding out effect (Kharusi and Ada, 2018), eventually impacts economic performance. Evidence from South Africa shows that fiscal deficits and government borrowings significantly crowds out private investment in the long-run (Biza et al., 2015). In short, these theories approach external debt financing as an advance tax paid on future production.

Oks and Van Wijnbergen (1995) were the first to investigate the impact of the uncertainty in payments for debt servicing on economic performance. Their study conducted in Mexico provided proof of crowding out effect, i.e., debt servicing over the years had a negative impact on private investment and economic growth. In addition to crowding out, the burden of debt servicing could force governments to forego planned investment and economic reforms (Agénor and Montiel, 1999). Further studies also indicate a negative impact of external debt on domestic investment (Deshpande, 1997). Iyoha also provided empirical evidence on the relationship between debt, investment, and economic growth in African countries. The findings of this research conducted using data from 1970 to 1994 indicate that a 20% reduction in external debt increases investment by 18% and a growth in GDP by 1% (Iyoha, 1999). The research lead by Pattillo et al. (2002) further established the long-term relationship between external debt and economic growth. The study conducted on 93 developing countries during the period 1969–1998, identified an inverted U-shaped relationship between debt and growth. Economic growth is at its optimal level when the debt is 35–40% of the GDP. Clements also provided analytical evidence of crowding out effect (Nguyen et al., 2003). According to this study, a reduction in debt service as a percentage of GDP increased public investment and hence, economic growth.

Considering the burden placed on external debt financing on fiscal budgets, it could also lead to an increase in tax rates in these economies which could impact economic performance. The extent of the impact of debt on economic growth further depends on the institutional, policy, and regulatory framework of the borrowing country (Cordella et al., 2009). According to this research covering 80 developing countries, the negative impacts of debt on economic growth in countries with a good institutional and policy framework are observed when debt exceeds 15–30% of GDP, whereas, for other countries, the threshold is much lower.

Recent literature identifies multiple channels through which an increase in external debt can negatively impact economic growth in the long-run. According to Nautet and Van Meensel (2011), in addition to an increase in the interest rate and a fall in investment, an increase in public debt also leads to a slowdown in CF resulting in lower innovations and productivity. Panizza and Presbitero (2014), though agreed on the negative correlation between public debt and economic growth, especially for higher levels of debt, questioned the causal effect of debt on growth. According to their study, the correlation could also indicate that high economic growth led to lower reliance on external debt. However, the researchers agree on the channels through which excessive debt could negatively impact economic growth. Country-specific studies on the impact of debt on economic growth show a similar result. For example, research conducted at Malawi (Tchereni et al., 2013), Nigeria (Ezeabasili et al., 2011), India (Bal and Rath, 2014) and Pakistan (Akram, 2011), indicate that there is a negative relationship between public debt and economic growth.

Though literature is quite vocal about the negative impact of debt on economic growth, a few studies report the contrary that efficient investment of external debt to build infrastructure, energy consumption in a corrupt-free environment will lead to growth (Checherita-Westphal and Rother, 2012; Chenery, 1967). However, these studies are viewed as special cases of the inverted U-curve relationship between external debt and economic growth.

To conclude, the existing literature validates the theory that external debt leads to the improved economic performance provided it leads to CF. Further, excessive debt has a

negative impact on economic growth as it limits CF due to crowding out, debt overhang, and liquidity constraints. However, the empirical proof is thin on the role played by the CF in explaining the impact of external debt on economic growth. In this paper, we attempt to bridge this gap by applying CF to understand the relationship between external debt and economic growth. The next section details the data and methodology used for analysis.

3 Data and methodology

The paper utilises macroeconomic data from 1990 to 2019 covering 24 countries. In this study, GDP growth is used as a measure of economic growth and EDS as a measure of external debt. The percentage growth in gross fixed CF (CF growth) is used to determine whether EDS growth is used effectively in building capital required for economic growth.

Table 2 Definition of variables used in the study

Factor	*Definition*	*Literature*	*Source*
External debt stock growth (in %)	EDS is used as a proxy for the external debt levels. EDS measures debt owed to non-residents repayable in currency, goods, or services.	Impact on GDP growth: • Ijirshar et al. (2016) • Zaman and Arslan (2014) Impact on capital formation: • Abdullahi et al. (2016)	World Bank (WB) Debtor Reporting System (DRS)
Gross fixed capital formation growth (CF growth in %)	GFCF is the net value of acquisitions of fixed assets plus expenditure on services that add to the value of non-produced assets. CF growth measures the annual % increase in GFCF.	Impact on GDP growth: • Abdullahi et al. (2016)	WB national accounts data
Foreign direct investment (FDI) net inflows (in US$ billion)	FDI refers to direct investment equity flows constituting equity capital, reinvestment of earnings, and other capital.	Impact on GDP growth: • Appiah et al. (2019) Impact on capital formation: • Xu and Wang (2007)	International Monetary Fund (IMF)
Foreign exchange rate (local currency units per US$)	Official exchange rate is the annual average exchange rate determined by national authorities. It is expressed as local currency units per US$.	Impact on GDP growth: • Rodrik (2008)	IMF

Source: World Bank, IMF Databases

Table 2 Definition of variables used in the study (continued)

Factor	*Definition*	*Literature*	*Source*
Trade openness (in %)	Trade openness is the sum of imports and exports normalised by GDP.	Impact on GDP growth: • Adhikary (2011) • Rani and Kumar (2019)	WB International Comparison Program (ICP)
Inflation (in %)	The ratio of GDP in current local currency to GDP in constant local currency. It shows the rate of price change in the economy as a whole.	Impact on GDP growth: • Baharumshah et al. (2016) Impact on capital formation: • Crosby and Otto (2000)	WB national accounts data
Real interest rate (in %)	Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.	Impact on GDP growth: • Obansa et al. (2013) Impact on capital formation: • Crosby and Otto (2000)	IMF

Source: World Bank, IMF Databases

Literature indicates a significant positive impact of FDI on economic growth (Appiah et al., 2019). The impact of foreign exchange rate (Rodrik, 2008), inflation (Baharumshah et al., 2016), trade openness (Adhikary, 2011), and real interest rate (Obansa et al., 2013) on economic growth is well documented. The impact of FDI on enhancing the investment efficiency in emerging economies has also been well-researched (Xu and Wang, 2007). Further, literature indicates that real interest rate and inflation (Crosby and Otto, 2000) have a significant positive impact on CF.

In line with the existing literature, foreign direct investment (FDI), foreign exchange rate, trade openness, inflation, and real interest rate are used as control variables. The data was collected from the World Bank databases. The definition of the variables used in the study, relevant theories and the literature supporting their inclusion are provided in Table 2.

3.1 Modelling

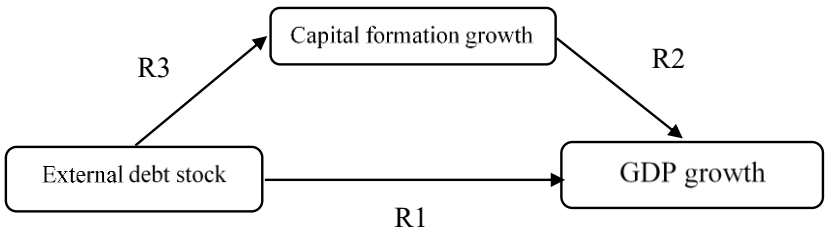
To assess the impact of the growth in external debt on the GDP growth of emerging economies through the CF route, we would need to construct three unbalanced panel data, regression models. The first model (R1) will assess the impact of EDS growth on the GDP growth of the economies considered. The next two models will be used to explain the relationship established in R1 through the CF route. The second regression (R2) will estimate the impact of the growth in CF on GDP growth and the third model (R3) will assess the impact of EDS growth on the growth of CF. Based on the existing literature, if R1 shows a positive impact of EDS growth on GDP growth, it indicates that the excess debt raised is used to build capital assets which would support economic growth. We can confirm this through R2 and R3.

Another possibility is that R1 indicates a negative impact of EDS growth on GDP growth. In this case, again R2 and R3 can give a clear indication of whether the excess

external debt is leading to crowding out effect thereby limiting private investors (Kharusi and Ada, 2018). Another possibility is that R1 shows there is no significant impact of EDS growth on GDP growth. Again, further investigation of R2 and R3 in this situation would show the role of CF in understanding this relationship. In this case, if EDS growth has no significant impact on the growth of CF (R3), we conclude that the increase in external growth does not lead to economic growth as there is no growth in CF. The above logic is valid only if growth in CF has a significant positive impact on GDP growth, which could be established through R2. Figure 2 provides a graphical framework for analysis.

is valid only if growth in capital formation has a significant positive impact on GDP growth, which could be established through R2. Figure 3 provides a graphical framework for analysis.

Figure 2 Graphical framework



Source: Authors' analysis

Source: Authors' analysis

Figure 3: Graphical framework

Converting the above steps into functional equations and hypothesis:

R1 GDP growth = f (EDS growth, FDI, foreign exchange rate, trade openness, inflation, real interest rate).

Converting the above steps into functional equations and hypothesis:

R1: GDP growth = f (EDS growth, FDI, foreign exchange rate, trade openness, inflation, real

R1 H01: There is no significant impact of EDS growth on GDP growth.

R2 GDP growth = f (CF growth, FDI, foreign exchange rate, trade openness, inflation, real interest rate).

R2 H02: There is no significant impact of CF growth on GDP growth.

R3 Gross fixed CF = f (EDS growth, FDI, inflation, real interest rate).

R3 H03: There is no significant impact of EDS growth on the growth of CF.

The next section discusses the findings of our analysis.

4 Results and discussion

We start the analysis by checking the stationarity of the variables involved. The results of Levin et al. (2002) panel unit root test are provided in Table 3. Considering that the p-value of the test statistic is less than 0.05, we reject the null hypothesis, i.e., the existence of a unit root, and conclude that the variables are stationary at level. As the input variables are stationary at level, we proceed with the estimation model.

From the descriptive statistics of the variables in Table 4, it is evident that the countries have experienced wide fluctuations in GDP growth during the period. The countries considered for our analysis are high growth economies reporting average GDP growth of 4%.

Before building the panel data estimation model, we construct the correlation matrix to identify multicollinearity between the independent variables. The resulting correlation matrix in Table 5 shows the correlations between the independent variables are of acceptable level. Hence, multicollinearity issues are not expected in the model.

Table 3 Results of Levin, Lin, and Chu unit root test at level

Variable	*Statistic*	*p-value*
GDP growth	–3.80	0.0001
EDS growth	–9.75	0.0000
CF growth	–7.85	0.0000
FDI	–4.19	0.0000
Exchange rate	–1.66	0.0480
Trade openness	–2.37	0.0090
Inflation	–200.30	0.0000
Real interest rate	–6.21	0.0000

Source: Authors' analysis

Table 4 Descriptive statistics

Variable (units)	*Mean*	*Median*	*Maximum*	*Minimum*	*Std. dev.*
GDP growth (%)	3.55%	4.37%	18.29%	–22.93%	4.22%
EDS growth (%)	8.71%	5.74%	600.12%	–19.29%	31.56%
CF growth (%)	5.04%	5.51%	150.47%	–67.68%	14.30%
FDI net inflow (US$ billion)	10.32	3.70	102.43	–4.55	16.36
Exchange rate (LCUs per US$)	764.32	25.78	14236.94	0.02	2426.03
Trade openness (%)	57.55%	50.60%	140.44%	15.51%	29.19%
Inflation (%)	42%	7%	6261%	–3%	356%
Real interest rate (%)	7.07%	5.57%	139.81%	–91.72%	16.16%

Source: Authors' analysis

Table 5 Correlation matrix

	GDP growth	*EDS growth*	*CF growth*	*FDI inflow*	*Exchange rate*	*Trade openness*	*Inflation*	*Real interest rate*
GDP growth	1							
EDS growth	–0.172	1						
CF growth	0.621	–0.084	1					
FDI inflow	0.003	0.001	–0.019	1				
Exchange rate	0.053	–0.026	–0.004	–0.005	1			
Trade openness	–0.100	0.012	–0.022	–0.197	–0.082	1		
Inflation	–0.243	0.437	–0.049	–0.059	–0.028	–0.036	1	
Real interest rate	0.125	–0.329	–0.160	0.201	–0.034	–0.218	–0.310	1

Source: Authors' analysis

Table 5 also shows the positive correlation between CF growth and GDP growth; whereas EDS growth has a negative correlation with GDP growth. This provides initial evidence that EDS growth is not leading to CF growth in the emerging economies considered.

Table 6a Hausman test result for the three-unbalanced panel data regression models

Regression	*Chi-sq statistic*	*p-value*	*R2 – fixed*	*R2 – random*	*Final model*
R1	14.4663	0.0248	0.2931	0.0592	Fixed effect
R2	16.1257	0.0131	0.5809	0.4927	Fixed effect
R3	16.1698	0.0028	0.0989	0.0496	Fixed effect

Source: Authors' analysis

Table 6b Unbalanced panel data estimation models

Regression: R1↓		*Regression: R2↓*		*Regression: R3↓*	
Fixed effect unbalanced panel data regression		*Fixed effect unbalanced panel data regression*		*Random effect unbalanced panel data regression*	
Dependent variable:		*Dependent variable:*		*Dependent variable:*	
GDP growth (%)		*GDP growth (%)*		*CF growth (%)*	
EDS growth	*–0.0002 (0.9746)*	CF growth	*0.1913*** *(0.0000)*	EDS growth	*–0.0555*** *(0.0313)*
FDI	2.88E-05 (0.6898)	FDI	0.0001 (0.1593)	FDI	–9.42E-06 (0.9883)
Exchange rate	2.29E-06 (0.1775)	Exchange rate	1.12E-06 (0.3166)	Inflation	–0.0047** (0.0435)
Trade openness	–0.0002 (0.2047)	Trade openness	–0.0001* (0.0760)	Real interest rate	–0.3246** (0.0000)
Inflation	–0.0023** (0.0003)	Inflation	–0.0011** (0.0111)	Constant	0.0802** (0.0000)
Real interest rate	0.0151 (0.3623)	Real interest rate	0.0736** (0.0000)		
Constant	0.0299** (0.0022)	Constant	0.0121** (0.0312)		
Observations	410	Observations	410	Observations	410
R^2	0.2931	R^2	0.5809	R^2	0.0989
Adjusted R^2	0.2557	Adjusted R^2	0.5601	Adjusted R^2	0.0550
Residual std. error	0.0377	Residual std. error	0.0270	Std. error of regression	0.1390
F statistic	7.8408** (0.0000)	F statistic	27.8888** (0.0000)	F statistic	2.2529** (0.0021)

Notes: ↓ *p*-values in bracket; **$p < 0.05$; *$p < 0.1$.

Source: Authors' analysis

Now we proceed with building the unbalanced panel estimation models. For each regression, we conduct the Hausman test to determine whether to consider fixed or random effect estimation models. The null hypothesis of the Hausman test is that the

appropriate model is the random effect model (Hausman, 1978). Depending on the *p*-value of the Hausman test we proceed with a fixed or random-effect model.

In the following section, we consider the results of the regression. According to the chi-square statistic and the *p*-value of the Hausman test as given in Table 6a, we reject the null hypothesis for regressions R1 and R2 and proceed with the fixed effect estimation model. Whereas in the case of R3, we go ahead with the random effect model.

The three regression model details are provided in Table 6b. The unbalanced panel data regression model R1 indicates that the EDS growth has a negative impact (though not significant) on GDP growth in the emerging economies considered. Based on the data considered, an increase in external debt is emerging economies is not leading to GDP growth. As mentioned in the literature, this could be because of debt overhang, crowding out or liquidity constraints (Kharusi and Ada, 2018). These factors could negatively impact the capacity of these economies to convert external debt into gross fixed capital which could then support economic growth. To understand the role of CF in explaining the impact of EDS growth on GDP growth, we analyse the results of regressions R2 and R3.

R2 models the relationship between CF growth and GDP growth, i.e., whether an increase in CF is leading to enhanced economic output. The panel data estimation model clearly shows a significant positive impact of CF growth on GDP growth indicating that building up fixed capital assets lead to an improvement in the economic output (Checherita-Westphal and Rother, 2012). The CF could be in the form of fixed assets such as infrastructure and machinery which could lead to enhanced production of goods and services within the economy. Having shown that CF has a positive impact on the economic growth, we proceed to understand whether the increase in external debt is leading to a growth in CF in these economies. The panel estimation model R3 provides the relationship between EDS growth and CF growth. The result shows that EDS growth has a significant negative impact on CF growth, i.e., the increase in external debt is inhibiting fixed CF in the emerging economies considered. According to the existing theories, the high sovereign debt could be crowding out the debt markets (Chaudhry et al., 2017) thereby reducing overall capital raised for growth. It is also possible that the emerging economies are using external debt raised to finance existing debt obligations and to bridge fiscal deficits in which case it will not lead to CF or economic growth (Bordo and Meissner, 2006). The literature also indicates that high volume of external debt in emerging economies could lead to an increase in interest rates in the domestic market which could make it more expensive to raise capital for expansionary purposes (Kharusi and Ada, 2018). The goodness of fit for R3 is low (R2 – 0.0989) indicating that the model explains only about 10% of the variations in CF growth. A low R2 is acceptable as the purpose of this study is not to accurately predict CF growth but to understand the impact of EDS growth on CF growth.

To summarise our findings, in the group of 24 emerging economies considered for our study it is evident that the increasing external debt is not leading to CF which in turn is limiting the impact on economic growth. Based on the findings, the following recommendations are made to effectively utilise the recent growth in external debt for economic growth. As CF growth has a significant positive impact on economic growth, the governments in emerging economies should increase the proportion of capital expenditure in their federal budgets. This would include expenditure in building infrastructure, technical tools and components required for production, electricity, and a cost-effective transportation network. Currently, the emerging economies have a higher

proportion of fiscal budget allocated for recurrent expenditures (Kanu and Ozurumba, 2014). Policymakers in emerging economies need to enact investor friendly policies to attract and retain capital inflows. Domestic savings would also need to be mobilised through attractive schemes to overcome crowding out. Real sectors of the economy which would help create employment opportunities in the long run should be encouraged to sustain long-term growth. Also, it is vital to increase accountability and prudence in the allocation of capital to purposeful projects to avoid extravagance.

5 Conclusions

With limited domestic resources, the emerging economies rely on external debt for economic growth. The external debt in the emerging economies have increased substantially in the recent years. Existing theories indicate that only productive use of external debt leading to CF would translate to economic growth. The findings of the paper support this theory as the growth in CF is shown to have a significant positive impact on economic growth in the emerging economies considered. However, the increase in external debt is not leading to CF or economic growth. The external debt is either crowding out investments or is getting poorly utilised for non-developmental activities. In this context, the findings of this study are of significance to emerging economies in re-evaluating their external debt policies. Policies to attract capital from external and domestic sources to priority sectors is essential for economic growth. The study recommends increased monitoring of the utilisation of external debt to avoid extravagance. This study considers emerging economies as an individual entity and hence, future research should focus on country-specific analysis to formulate targeted national level policies.

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Notes

1 The countries considered for analysis are Argentina, Bangladesh, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, Turkey, Ukraine and Venezuela.