Available online at http://cusitjournals.com/index.php/CURJ (e-ISSN:2409-0441)
(ISSN-P: 2220-9174)

CITY UNIVERSITY RESEARCH JOURNAL
Vol (13), No. (2), December, 2023

Sovereign Risk Assessment in Changing Political Landscapes: Moderating Role of Financial Vulnerability

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Abstract

This study aims to investigate the impact of political regimes on sovereign risk with the moderating role of financial vulnerability. To investigate the causal pathway of democratic advantage, the study used ordered probit regression by considering a sample of 52 emerging economies participating in BRI. The findings of the study reveal that democracies generally have lower credit ratings and a higher likelihood of default compared to their autocratic counterparts and the situation worsens when the level of debt crosses the threshold. Increased credit risk due to a high debt burden significantly affects economic adjustments, ultimately hindering economic growth. These findings contribute to a better understanding of policymakers and investors to manage credit risk specifically in the context of BRI.

Keywords: Sovereign risk, financial vulnerability, debt sustainability, Belt & Road Initiative (BRI)

1. Introduction

The notion of democratic advantage has opened the unsettling debate on whether the democratic institutions can act as effective commitment tool to gain "advantage" to access credit market and enjoy higher sovereign ratings over autocratic counterparts. According to Schultz and Weingast (2003) to maintain credibility democracies hold public leaders accountable which enhances their commitment to repay the debt.

Consequently, it is argued that democracies possess greater creditworthiness, and they have an advantage in global credit markets. Due to heightened accountability, democracies relish high sovereign ratings with low credit risk which signifies the ability and willingness to meet the debt obligations. Similarly, the credible commitment opens new avenues towards greater access to credit market with low interest rates (Archer et al., 2007; Saiegh, 2005), According to DiGiuseppe and Shea (2015) most scholars now appear to have reached a consensus that democracies do indeed benefit from this "democratic advantage" in terms of sovereign credit ratings.

On the other hand, Hansen (2023) contends that the advantage of democracies is not universal, but rather dependent on the level of debt burden of the country. A high external debt-to-GDP ratio make democracies highly vulnerable to sovereign risk, which is usually reflected through falling credit ratings, on the contrary when the debt levels are optimal democracies enjoy high credit ratings and are less vulnerable to sovereign risk. Democratic advantage stems from the ability of democratic institutions to empower the public to rally against unpopular economic measures, potentially resulting in reckless debt accumulation (O'Mahoney, 2011; Shi & Svensson, 2006). Consequently, democratic governments may encounter greater challenges in the adjustment process, as the debt burden interacts with their institutions in such a way that heightens the skepticism of international creditors about their capacity to navigate demanding macroeconomic conditions (Bhandari et al., 1990). Thus, democracies experience more unfavorable credit outcomes in the presence of adjustment requirements. However, when the economic need for adjustment is minimal, democracies exhibit advantages due to the numerous positive effects they have on governance and policymaking.

According to Hansen (2023) democratic economies are financially vulnerable when their overall debt burden (financial risk) is higher than the optimal threshold level. High levels of debt can indicate a diminishing determination to fulfill debt obligations, suggesting that any unforeseen shock can exacerbate crises given the massive debt burden (Aizenman et al., 2016). Additionally, substantial levels of debt restrict the ability to implement stabilizing counter-cyclical policies during such occurrences. According to the debt overhang theory presented by Krugman (1988), the overhang occurs when the debt burden exceeds the country's repayment ability, making debt servicing so high that a significant portion of the output accrues to foreign investors, creating a disincentive to invest. In this scenario, debt servicing acts as an implicit tax on the borrowing economy, which stifles economic growth and future investment, making it difficult for developing countries to escape debt crises (Abdelaziz et al., 2019).
This study provides profound implications regarding the fact that certain features of democracies, such as accountability mechanisms like electoral consequences and accountability of executive discretion, may affect the policy adjustment during the times of economic turbulence. This insight is highlighted in Lipscy's (2018) work, which argues that institutional sluggishness is a key reason behind democratic financial and economic crises. While the nature of diffuse policymaking can be advantageous to democracies in certain contexts, it can also delay the process of addressing growing debt and fiscal imbalances. Despite the many benefits of democratic institutions, including economic transparency (Bastida et al., 2017; Mendoza et al., 2015), reduced corruption (Beekman et al.,2013), rule of law (Biglaiser & Staats, 2012), and greater provision of public possessions (DiGiuseppe & Shea, 2015), some of the institutional features that enable these benefits may also put democracies at a disadvantage during times of economic and political turmoil (Waldenström, 2010).

The sovereign's ability to fulfill its debt obligation is assessed by various rating agencies. However, this ability varies greatly when it concurs with willingness based on political regime type (Beaulieu et al., 2012). Sovereign credit ratings (SCR) act as a predictive measure of the likelihood of default, making them a comprehensive indicator of a country's potential for failing to meet its debt obligations (Montes et al., 2016). In addition, SCRs are vital for developing countries to attract international capital by providing investors with information on the likelihood of default. This study analyzed data from Standard & Poor's, Moody's, and Fitch for emerging

economies from 2013 to 2020, using a panel data approach to identify the impact of various political regimes on sovereign risk of the countries. The study considered three different political regimes, including democracy, autocracy, and hybrid regimes. This research adds to the literature and enhances our understanding of political landscapes and their impact on sovereign risk in EMEs.

This article contends that during acute debt crises, domestic politics of sovereign democracies are primarily responsible for determining the content and timing of debt restructuring agreements with foreign investors. Previous studies have suggested that democracies are more reliable borrowers in international credit markets compared to other types of political regimes. This is because democratic governments with checked executives reduce the risk of seizure and enhance the credibility of their commitments (North and Weingast, 1989). As a result, democratic borrowers are expected to have an advantage in terms of accessing new borrowing opportunities and obtaining favorable interest rates (Schultz and Weingast, 2003). Empirical evidence supports the notion that democracies receive more credit and at lower interest rates compared to non-democratic states (Beaulieu et al., 2012). However, there is conflicting evidence regarding the impact of political regimes on debt repayment. The vested interest of executives in a democratic government hinders the willingness to repay their debt (Stasavage, 2003). On the other hand, credit downgrades significantly impact autocracies as dictators depend on external debt to fund private goods for their loyal coalitions, making them particularly sensitive to such financial assessments. (DiGiuseppe and Shea, 2015). Consequently, non-democratic regimes are compelled to maintain positive relationships with creditors, resulting in some of them enjoying better sovereign ratings than democracies (Dhillon et al., ,2019). This paper contributes to extant body of literature (that examines the connection between the domestic politics and financial vulnerability of debtor states Dhillon et al., 2019; DiGiuseppe and Shea 2019; Trebesch, 2019) in exacerbating sovereign risk along the BRI.

The contribution of this study to the extant literature is multifold. Firstly, it would provide profound insights into the impact of regime type on sovereign risk especially in the context of emerging economies that are participating in the Belt & Road Initiative (BRI). Hurley et al., (2019) have recently analyzed the debt implications of BRI and have found eight countries at the risk of high debt distress including Pakistan. Furthermore, Bandiera and Tsiropoulos (2020) have investigated debt vulnerabilities along BRI and found that 37% of the countries are at risk of high debt distress. These studies have highlighted the role of economic factors with a total disregard to political factors. Therefore, this study will fill the gap by considering democratic advantage and financial vulnerability together to gauge their impact on sovereign risk. Furthermore, this study incorporates an economy-specific yardstick for debt threshold assessment taken from the World Bank and IMF.

The subsequent sections of this paper are structured as follows: The following section delineates the connection between political regimes and sovereign debt. Section 3 elucidates the methodology employed. In Section 4, an overview of the results is presented. Lastly, Section 5 encapsulates the study's conclusion and implications.

2. Literature Review

2.1 Theoretical Foundations

2.1.1 Debt Overhang Theory

When a creditor does not expect that the debtor will be able to pay the debt fully, this situation is referred to as “debt overhang.” Krugman (1988) is the pioneer of debt overhang theory by

providing evidence regarding the potential outcome when a country cannot fully service its debt payment without additional borrowing. According to Krugman (1988), When a country's external debt is higher then the present value of expected future resource transfer then the country has a debt overhang problem. The theoretical foundation of the debt overhang hypothesis can be used for a broader interpretation of debt's negative effects on growth.

2.1.2 Democratic Advantage Theory

The notion of "democratic advantage" states that democracies make credible commitments to repay the debt as limited executive discretion enhances the credibility of democracies than their autocratic counterparts. However, the "advantage" is contingent upon the level of debt vulnerability and the need for adjustment of the countries in question (Steinberg et al., 2015).Due to the diffuse decision-making process and greater accountability to the public, democracies face challenges in implementing unpopular economic adjustment measures compared to autocracies. Consequently, democracies with high debt levels tend to experience worse credit outcomes, while those with low vulnerability still struggle with managing debt.

2.2 Empirical Literature

The foundation of the discussion on democratic institutions and their link to favorable access to financial markets can be identified in the work of North and Weingast (1989). They argued that stable fiscal policies in the English Crown were only achievable when constitutional authority was granted to Parliament for overseeing royal spending decisions (Dincecco, 2009). Expanding on this concept, Schultz and Weingast (2003) bolstered the argument by asserting that democratic leaders possess the credibility to commit to debt repayment. Consequently, investors are more inclined to lend to democracies due to the enforceability of this de facto contract, thereby enhancing their access to the financial market. Consequently, democracies are argued to possess greater resilience and success in enduring prolonged wars.

Recent consensus among scholars focusing on the democratic advantage aligns with the core idea that democracies can consistently commit to debt repayment due to electoral accountability and the dispersion of executive power. These foundational characteristics of democracy results in various other favorable and growth-inducing outcomes, such as a greater public goods provision compared to private goods (DiGiuseppe & Shea, 2015), am increased transparency which reduces corruption (Kolstad & Wiig, 2016), and an improved rule of law and better protected property rights (Biglaiser & Staats, 2012).

Conversely, according to Hansen (2023), while democracies generally adopt policies conducive to economic growth and can prevent leaders from failure to meet the debt obligations, they contend with three notable disadvantages. Firstly, autocratic leaders have more at stake in avoiding default, benefiting more politically from credit and facing potentially worse outcomes if ousted from power. Secondly, democracies face greater challenges in implementing economic adjustment policies due to conflicting pressures from various interest groups, heightened exposure to veto actors, and the influence of electoral cycles. Lastly, democracies may encounter issues of debt sustainability, risking an accumulation of excessive debt without concurrently optimizing the tax base, given the political costs associated with taxation.

Lastly, the idea of a hybrid regime refers to political systems that combine democratic and autocratic elements to a significant degree (Hale, 2011). In the last two decades, hybrid regimes have received significant attention in the field of comparative politics, resulting in numerous studies conducted by scholars like Bogaards (2009), Morlino (2009) Gilbert and Mohseni (2011),

and, Mazepus et al. (2016). However, classifying regimes as hybrids is problematic, as it is unclear if these 'in-between' cases truly maintain similar regimes. Unlike traditional authoritarian regimes, hybrids do not rely on divine will or coercion to justify their rule. Instead, they seek validation through elections, although these elections are often manipulated (Gerschewski, 2013). Hybrid regime rulers also adapt their methods of legitimation to external circumstances, leading to discrepancies in regime assessments and categorizations (Mazepus et al., 2016).

H1a: Flawed democracy impacts sovereign risk positively & significantly.
H1b: Full democracy impacts sovereign risk positively & significantly.
H1c: Autocratic regime impacts sovereign risk negatively & significantly.
H1d: Hybrid regime impacts sovereign risk negatively & significantly.

Factors that facilitate democracies' commitment to repaying debt are electoral punishment and executive constraints ironically suggest that democracies may be at a disadvantage compared to autocracies during financial vulnerability. This is because when a nation is financially vulnerable, it likely needs to implement economic adjustment policies to mitigate risks and prevent crises. Despite the theory that democracies are better at avoiding default, literature suggests that democracies are actually in a worse position in such situations (Ballard-Rosa, 2020)

During periods of financial vulnerability, democracies may find themselves in a more disadvantageous position compared to their autocratic counterparts. In such circumstances, the indication of a country's financial vulnerability implies the necessity for implementing such economic policies which mitigate risks and prevent potential crises (Hansen, 2023). A country's risk of default or other economic crises can be accurately predicted by the level of accumulated debt it has (Manasse & Roubini, 2009). The ability and willingness of a country to repay its debts are crucial factors in determining the likelihood of default. The total size of debt directly contributes to the magnitude of settlement complications. As the debt increases, the costs of interest rates also rise, consuming a larger portion of the budget. This situation creates challenging political decisions as servicing the debt may require sacrificing other potential government programs.

As per Ahlquist (2006), substantial amount of debt serve as a significant risk indicator for investors, being associated with the three primary dimensions of investor risk—namely inflation, currency, and default. Corneli and Tarantino (2016) additionally posit that higher debt levels elevate the chances of a liquidity shock and increase the likelihood of inadequate repayment. Consequently, a nation's level of indebtedness is a recognized gauge of financial vulnerability, anticipated to mitigate the impact of regime type on a country's sovereign risk.

H2a: Interaction of flawed democracy with unsustainable debt will have a negative impact on sovereign risk.
H2b: Interaction of full democracy with unsustainable debt will have a negative impact on sovereign risk.
H2c: Interaction of autocracy with unsustainable debt will have a negative impact on sovereign risk.
H2d: Interaction of hybrid regime with unsustainable debt will have a negative impact on sovereign risk.

3. Methodology

This study used a quantitative method with a deductive approach to quantify and evaluate data and to test the hypotheses based on established theories (democratic advantage & the debt overhang theory). According to the IMF country classification 2021, out of the 152 total BRI participants, 82 countries are classified as emerging economies. All 82 countries were included in this study, but a few countries were excluded due to insufficient data availability. Therefore, a total of 52 emerging economies were considered for this longitudinal study, spanning 8 years from 2013 to 2020.One of the prime reasons for selecting emerging economies is that they're the major recipient of capital through debt, especially in this case of BRI. Literature highlights the significance of debt levels in determining economic risk in countries, as noted by Jeanne (2007), Obstfeld, (2012), and Reinhart & Rogoff (2010). However, it is worth noting that developed economies have experienced minimal debt defaults since 1950 (Das et al., 2012), resulting in relatively stable country credit ratings. In contrast, developing countries are more susceptible to variations in credit ratings, which may be influenced by political institutions.

Moreover, according to Mosley (2018), developing countries face diverse financial challenges, including limited capital availability, susceptibility to volatility in investment flows, exposure to the risk of exchange rate, and the potential for increases sovereign risk vulnerabilities—a scenario less common in developed nations. Mosley further underscores that investors express heightened apprehension regarding political conditions in developing countries, underscoring the substantial importance of democratic institutions in these regions. Therefore, the dynamic interaction between democratic political institutions and debt vulnerability is anticipated to exert the most pronounced influence on credit outcomes in the developing world.

The study utilizes an annual average of sovereign credit ratings from Standard & Poor's, Moody's, and Fitch rating agencies. These ratings are based on a 21-point scale, with the highest rating being S&P's "AAA" or Moody's "Aaa," indicating exceptional creditworthiness and a high likelihood of debt repayment. In contrast, ratings decline to 1 for countries facing a risk of default, characterized by ratings lower than CCC+ and Caa1 for S&P and Moody's, respectively. Table 1 provides a breakdown of the operationalization of variables.

Table 1:Variable Operationalization

Variable (s)	Proxy	Predicted effect on sovereign risk	Source (s)
Dependent Variable			
Country Sovereign Risk	Sovereign credit ratings		S&P, Moody & Fitch (Appendix-I)
Explanatory Variable			
Political Regime	Democracy Index	Positive/Negative	Economist Intelligence Unit (EIU)
Moderating Variable			
External Debt Sustainability	Debt-to-GDP ratio Debt Threshold (70%)	Sustainable= Negative Unsustainable=Positive	World Bank

Control Variable (s)			
Current account-to-GDP	Current account-to-GDP	Deficit= Positive Surplus=Negative	World Bank
Population	Population (Log)	Negative	World Bank
GDP per capita	GDP per capita (Log)	Negative	World Bank

3.1 Ordered Probit Regression

The study estimates the factors affecting sovereign debt ratings under a framework with a few dependent variables. The ordered probit is a logical solution for this issue due to the rating's discrete nature and reflection of an order in terms of default probability. The creditworthiness of a nation is continuously assessed by each rating agency, represented by the latent variable Rit. Bissoondoyal-Bheenick (2005) used a single-year ordered regression model to evaluate the impact of multiple factors on country sovereign risk, while Afonso et al. (2011) estimated a panel ordered probit model using short and long run determinants of sovereign risk. An ordered response is a type of multinomial response, where the assigned values to each outcome are no longer arbitrary. The econometric model of the study derives the ordered probit model for y (conditional on explanatory variables x), where y is a credit rating ranging from 1 to 21, with "y = 21 representing the highest rating and y = 1 representing the lowest rating".

$$\boldsymbol{Y_{it} = \emptyset(\beta_0 + \beta_1 PRT_{it} + \beta_2 Z_{it} + \mu_{it})} \text{.....(1)}$$

$$\boldsymbol{Y_{it} = \emptyset(\beta_0 + \beta_1 PRT_{it} + \beta_2 EDS_{it} + \beta_2 EDS * PRT_{it} + \mu_{it})} \text{.....(2)}$$

4. Results

4.1 Descriptive Statistics

Descriptive statistics encompasses a range of techniques employed to depict the fundamental characteristics of a dataset succinctly and comprehensively. It offers a comprehensive overview of the data, aiding in the identification of patterns and relationships. Table 2 shows the result of descriptive statistics. The average sovereign risk is approximately 11, falling within the investment-grade category. This aligns with a BB+ rating on Fitch's and Standard & Poor's scales and a Ba1 rating on Moody's scale. These values closely mirror the mean rating of 14 reported by Teixeira et al. (2018) on the same scale, although their study period spans only the years 1998 to 2002. The standard deviation of the rating variable is 3.68, indicating the extent of dispersion in sovereign risk. Ratings range from a minimum of 5 to a maximum of 19.Four dummy variables have been used for political regime type and are represented ad D_ar, D_hr, D_Fld and D_full. Control variable current account to GDP shows a substantial heterogeneity by values ranging from -37.608 (deficit) to 39.901 (surplus) with a mean value of -1.528 suggesting that most countries are dealing with current account deficit. External debt is a moderating dummy variable with values ranging from 0 to 1. Furthermore, log for population and GDP per capita has been taken and have been used as control variable for this study.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Country Sovereign Risk	416	10.637	3.68	5	19
Authoritarian Regime	416	.313	.464	0	1
Hybrid Regime	416	.248	.432	0	1
Flawed Democracy	416	.37	.483	0	1
Full Democracy	416	.043	.204	0	1
Current Account	416	-1.528	7.529	-37.608	39.901
External Debt Sustainability	416	.661	.474	0	1
Population Log	416	16.458	1.469	14.048	19.427
GDP Log	416	9.643	.707	7.737	11.605

4.2 Correlation matrix

A correlation matrix is a tabular representation of correlation coefficients between various variables. This matrix illustrates the relationships between all potential pairs of values in a dataset. It serves as a robust tool for summarizing extensive data sets and revealing patterns within the data. Table 3 shows the correlation matrix. A correlation matrix serves as a method to assess the correlation coefficients among different indicators. The matrix illustrates the correlation between all possible pairs of values in a table, indicating the degree of connection between two variables. As depicted in Table 3, there exists a negative correlation among all dummy variables utilized as proxies for political regime types. Conversely, there is a positive correlation between regime dummies and explanatory variables. Similarly, a positive correlation is observed between regime dummies and control variables.

Table 3:Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Authoritarian Regime	1.000							
(2) Hybrid Regime	-0.387	1.000						
(3) Flawed Democracy	-0.517	-0.440	1.000					
(4) Full Democracy	-0.143	-0.122	-0.163	1.000				
(5) Current Account	0.295	-0.231	-0.078	0.002	1.000			
(6) External Debt Sustainability	0.001	-0.060	0.044	-0.022	0.290	1.000		
(7) Population Log	0.022	0.146	-0.131	-0.149	0.111	0.366	1.000	
(8) GDP log	0.351	-0.392	-0.046	0.096	0.253	-0.201	-0.289	1.000

4.3 Baseline Scenario

Table 4 presents the results of the baseline model estimation using ordered probit regression. Models 1 through 4 are estimated with regime types derived from the democracy index and include a comprehensive set of controls informed by the existing literature. These models have been run

separately to validate that the relationships identify are not influenced by over-parameterization. Results of model 1 reveal that autocracies impact sovereign risk negatively with a coefficient value of -0.283. In a similar vein, hybrid regimes have negative and significant impact on sovereign risk implied by a coefficient value of -0.603. On the hand flawed democracies have positive and significant impact on sovereign risk with a coefficient value of 0.532 and full democracies with coefficient value of 0.635.

Table 4:Ordered Probit Regression

VARIABLES	(1) CR	(2) CR	(3) CR	(4) CR
Authoritarian Regime	-0.283**			
	(0.126)			
Hybrid Regime		-0.603***		
		(0.131)		
Flawed Democracy			0.532***	
			(0.109)	
Full Democracy				0.635**
				(0.251)
Current Acc	0.0447***	0.0352***	0.0430***	0.0410***
	(0.00791)	(0.00779)	(0.00772)	(0.00773)
Population (Log)	0.0333	0.0404	0.0540	0.0381
	(0.0379)	(0.0378)	(0.0382)	(0.0380)
GDP (Log)	1.109***	0.944***	1.096***	1.042***
	(0.0956)	(0.0944)	(0.0924)	(0.0917)
/cut1	8.687***	7.070***	9.120***	8.233***
	(1.260)	(1.249)	(1.251)	(1.230)
/cut2	9.511***	7.952***	9.976***	9.062***
	(1.251)	(1.236)	(1.242)	(1.221)
/cut3	10.08***	8.532***	10.56***	9.631***
	(1.250)	(1.235)	(1.242)	(1.220)
/cut4	10.54***	9.001***	11.03***	10.09***
	(1.252)	(1.236)	(1.244)	(1.222)
/cut5	10.89***	9.360***	11.38***	10.44***
	(1.258)	(1.241)	(1.250)	(1.227)
/cut6	11.11***	9.593***	11.61***	10.67***
	(1.264)	(1.247)	(1.256)	(1.233)
/cut7	11.36***	9.847***	11.87***	10.91***
	(1.271)	(1.253)	(1.264)	(1.240)
/cut8	11.80***	10.30***	12.33***	11.35***
	(1.279)	(1.261)	(1.273)	(1.248)

/cut9	12.27***	10.77***	12.82***	11.81***
	(1.286)	(1.266)	(1.281)	(1.254)
/cut10	12.47***	10.96***	13.03***	12.01***
	(1.289)	(1.270)	(1.285)	(1.257)
/cut11	12.98***	11.48***	13.54***	12.53***
	(1.301)	(1.282)	(1.297)	(1.270)
/cut12	13.22***	11.71***	13.77***	12.77***
	(1.306)	(1.288)	(1.301)	(1.276)
/cut13	13.46***	11.95***	14.00***	13.02***
	(1.311)	(1.293)	(1.305)	(1.281)
LR Chi Square	201.46	217.51	220.28	202.8
Prob	0.000	0	0	0
McFadden R	0.1	0.11	0.11	0.1
Log Likelihood	-873.94	-865.91	-864.53	-873.27
Observations	395	395	395	395

Note: The significant probability value explains that the models are correctly specified. The R square shows the goodness of fit. Robust standard errors are shown in parentheses. ***, **, *indicating the coefficients significance at the 1%, 5%, and 10% significance levels.

4.2 Moderation Analysis

Table 5 shows the results regarding the moderating role of external debt to GDP on sovereign risk and political regime type. A threshold of 70% debt to GDP has been used as prescribed by the World Bank and IMF. A dummy variable for external debt to GDP has been used by coding the debt below the threshold as "1" which represents "sustainable" and "0" when it's above the threshold representing the external debt to GDP level as "unsustainable. Analysis has been undertaken by using "STATA 14" which allows the interaction of factorial variables. For regime types base "0" has been selected which allows tha interaction of the implied regime. On the other hand, for external debt to GDP base "1" has been chosen so that interaction happens when debt is unsustainable. The choice of "base" for external debt to GDP has been made specifically on the basis of debt overhang theory presented by Krugman (1988).

Table 5 reveals that when external debt is unsustainable in autocracies and hybrid regimes they are not very vulnerable to sovereign risk while both shades of democracies have exacerbated risk when debt crosses the threshold level of 70% in emerging economies.

Table 5:Moderation Analysis

VARIABLES	**(1)** **CR**	**(2)** **CR**	**(3)** **CR**	**(4)** **CR**
	(0.143)	(0.138)	(0.157)	(0.130)
Authoritarian Regime (ar)	-0.389**			
	(0.152)			
Hybrid Regime (hr)		-0.458***		
		(0.161)		

Flawed Democracy(fld)			0.650***	
			(0.136)	
Full Democracy(full)				0.0947
				(0.318)
External Debt Sustainability (EDS)	-0.727***	-0.525***	-0.375**	-0.703***
EDS#ar	0.407*			
	(0.244)			
EDS#hr		-0.254		
		(0.248)		
EDS#fld			-0.475**	
			(0.227)	
EDS#full				1.301**
				(0.514)
Current acc	0.0325***	0.0243***	0.0337***	0.0286***
	(0.00825)	(0.00816)	(0.00806)	(0.00808)
Population Log	-0.0219	-0.0201	0.0117	-0.0287
	(0.0397)	(0.0401)	(0.0406)	(0.0401)
GDP Log	1.205***	1.053***	1.197***	1.159***
	(0.0979)	(0.0974)	(0.0951)	(0.0946)
/cut1	8.352***	6.849***	9.167***	7.898***
	(1.267)	(1.254)	(1.272)	(1.236)
/cut2	9.247***	7.807***	10.07***	8.803***
	(1.256)	(1.239)	(1.261)	(1.225)
/cut3	9.844***	8.406***	10.68***	9.398***
	(1.255)	(1.238)	(1.261)	(1.224)
/cut4	10.32***	8.894***	11.16***	9.880***
	(1.257)	(1.239)	(1.263)	(1.226)
/cut5	10.68***	9.268***	11.53***	10.24***
	(1.262)	(1.244)	(1.269)	(1.231)
/cut6	10.92***	9.510***	11.78***	10.48***
	(1.269)	(1.250)	(1.276)	(1.238)
/cut7	11.18***	9.772***	12.04***	10.74***
	(1.276)	(1.256)	(1.284)	(1.245)
/cut8	11.63***	10.22***	12.52***	11.19***
	(1.285)	(1.264)	(1.294)	(1.253)
/cut9	12.10***	10.69***	13.01***	11.65***
	(1.291)	(1.270)	(1.302)	(1.259)
/cut10	12.30***	10.89***	13.22***	11.85***
	(1.295)	(1.273)	(1.306)	(1.262)

/cut11	12.82***	11.42***	13.75***	12.39***
	(1.307)	(1.285)	(1.318)	(1.275)
/cut12	13.06***	11.66***	13.98***	12.64***
	(1.312)	(1.291)	(1.323)	(1.282)
/cut13	13.30***	11.89***	14.21***	12.90***
	(1.316)	(1.296)	(1.327)	(1.287)
LR Chi Square	228.04	239.9	245.12	233.34
Prob	0.000	0.000	0.000	0.000
McFadden R	0.11	0.12	0.12	0.11
Log Likelihood	-860.655	-854.72	-852.11	-858

Note: The significant probability value explains that the models are correctly specified. The R square shows the goodness of fit. Robust standard errors are shown in parentheses. ***, **, *indicating the coefficients significance at the 1%, 5%, and 10% significance levels.

5. Discussion

The objective of the study was to examine the impact of political regimes on sovereign risk vulnerabilities of emerging economies participating in BRI. The findings of the study show that democracies have higher sovereign risk as compared to autocracies and this risk increases with increasing external debt to GDP level. These findings provide empirical evidence for the debt overhang theory which suggests that countries become vulnerable to debt crises when the debt to GDP level crosses the debt tolerance point. Our results align with Hansen (2023), indicating that developing democracies face a higher risk of default on their debt obligations compared to autocracies. Likewise, literature on economic adjustment affirms the greater difficulty democracies encounter in managing various economic crises due to conflicting interest groups and political pressures. According to Bearce and Hallerberg (2011) democratic economies have less stable exchange rates when compared to autocratic economies, one of the reasons is that democracies have shown less inclination towards economic adjustment needed to maintain stable exchange rates.

These costs involve fiscal restraint, such as implementing constricted budgets, and adopting monetary policies which are stringent, and which may lead to elevated unemployment rates. Eichengreen (2008) contends that certain democratic institutions, such as suffrage expansion, prevalence of unionization, and left-wing parties, hinder the economic growth of democracies. This is noteworthy as the democratic institutions involve such adjustment costs which are crucial for enforcing debt consolidation and preventing sovereign defaults. According to Nelson & Steinberg (2015), democracies face challenges in establishing a credible commitment to exchange rate stability, rendering them more vulnerable to currency depreciation. Furthermore, Leblang and Satyanath (2006) posit that alienated governments in democratic economies are key indicators of currency devaluation. Despite the enhanced transparency associated with democracies, the presence of divided governments complicates the process of investors rallying around a common focal point, thereby contributing to speculative runs.

6. Conclusion

This study explores the impact of political regime types on sovereign risk vulnerabilities of emerging economies taking part in BRI. In addition, the financial vulnerability in terms of high

debt to GDP ratio has been gauged through interaction of regime and external debt. This study has found no democratic advantage for the democracies as they are prone to default with and without the effect of high debt to GDP levels. Our study contributes to the ongoing debate in international institutions regarding appropriate debt thresholds or maximum recommended debt levels. Historically, debt sustainability analysis primarily relied on economic factors and often simplified into general guidelines. Our examination aligns with the concept proposed by Kraay and Nehru (2006) that the establishment of "smart thresholds" for debt should be correlated with the quality of policies and institutions. This study offers policy recommendations for governments to develop and reinforce organizations that uphold good governance, the rule of law, and political stability. By establishing a strong institutional framework, countries can foster a stable political atmosphere, minimizing the chances of sudden policy shifts and bolstering economic stability as a whole.

One of the limitations of the study is that it considers emerging economies therefore additional research is required to gain a comprehensive understanding of the specific mechanisms and variations in political regimes in other economies like low income and advanced economies. Furthermore, it is crucial to investigate the precise circumstances under which democracies and autocracies accumulate alarming levels of debts and how varying debt levels interact differently in different political regimes. Additionally, this paper assumes that democracies are generally more influenced by domestic political interests and encounter challenges in implementing stabilization policies. While this assumption is reasonable, it would be beneficial to further comprehend the role of interest group pressures that lead democracies into these pitfalls. Moreover, it is essential to determine whether specific political divisions have an impact on these adverse financial outcomes.

7. References

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Appendix-I

Category Number	S&P	Moody's	Fitch
21	AAA	Aaa	AAA
20	AA+	Aa1	AA+
19	AA	Aa2	AA
18	AA-	Aa3	AA-
17	A+	A1	A+
16	A	A2	A
15	A-	A3	A-
14	BBB+	Baa1	BBB+
13	BBB	Baa2	BBB
12	BBB-	Baa3	BBB-
11	BB+	Ba1	BB+
10	BB	Ba2	BB
9	BB-	Ba3	BB-
8	B+	B1	B+
7	B	B2	B
6	B-	B3	B-

5	CCC+	Caa1	CCC+
4	CCC	Caa2	CCC
3	CCC-	Caa3	CCC-
2	CC	Ca	CC/C
1	D	C	D

Appendix-II
LIST OF COUNTRIES

Albania	Bolivia	Ecuador	Iraq	UAE
Angola	Bosnia and Herzegovina	Egypt	Jamaica	Mongolia
Armenia	Botswana	Gabon	Kazakhstan	Morocco
Azerbaijan	Bulgaria	Georgia	Kuwait	Namibia
Bahrain	Chile	Hungary	Lebanon	Nicaragua
Bangladesh	Costa Rica	Indonesia	Lesotho	Nigeria
Belarus	Dominican Republic	Iran	Malaysia	Oman
Pakistan	Panama	Peru	Philippines	Poland
Qatar	Romania	Russian Federation	Saudi Arabia	Sri Lanka
Thailand	Trinidad and Tobago	Tunisia	Turkey	Ukraine
Uruguay	Vietnam			