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Board Independence, Corporate Governance and Economic Growth: Evidence from BRICS+ Economies**Ms. Navya Moncy¹ & Dr. R P Ngulai^{2*}**¹B.Com.(H) 4th Year Sem-VIII, Department of Commerce, Jesus and Mary College, Delhi University.²Assistant Professor, Department of Commerce, Jesus and Mary College, Delhi University.*Corresponding Author: ngulai.rong@gmail.com

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Abstract

This paper explores how board independence and corporate governance quality affects economic growth across twelve BRICS+ countries (Brazil, Russia, India, China, South Africa, Indonesia, Argentina, Vietnam, UAE, Thailand, Malaysia, and Turkey) over the period 2014-2019. Based on a balanced panel of 72 observations, we apply an Ordinary Least Squares and Robust Least Squares regression analysis to study the effect of governance measures on real per capita GDP growth. The main independent variables under consideration are the Board Independence ratio and a summary Corporate Governance Index, consisting of two main dimensions: Conflicts of Interest Regulation (CGI1) and Shareholders' Rights (CGI2). Additionally, we controlled for investment, human capital, and political stability, rule of law, regulatory quality and institutional quality indicators. Overall, we find that the overall Corporate Governance Index is a good predictor of economic growth: a 1-unit increase in the overall corporate governance index explains roughly 1 percentage point of additional real per capita GDP growth. Both investment and human capital also display strong positive growth effects, which persist through the various specifications. Notably, we find that while CEO duality negatively predicts standard growth effects, the growth effect of improvements in governance are far more pronounced for combined CEO-Chair firms than for separate roles. Our findings highlight the significant macro-economic importance of corporate governance for emerging economies and present governance reforms, particularly regarding shareholder rights and conflict of interest regulations, as a potential way to stimulate growth in the BRICS+ countries. Our results are suggestive that a particular focus on improving governance in companies with separate Chairman and CEO positions might lead to very significant economic gains.

Keywords: Board Independence, Corporate Governance, Economic Growth, BRICS+ Economies, CEO Duality, Conflict-of-Interest Regulation, Shareholder Rights.

Introduction

The BRICS+ countries (Brazil, Russia, India, China, South Africa, Indonesia, Argentina, Vietnam, United Arab Emirates, Thailand, Malaysia and Turkey) constitute an important group of emerging economies that exercise a growing influence on the world's economic structure. In the current scenario of volatile tariffs, rising geopolitical uncertainty and changing institutions, quality of corporate governance (e.g. Board independence, agency problems control) can emerge as a determinant of sustained economic growth. With a tough competition for Foreign Direct Investment and to maintain macroeconomic stability amid an uncertain world trading environment, it is crucial for these countries to preserve their institutional credibility. Stronger governance structures can be indicators of investor trust and efficiency of capital allocation, which could translate into faster aggregate growth. The role of board independence is central here as it is known to curb agency problems and to align interests between management and shareholders, which in turn can foster productive investments. This study is intended to address a research gap of testing empirically the influence of board independence and quality of corporate governance (via a composite index measuring conflict-of-interest regulation and protection of shareholders rights) on Real GDP per capita growth in the BRICS+ economies during 2014-2019. During this period these economies have been going through a phase of experimentation with institutions and policies.

The structure of board and corporate governance are important for firms' performance. According to Jackling and Johl (2009), the better structure of board in Indian firms leads to higher performance of firms. Corporate governance became an important determinant for firm performance. Later research showed that this finding is relevant also for emerging markets: Klapper and Love (2004) identified a link between higher firm performance and better governance mechanisms in developing countries, especially where legal institutions are weaker. Levine (1997) presented reviews that support the idea that financial development and economic growth are critically dependent on the quality of institutions and governance mechanisms. Existing literature has confirmed the link between governance and firm-level performance, however, largely at a micro-level. The contribution of governance at macro-level works by way of better capital flows, information symmetry and also, reducing capital costs. Little has been done to directly correlate firm-level governance elements (like board independence) with macro-level economic growth in BRICS+ countries.

Recent corporate governance studies have focused on the role of board practices within the firm rather than institutions at the country level. The change in focus is largely a result of enhanced data availability; past studies had to use country-level variables since firm-level data were scarce. Now we have tools such as World Bank's Doing Business indicators and the Worldwide Governance indicators, which

have been used in firm- and country-level analysis. Wintoki, Linck and Netter (2012) addressed problems of endogeneity in research on corporate governance, showing that there is a reciprocal relation between board structure and firm performance. Aguilera and Jackson (2010) explored governance mechanisms in comparative perspective, arguing that it all depends on the context. Claessens and Yurtoglu (2013) summarized findings regarding the nature of governance mechanisms in emerging economies. Filatotchev, Jackson and Nakajima (2013) argued the importance of the interaction between firm-level governance structure and national context. These studies, in fact, paved the path to test macro-micro issues, i.e. what improved firm-level governance leads to the aggregate economy's performance.

This paper analyzes the role of board independence and corporate governance in the economic growth of BRICS+ countries. We measure corporate governance using two index proxies (i.e. Conflict of interest regulation CGI1 as an index for the extent of protection of economic growth against potential risks of transactions and the second proxy for shareholder rights CGI2). Board independence act as independent variables. We estimate a panel data model with Real GDP per capita growth as the dependent variable in order to respond to the following three research question: i) How much is the magnitude of the impact of board independence on the economic growth of BRICS+ countries? ii) Does the impact of various governance structures (conflict of interest regulation vs shareholder rights) on economic growth differ in relation to their significance? iii) Does the governance mechanism influence differently the economic growth depending on firm-specific factors, e.g. Chief Executive Officer Duality? Novelty in this paper comes with a creation of equal panel based on mixing the World Bank WDI data set and the DB governance variables, and obtaining 72 observation points (12 countries x 6 years) controlling for variables related to political stability, regulatory quality, the rule of law and human capital.

Literature Review

Prior research examining the link between institutional quality and economic growth has documented a wide range of effects of governance and institutional frameworks on economic outcomes through various mechanisms. Specifically, La Porta et al. (1997, 1998) documented the links between the institutional arrangements and capital markets, availability of external finance, and investment incentives. Beck and Levine (2005) expanded this work by analyzing the channels through which legal institutions contribute to financial development and identified specific transmission mechanisms through which governance influences economic growth through both financial development and efficient allocation of capital. Demirgüç-Kunt and Maksimovic (1998) offered direct evidence by showing that measures of institutional quality-like contract enforcement and property rights protection-are strongly positively associated with firm growth rates and capital

structure decisions. Thus, this initial set of studies firmly established the relationship between governance and economic development, though at the country level and leaving unanswered firm-specific governance questions.

On the firm level study, it demonstrated the large amount of firm-level variation and emphasized the crucial role of firm-specific governance. All the studies by Jackling and Johl (2009), Klapper and Love (2004), Haniffa and Hudaib (2006) show that better corporate governance, such as board independence, have significant positive relationships with the firm performance, profit, and market value. Ciftci et al. (2019) confirm that corporate governance mechanisms explain financial performance in emerging markets even where governance is constrained by institutional factors. In other studies, it is found that board characteristics affect governance quality (Jiraporn et al. 2009) while audit committee quality is also found to be a dimension of corporate governance (Klein 2002). Board diversity is identified as a further governance variable associated with firm performance (Darmadi 2013) while strong and independent board can restrict excessive risk taking (Pathan 2009). Another important transmission mechanism linking governance to firm value through cost of debt has been identified (Anderson, Mansi and Reeb 2004). Also, governance quality affects quality of earnings (Dechow et al. 2011). The above and numerous other studies confirmed positive relationship between corporate governance and firm performance at the firm level in various national contexts.

Lately, much attention has been paid on how governance impacts firms with concentrated ownership, typical for emerging economies and issues of the principal-principal agency problem. Young et al. (2008) made an important contribution by shedding light on emerging markets and the potential conflict between dominant and minority shareholders necessitating different types of governance structures compared to dispersed-ownership economies. Dahya, Dimitrov and McConnell (2008) documented considerable differences between effectiveness of board mechanisms in concentrated ownership environment (which most of BRICS+ are) and dispersed-ownership corporations. Black, Jang and Kim (2006) examined Korean market where ownership concentration is also a prevailing issue. So, it is possible that the governance mechanisms affect firms within BRICS+ contexts differently compared to developed countries. Attempts to reconcile firm level governance findings with macro level development were relatively successful, though they are limited in scope. For example, Levine (1997) showed how governance and institutional quality are important enable for development of financial system, and Škare and Hasić (2016) highlight, through a comprehensive literature review, that corporate governance acts as an important determinant of economic growth, primarily through its positive effects on firm performance. Bhagat and Black (2001) and Wintoki, Linck, and Netter (2012) indicated that effects of governance might be conditional and contextual.

Data and Methodology

The panel data consist of 12 BRICS+ economies over the period 2014-2019; which results in 72 observations. This period is chosen in order to analyze policy changes occurring after the global financial crisis and prior to the corona virus pandemic. Data was acquired from the World Bank: 'World Development Indicators' database and 'Doing Business' database. The panel regression model that we estimate for the governance-growth link is:

$$\text{GROWTH}_{i,t} = \beta_0 + \beta_1 \text{BI} + \beta_2 \text{CGI}_{i,t} + \beta_3 \text{Investment}_{i,t} + \beta_4 \text{HumanCapital}_{i,t} + \beta_5 \text{BoardSize}_{i,t} + \beta_6 \text{WGI}_{i,t} + \varepsilon_{i,t} \quad (1)$$

$\text{GROWTH}_{i,t}$ is the mean real GDP per capita growth rate in country in year t , as a percentage of annual real GDP growth rates in constant dollars; it is obtained from the World Bank World Development Indicators. Board Independence ratio (BI) is the percentage of independent, non-executive directors of a company's board out of total directors. An independent director has no relationship that could impair his/her ability to exercise independent judgment, according to OECD Corporate Governance Factbook (2014). It reflects a key governance mechanism, which reduces entrenchment and increases effectiveness of monitoring and advisory functions.

CGI covers two separate dimensions. The first sub-index, CGI1, is the Conflicts of Interest Regulation Index and covers three components: Disclosure Index requiring a disclosure of directors' conflicts of interests and self-dealing transactions; Director Liability Index making directors personally liable for any self-dealing; and Shareholder Suits Index covering derivative and direct shareholder suits. The second sub-index, CGI2, is the Shareholders' Rights in Corporate Governance Index, and covers three dimensions: Shareholders' Rights Index covering the ease with which shareholders are able to influence corporate matters through voting rights and preemptive rights; Ownership and Control Index covering factors which can prevent concentration of ownership and control; and Corporate Transparency Index covering disclosure and transparency provisions. CGI1 and CGI2 are scaled from 1 (weak governance) to higher values (stronger governance); data are derived from World Bank Doing Business datasets.

Board size is the number of directors of a company's board, which represents board composition, also affected by regulatory framework, according to OECD Corporate Governance Factbook. Investment is Gross Capital Formation (percentage of Gross Domestic Product), which represents acquisition of non-financial assets, net of disposal of non-financial assets. It reflects the capital accumulation needed to achieve long-term economic growth and productivity growth. Human capital represents years of schooling of adult population (aged 15 and above) and obtained from the Barro-Lee dataset provided in World Bank World Development

Indicators, it reflects the human development capacity which will positively affects productivity and growth performance.

Political Stability (PolStab) is the perception of the likelihood of the government being unstable or falling, for example through coups d'état, terrorism, or civil disorders; it is obtained from the World Bank Worldwide Governance Indicators. Regulatory Quality (RegQuality) is the perception of the quality of the government to formulate and implement sound policies and regulations that allow and promote private sector development; it is obtained from the World Bank Worldwide Governance Indicators. Rule of Law (RuleLaw) captures the perception of the extent to which citizens have confidence in and abide by the rules of society, including contract enforcement, property rights, and the effectiveness of police and courts; it is obtained from the World Bank Worldwide Governance Indicators. Duality is a dummy variable: it equals 1 when a CEO also chairs the board and 0 when the positions of CEO and board chair are separated, it reflects a significant governance arrangement feature which might influence the effectiveness and independence of the board. Data is obtained from OECD Factbook.

We use OLS regressions with heteroskedasticity-robust standard errors (White, 1980) to address time and country heteroskedasticity, along with Robust Least Squares regressions to limit the influence of extreme values. T-statistics and coefficients are reported at 10%, 5%, and 1% significance levels. We analyze interaction effects between Duality and governance indicators to assess whether effects vary with institutional strength (Table 3, Models 1-4). Table 2, Models 1-3 present the baseline specification with parsimonious controls.

Findings

Table 1: Descriptive Statistics

	Observation	Mean	Median	Standard Deviation	Minimum	Maximum
Corporate Governance Index	72	2.78	3.28	1.06	1.03	4.64
Corporate Governance Index 1	72	2.25	2.64	0.94	1.00	3.94
Corporate Governance Index 2	72	4.03	4.00	1.84	1.01	7.94
Board Independence	72	0.38	0.33	0.11	0.30	0.66
Board size	72	4.92	5.00	2.07	2.00	10.00
Investment	72	19.81	20.91	13.60	0.60	45.31
Human capital	72	1.78	0.66	2.33	0.41	7.00
WGI	72	10.41	10.33	0.69	9.00	11.67
Duality	72	0.42	0.00	0.50	0.00	1.00

Table 1 presents the descriptive statistics for governance and economy of our BRICS+ sample. In terms of governance and economic outcomes of the BRICS+ sample, heterogeneity across this sample seems considerable. The average value of corporate governance index is 2.78 (SD=1.06), ranging from 1.03 to 4.64, suggesting moderate level of corporate governance although wide discrepancy is witnessed among countries within this group. Mean value for conflict-of-interest index (CGI1) is 2.25 (SD=0.94) which ranges from 1.00 to 3.94 and mean for shareholder rights index (CGI2) is 4.03 (SD=1.84) which ranges from 1.01 to 7.94, suggesting that shareholder rights is a little higher than conflict of interest index in these economies. On the other hand, average value for ratio of board independence is 0.38 (SD=0.11) and its minimum and maximum value are 0.30 and 0.66 respectively, showing not much difference across the sample. The average number of board members is 4.92 (SD=2.07), which varies from 2 to 10 members. It shows there are variations of moderate levels in composition of board. Dependent variable (real per capita GDP growth rate) ranges from nearly 0 to about 6.97% with the mean 3.17% and SD 2.10%. Investment (as % of GDP) has average 19.81% (SD=13.60%), varying widely from 0.60% to 45.31%. Human Capital is estimated as 1.78 years of schooling (SD=2.33%) whereas value of institutional quality (WGI) is 10.41 (SD=0.69), both indicating that these economies belong to middle rank group of countries in the world in terms of institutions. Duality variable (combined dummy variable for the position of Chairman and CEO) shows average value of 0.42 (SD=0.49), indicating that majority (58%) observations have split board structure.

Table 2: Ordinary Least Squares - Board Independence, Corporate Governance and Growth

Dependent Variable—Real annual per capita growth rate (2014-2019)

	1	2	3
Constant	-0.7830 (-0.9221)	4.2391** (2.3052)	1.5731 (1.6267)
BI	-3.6913* (-1.8587)	-13.0245*** (-3.4611)	-7.0358** (-2.5669)
CGI	0.9885*** (5.3838)		
CGI1		-1.4939** (-2.2479)	
CGI2			0.2698 (1.2537)
BOARD SIZE	0.0911 (1.1790)	-0.0690* (-1.7588)	-0.0201 (-0.5744)
Investment	0.0530*** (8.7273)	0.0983*** (2.7178)	0.0817*** (5.0278)

Human Capital	0.1851***	0.3244*	0.1884**
	(2.6989)	(1.9003)	(2.5254)
CGI*BI	0.6677		
	(1.1789)		
CGI1*BI		5.9091***	
		(4.6220)	
CGI2*BI			0.8464
			(1.5199)
Observation	72	72	72
R-squared	0.6503	0.4854	0.5572

Note: All regressions include a constant term and are estimated by OLS with White's Period of heteroskedasticity. T-values are in parentheses. *, **, *** significant at 10%, 5%, and 1% level, respectively.

OLS regression results for the estimated Model of Growth are summarized in Table 2. The estimates are quite consistent with our baseline econometric specifications: $GROWTH_{i,t} = \beta_0 + \beta_1 BI + \beta_2 CGI_{i,t} + \beta_3 Investment_{i,t} + \beta_4 HumanCapital_{i,t} + \beta_5 BoardSize_{i,t} + \beta_6 WGI_{i,t} + \epsilon_{i,t}$. The strong governance impacts are sustained with a progressively tighter measure of governance indices. In Model 1 the CGI index has a positive and significant coefficient ($\beta = 0.989$, $t=5.384$, $p<0.01$), meaning a one-unit improvement in this aggregate index is associated with a almost one percentage point increase in the rate of real per capita growth. While negative and reliable, the coefficient for board independence is somehow counterintuitive ($\beta = -3.691$, $t= -1.858$, $p<0.10$), suggesting that an independent board is not in itself a direct promoter of a higher rate of growth or it reflects the presence of some omitted variable or specific circumstances of the BRICS+ markets which favour the existence of firms with independent boards and smaller growth rates-perhaps these firms belong to certain industries or have a certain stage of development and have already enacted particular reforms. Board size has a positive but not statistically significant coefficient in Model 1 ($\beta = 0.091$, $t= 1.179$), this shows that board size is not a robust determinant of growth once accounting for comprehensive quality measures of governance. In Model 2 and 3 the board size coefficient turns negative, still not significant ($\beta = -0.069$ and $\beta= -0.020$ respectively) showing that the role of board size in growth depends on the nature of governance quality and the meaning of board independence being studied. Investment is confirmed again to be the most robust growth-determining factor, with a statistically significant coefficient ($\beta = 0.053$, $t= 8.727$, $p<0.01$). Human capital is also a reliable determinant of growth with a significant positive coefficient ($\beta = 0.185$, $t= 2.699$, $p<0.01$). The R² in Model 1 is as large as 0.650. When breaking down the measure of governance into Conflicts of Interests (CGI1) in Model 2, we find a strongly negative and significant coefficient ($\beta = -1.494$, $t= -2.248$, $p<0.05$) showing that an effective shareholder protection against conflicts of interests is not sufficient on its own for a better governance or that it must operate through alternative channels. The coefficient for Shareholder Rights (CGI2)

in Model 3 turns to positive, but not statistically significant ($\beta = 0.270$, $t=1.254$, not significant). Board size insignificance all through Models demonstrates that it is not the size that really matters. Its effects are captured by its interactions with governance quality and independence indicators and the interaction effects are statistically significant. Among these interaction terms, the coefficient for CGI1*BI is significantly large ($\beta = 5.909$, $t=4.622$, $p<0.01$), which highlights that the effect of board independence in enhancing the link between conflicts of interest and growth depends on the level of the board independence and that the channels through which the impacts on conflicts of interests were transmitted must be heavily dependent on the degree of the board independence.

Table 3: Robust Least Square - Board Independence, Corporate Governance and Growth

Dependent Variable—Real annual per capita growth rate (2014-2019)

	1	2	3	4
Constant	-5.3373*	-6.5683*	-6.5206*	-3.8076
	(-1.8431)	(-1.6778)	(-1.6620)	(-1.4152)
CGI	1.1995***			0.9655***
	(2.8823)			(4.4477)
CGI1		-1.9266**		
		(-2.1212)		
CGI2			-0.0212	
			(-0.0444)	
BI	-1.8337	-17.2174***	-12.0434*	-2.3528
	(-0.4354)	(-2.9841)	(-1.9435)	(-1.4149)
BOARD SIZE	0.0840	-0.1090	-0.0690	-0.0398
	(1.1098)	(-1.1476)	(-0.7312)	(-0.4682)
Investment	0.0671***	0.1337***	0.1041***	0.0593***
	(3.3786)	(5.3050)	(4.5177)	(2.5982)
Human Capital	0.2817**	0.5446***	0.3647**	0.1748
	(2.4128)	(3.4870)	(2.4632)	(1.3740)
WGI	0.2999	1.0734***	0.8925***	0.3679
	(1.2588)	(3.3315)	(2.9332)	(1.5969)
DUALITY				-2.0843*
				(-1.6530)
CGI*BI	0.1928			
	(0.1627)			
CGI1*BI		7.3224***		
		(3.0688)		
CGI2*BI			1.7134	
			(1.4003)	
CGI*DUALITY				0.5856*
				(1.7191)

BI*DUALITY				-2.0364
				(-0.5937)
CGI*BI*DUALITY				1.6176***
				(2.6040)
Observation	72	72	72	72
R-squared	0.6362	0.5271	0.5642	0.6812

Note: t-values are in parentheses. *,**,*** significant at 10%, 5%, and 1% level, respectively.

Stronger Least Squares estimation (Table 3) is similar to OLS estimates but is less sensitive to the effect of outliers (a robustness check that is vital for developing markets which tend to be more volatile). RLS Model 1 picks up the same positive effect on governance (CGI $\beta = 1.199$, $t = 2.882$, $p < 0.01$); which is quite similar to the OLS coefficient and implies that broad governance reforms yield positive results for growth, by down-weighting those firms with a relatively larger influence. As predicted, board size in the RLS estimation (Model 1) is not significant ($\beta = 0.084$, $t = 1.110$) but remains positive and similar to the OLS result, further reinforcing that the size of the board has minimal effect when total governance improvements and quality variables are held constant. Investment ($\beta = 0.067$, $t = 3.379$, $p < 0.01$) and human capital ($\beta = 0.282$, $t = 2.413$, $p < 0.05$) continue to hold positive coefficients and are significant. Quality effects remain positive ($\beta = 0.300$, $t = 1.259$) but fluctuate slightly on significance among models. For governance improvements in its disaggregated form (Model 2 and Model 3) CGI1 turns significant negative ($\beta = -1.927$, $p < 0.05$), CGI2 becomes insignificant negative ($\beta = -0.021$) and board size turns negative in these equations ($\beta = -0.109$ and $\beta = -0.069$, respectively), indicating that the direction and significance of board size effect are quite sensitive to how governance is defined and possibly its interaction with the components of governance reforms. Model 4 also introduces the Duality variable and interactions. The coefficient on the dummy variable Duality is negative and significant ($\beta = -2.084$, $t = -1.653$, $p < 0.10$), signifying that, for dual CEO-Chair firms the base level growth is reduced by about 2.08%. However, board size in this specification continues to be insignificant ($\beta = -0.040$, $t = -0.468$), implying that the positive effect of board size is not achieved without appropriate structural reforms to the board and separation of the two roles of CEO and Chairperson. In addition, the interaction terms CGI*Duality ($\beta = 0.586$, $t = 1.719$, $p < 0.10$) and CGIBI*Duality ($\beta = 1.618$, $t = 2.604$, $p < 0.01$) turn out to have significant positive effects. This implies that for firms where CEO and Chairperson is the same person, their governance reforms achieve relatively higher positive growth impacts compared to firms with separated roles. This may be explained by the argument that companies that have separate the two roles already implement the "best practices" and the further they improve governance the smaller the impacts they will see. In contrast, firms with a dual role still have room for governance improvements that will have more impactful results.

The OLS and RLS results both indicate a positive and significant impact of corporate governance on economic growth for BRICS+ economies. A unit increase in the governance index leads to an increase of approximately 1% in real GDP per capita growth. Board size has a weak and insignificant effect and is unlikely to be a significant determinant over governance quality and board independence. When the governance index is broken down to CGI1 and CGI2, the effect is insignificant. As CGI1 exhibits negative values (may suggest measurement problems or it influences growth indirectly) and CGI2 has a statistically non-significant impact on economic growth. The individual board independence coefficient turns out to be statistically negative at the bivariate stage but the interaction terms $CGI \cdot BI$, $CGI1 \cdot BI$, $CGI \cdot BI \cdot Duality$ are all positive and statistically significant. This indicates that the importance of the structure of board independence in influencing the growth potential depends on its interactions with other governance measures and with certain specific firm characteristics and corporate structure. Human capital and investment are consistently demonstrated to be the most important driving forces of growth under OLS and RLS for all selected model variants. The dummy Duality reveals that joint ownership of CEO-Chair is associated with lower growth, but shows greater room for improving corporate governance, consistent with the importance of board independence structure. The results demonstrate that corporate governance is indeed an important source of macroeconomic growth and the effect depends on various factors of governance measures.

Conclusion

This paper looks at the connection between board independence, corporate governance and growth of the economy in BRICS+ during 2014-2019. The conclusion reached is that corporate governance is significantly correlated with the growth of the economy but the board independence mechanism is not as direct but works through a number of channels which are conditional in nature. The board independence does not lead to high growth rates per se and has a negative effect when studied alone. Thus, mere appointment of independent directors does not provide the best economic returns. Board independence is conditional on corporate governance mechanisms, and its effects become stronger when governed by some others. In the presence of adequate corporate governance mechanisms, the board independence is a strong and a positive factor and the interaction effects are positive especially on conflict-of-interest regulation and shareholder protection mechanism. It clearly shows that governance dimensions reinforce each other, i.e. The positive impact of board independence has to be integrated with others, to form a stronger governance dimension. Similarly, it says that board independence had the strongest effect when the position of the CEO and Chair is occupied by the same person, meaning governance improvements had better effect when problems are intense. Overall corporate governance can have an effect on economic growth indirectly

through firm-level outcomes like firm-level performance, efficiency of investment and allocation of resources. It confirms that corporate governance is more of a macroeconomic phenomenon than a firm-level concept. Policy recommendations based on study suggest that the focus has to be on a more holistic improvement on board independence with strong legal support, transparency mechanism, and the overall quality of the institutions.

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