Assessing the Impact of Economic Performance and Political Environment on Debt Intolerance

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Introduction

- This study is conducted to determine the impact of economic performance and political environment on debt intolerance.
- Political factors affect the economic activity of a country and hence the debt carrying capacity of it.
- For poor and most of the emerging economies external debt is a major source of financing for the development of domestic economy.
- Usually those countries are prone to incur external debt where savings are relatively low and foreign aid is needed for economic development.

Introduction

- Debt intolerance is a concept which shows the incapability of the emerging economies to tolerate such level of debts that would be efficiently sustained by the advanced economies
- If external debt is not utilized properly and is not channeled towards the productive activities, then the ability of an economy to pay back its debt is adversely affected.
- Excessive reliance on external debt distorts the political structure of an economy as there are frequent changes in policies due to which economic activities get harm.
- The issue of debt intolerance arises when the country becomes unable to successfully pay off its debt liabilities

Research Question

- Economic and political factors play an important role in determining the debt carrying capacity of the given countries.
- This study is designed to examine the impact of economic performance and political environment on debt intolerance of selected HIPC.
- Does economic performance has an impact on debt intolerance? How political environment impacts debt intolerance ?
- Given the economic and political performance will these countries be able to achieve debt tolerance?

Literature Review

- Fosu (1996), Clements, Bhattacharya and Nguyen (2003), Qayyum and Haider (2012), Wamboye (2012) and Siddique, Selvanathan and Selvanathan (2015) examined the impact of external debt on economic growth.
- Guscina (2008) analyzed the impact of macroeconomic, institutional and political factors in assessing the government's debt structure of 19 emerging market economies for a period of 25 years.
- Jafri (2008) and Mahmood, Rauf and Ahmad (2009) tried to estimate the debt sustainability of Pakistan by using debt sustainability analysis approach.
- Sichula (2012) attempted to study the paradox of debt overhang in HIPC. The main aim is to show the effect of debt overhang and debt relief in these countries.

Theoretical Framework

- The main patrons to high debt of heavily indebted countries are global happenings of 1970's and 1980's followed by oil price shock, high interest payments, economic downturns in industrial economies and weak commodity prices.
- Moreover domestic factors i.e. poor governance, lack of accountability on part of government institutions, frequent changes in policies, rent seeking, poor policies regarding the development of private sector, misuse of resources, use of foreign aid for unproductive purposes also played crucial role in debt proliferation.

Theoretical Framework



Data and Methodology

- The study used the data of 29 HIPC. The time period is ranging from 2000-2015.
- The study adopted Debt intolerance as the Dependent Variable.
- Economic Performance and Political Environment are employed as the independent variable.
- However the Economic Performance and Political Environment are very broad concepts so the study has used proxies for these indicators.

Data and Methodology.

- Debt Intolerance is measured through Debt to GDP ratio.
- Economic Performance has used gross domestic product (GDP) and inflation (INF)) as the indicators for the measurement.
- Political environment is measured through voice and accountability (VA), political stability and absence of violence (PSAV).
- Foreign direct investment (FDI), credit to private sector (PVC), exchange rate (OEX), money supply (M2) and governance indicators (GOV) are used as control variables.
- Data for GDP, inflation, FDI, credit to private sector, exchange rate and money supply is taken from WDI. Data or PSAV and VA is taken from ICRG. Data for governance indicators is taken from WGI.

– <u>Model 1</u>

Measuring the impact of Economic Performance on Debt intolerance.

 $LDEBTT1_{i,t} = \beta_i + \beta_1 LGDP_{i,t} + \beta_2 INF_{i,t} + \beta_3 GOV_{i,t} + \beta_4 OEX_{i,t} + \beta_5 PVC_{i,t} + \dot{\epsilon}_{i,t}$

– <u>Model 2</u>

Measuring the impact of Voice and Accountability on Debt intolerance

$$LDEBTT1_{i,t} = \alpha_i + \alpha_1 VA_{i,t} + \alpha_2 LGDP_{i,t} + \alpha_3 FDI_{i,t} + \alpha_4 LOEX_{i,t} + \varepsilon_{i,t}$$

– <u>Model 3</u>

Measuring the impact of Political Stability and Absence of Violence on Debt intolerance

 $LDEBTT1_{i,t} = \varphi_i + \varphi_1 PSAV_{i,t} + \varphi_2 LGDP_{i,t} + \varphi_3 FDI_{i,t} + \varphi_4 M2_{i,t} + \varepsilon_{i,t}$

Econometric Technique

- The study has panel data and the estimation methodology adopted is PCSE (Panel Corrected Standard Errors).
- Panel Corrected Standard Errors (PCSE) is widely used when working with time series cross sectional (TSCS) data. When serial correlation and observation specific effects are present, it is fairly robust to use this method.
- PCSE allows accommodating data for panel heteroskedastictiy (the variance of error term is constant within a country, but differs substantially across countries due to country specific effects), cross correlation of errors (the errors across countries are correlated due to common shock within a time period) and auto correlation (Beck and Katz, 1995)

Model 1

Variables	Pooled OLS		Fixed Effect		PCSE		
					(heteroskedastic and		
					panel-specific AR(1))		
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	
LGDP	-0.434*	(0.000)	-1.074*	(0.000)	-0.647*	(0.000)	
INF	0.028**	(0.035)	0.033**	(0.024)	0.014***	(0.067)	
GOV	-0.168**	(0.037)	-0.199**	(0.025)	-0.090***	(0.064)	
LOEX	-0.08*	(0.000)	0.0006	(0.993)	-0.115*	(0.000)	
PVC	-0.004***	(0.07)	0.008***	(0.051)	-0.004	(0.161)	
Intercept	14.067*	(0.000)	28.071*	(0.000)	19.212*	(0.000)	
R-Square	0.387		0.70		0.858		
Diagnostics	Presence	of	Presence	of			
	heteroskedasticity		heteroskedasticity				
	and		and serial				
	Multicollinearity		correlation				
F-Test	0.000						
	Fixed Effect Model						
Hausman			0.000				
Test			Fixed Effect Model				
*, **, *** shows statistically significant at 1%, 5% and 10% level of confidence. The values in							
the () are the probability values.							

Model 2

Variables	Pooled OLS		Fixed Effect		PCSE		
					(heteroskedastic and		
						panel-specific AR(1))	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	
VA	-0.287***	(0.096)	-0.711*	(0.005)	-0.461**	(0.048)	
LGDP	-0.438*	(0.000)	-1.118*	(0.000)	-0.700*	(0.000)	
FDI	-0.002	(0.948)	-0.003	(0.211)	-0.0015	(0.583)	
LOEX	-0.069*	(0.000)	0.162	(0.823)	-0.100*	(0.000)	
Intercept	14.263*	(0.000)	29.436*	(0.000)	20.647*	(0.000)	
R-Square	0.396		0.671		0.900		
Diagnostics	Presence of heteroskedasticity but no multicollinearity		Presence of heteroskedasticity				
			and serial correlation				
F-Test	0.000 Fixed Effect Model						
Hausman			0.000				
Test			Fixed Effect Model				
*, **, *** shows statistically significant at 1%, 5% and 10% level of confidence.							
The values in the () are the probability values.							

Model 3

Variables	Pooled OLS		Fixed Effect		PCSE (heteroskedastic and panel-specific AR(1))	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
PSAV	-1.412*	(0.000)	-1.206*	(0.006)	-0.612***	(0.088)
LGDP	-0.438*	(0.000)	-1.141*	(0.000)	-0.584*	(0.000)
FDI	0.001	(0.753)	-0.003	(0.202)	-0.001	(0.638)
M2	-0.006*	(0.006)	-0.009*	(0.006)	-0.004***	(0.071)
Intercept	14.922*	(0.000)	30.778*	(0.000)	17.891*	(0.000)
R-Square	0.401		0.699		0.890	
Diagnostics	Presence of Heteroskedasticity But no multicollinearity		Presence of Heteroskedasticity serial correlation			
F-Test	0.000 Fixed Effect Model					
Hausman Test	an Test		0.000 Fixed Effect Model			
*Shows statistics	lly significant	at 1% lov	el of confiden	co ** Sho	we statistically	significant

*Shows statistically significant at 1% level of confidence. ** Shows statistically significant at 5% level of confidence. *** Shows statistically significant at 10% level of confidence. The values in the () are the probability values.

Conclusion

- After the careful analysis of the results from the empirical estimation through Panel Corrected Standard Errors analysis of 29 HIPC, from year 2000-2015, the study concluded that there exist a positive and significant long run relationship of the economic performance and political environment with the debt intolerance.
- As the coefficient of GDP, Voice and Accountability and Political Stability and Absence of Violence is negative. It indicates that increase in these variables will decrease the debt intolerance
- Following first model of economic performance, the results of PCSE estimation showed negative coefficient of GDP which exhibits as GDP increases debt intolerance decreases. So there is a negative and significant relation of GDP with debt intolerance. Inflation is also significantly but positively related to debt intolerance. As inflation increases it makes a country more debt intolerant.

Conclusion

- Voice and accountability model shows that voice and accountability index, GDP and exchange rate is negatively and significantly related to debt intolerance.
- Political stability model shows that political stability and absence of violence and money supply seems to have a significant and negative impact on debt carrying capacity of HIPC.

Recommendations

- The governments of highly indebted poor countries should use the debt for the productive and development projects instead of channeling it towards debt servicing payments. As this will improve the economic performance of the country.
- The quality of institutions working in these economies should be improved. There must be appropriate means for the accountability on the part of institutions.
- Government must encourage the private sector. It will substantially help in achieving the growth targets. Credit must be provided to private sector for the growth.

Recommendations

- The military in these economies should not try to intervene in the activities of the government.
- Authorities should try to create an environment that attracts foreign investment.
- Reliance on external debt for to fill the gap between fiscal imbalances must be reduced.

Thank you