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Eldomiaty, Tarek Ibrahim; Apaydin, Marina; El-Sehwagy, Ahmed; Rashwan, Mohamed Hashim

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Tarek Ibrahim Eldomiaty, Marina Apaydin, Ahmed El-Sehwagy & Mohamed Hashim Rashwan

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*Corresponding author: Tarek Ibrahim Eldomiaty, School of Business, The American University in Cairo, New Cairo, Egypt E-mail: Tarek_eldomiaty@aucegypt. edu

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GENERAL & APPLIED ECONOMICS | RESEARCH ARTICLE Institutional quality and firm-level financial performance: implications from G8 and MENA

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economics & finance

Tarek Ibrahim Eldomiaty¹*, Marina Apaydin¹, Ahmed El-Sehwagy² and Mohamed Hashim Rashwan³

ABSTRACT: This paper examines the effects of institutional quality on firm-level financial performance. The data include non-financial firms listed in stock exchanges in G8 and MENA countries. The total number of firms in the G8 and MENA is 347 and 389, respectively, covering the period 2017–2020. The results show that, in the G8 countries, institutional quality is associated significantly and positively with asset efficiency, expense control, debt financing, and liquidity. In the MENA countries, institutional quality is associated significantly and positively with liquidity and profitability, but negatively with asset efficiency, expense control, and debt financing. The results show that the effect of corporate size is asymmetrical. The results also reveal a significant institutional convergence between G8 and MENA countries in terms of voice & accountability, political stability, and government effectiveness. Nevertheless, institutional quality in the G8 is better off that of the MENA countries in terms of Rule of law, Control of Corruption, and Regulatory Quality. The results also show that the duration of improvement in institutional quality takes between 2-4 years to have a significant effect of firms' financial performance. This paper offers a contribution to corporate managers in terms of offering a guide to design financial strategies that adapts to the guality of institutions in the respective countries. A further contribution is offered to policy makers in terms of offering a road map to improve institutional quality that helps improve the financial performance of the business sector.

Subjects: Macroeconomics; Political Economy; Corporate Finance

Keywords: Institutional Quality; MENA; G8; Firm-level Financial Performance; Duration

JEL Classifictaion: M21

1. Introduction

The progress of corporate financial performance reflects management effectiveness and efficiency in utilizing corporate resources. Significant benefits are realized to a country's economy when the aggregate financial performance improves at the country level (Naser & Mokhtar, 2004). Accordingly, the differences between corporate financial performance across countries can be examined from institutional view. Countries that are relatively characterized by strong institutions





© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent. must be different from those characterized by weak institutions. The institutional economics theory (D. C. North, 1990; D. North, 1992a, 1992b) interprets the differences between developed and developing countries, that is, developed countries adopt and develop institutional arrangement stronger than developing countries. This understanding carries implications at the micro level as the Transaction Cost Theory (Williamson, 1985, 1991) offers evidence that economies with high quality institutions make are associated with lower transactions costs than low quality institutions. That is, low transactions costs enable the country and the company to allocate resources in an efficient way that reflects on corporate financial performance.

1.1. Objectives

This paper aims at fulfilling the objectives that are as follows.

- (1) Examine the potential effects of World Governance Indicators (WGIs) on different dimensions of corporate financial performance.
- (2) Examine the time (years) required for an improvement in WGIs is reflected on different dimensions of corporate financial performance. In this paper, this effect is referred to as "Duration."
- (3) Examine the potential effects of comparative differences between strong vs weak country governance on corporate financial performance.

1.2. Contribution

This paper contributes to the literature in terms of examining an extending line of research that associates the effects of institutional changes on firm-level financial performance. Furthermore, this paper offers a validation methodology that involves a comparison between developed countries (being known with relatively strong institutional arrangement) and developing countries (being known with relatively weak institutional arrangements).

2. Testing the convergence versus divergence of institutional quality

As far as observed differences in institutional quality in developed and developing countries can be traced by simple comparisons, a scrutiny is required in statistical terms. This is a prerequisite step to make sure whether the quality of the institutions in both groups is in a state of convergence or divergence. To that end, Mann-Whitney Test can be used to examine whether the pillars of WGI differ significantly (Mann & Whitney, 1947). The results are reported in Table 1.

The results in table 1 show that the differences between the pillars of institutional quality in the G8 and MENA countries are significant. These results offer an initial source of robustness in terms

Table 1. The resul	ts of testing the s	ignificance of instit	utional quality	
World Governance Indicators (WGIs)	G8 countries (Mean Rank)	MENA countries (Mean Rank)	Z value	P-Value (two tailed)
Voice and Accountability	2170.3019	848.6926	-42.204	0.00
Political Stability No Violence	2032.0598	972.0881	-33.807	0.00
Government Effectiveness	2115.1427	897.928	-38.826	0.00
Regulatory Quality	2105.3001	906.7135	-38.238	0.00
Rule of Law	2071.389	936.9826	-36.214	0.00
Control of Corruption	2025.7363	977.7325	-33.436	0.00

Table 2. The Development of Research Hypot	neses
Hypotheses	References
A significant association exists between WGIs and Total asset turnover	Gupta (2011), Sokolov and Solanko (2017)
A significant association exists between WGIs and Dividend payout ratio	Mitton (2004), Benavides et al. (2016) and Hofmann (2018)
A significant association exists between WGIs and Operating Expenses/Total Assets	Mueller and Stewart (2011), De Schoenmaker et al. (2014)
A significant association exists between WGIs and Long-term debt ratio	Gupta (2011), Kyaw et al. (2011), Awartani et al. (2016), Li <i>et al.</i> , (2016a), Nifo et al. (2018) and Van Vu et al. (2018)
A significant association exists between WGIs and Inventory current assets	Gupta (2011), Dicko (2016) and Smith (2016)
A significant association exists between WGIs and Earnings yield	Girard and Sinha (2008), Desbordes (2010), Kriel (2012), Y. Wang and You (2012), Chadee and Roxas (2013), Sokolov and Solanko (2017) and Kagzi and Guha (2018)

of examining two groups of countries that differ significantly. To that end, these results indicate that the institutional quality in the G8 and MENA countries is in a state of diversions.

3. Indicators of institutional quality and firm-level financial performance

Williamson's (1985, 1991) work offers extended opportunities to examine the potential effects of economic governance at the firm level. Generally, the financial performance is a measure of the corporate ability to obtain and allocate resources in a range of methods in order to achieve a competitive advantage (Ilesanmi, 2011; Iswatia & Anshoria, 2007). Kaufmann et al. (2011), La Porta et al. (1998), and Djankov et al (2007, 2008) indicate that the database of WGIs are up-todate, time-varying indicators that measure country-level governance. Cam and Özer (2022) argue that for the firms operating in countries with stronger governance, the leverage decreases while increasing the maturity of their debt. Benavides et al. (2016), Hofmann (2018), and Mitton (2004) report that dividends payout ratio is positively associated with the WGIs. That is, dividends payout increased in the countries with higher governance scores, thus firms pay less volatile dividends in high governance countries. Awartani et al. (2016) and Diamond (2004) report that, in the MENA countries, higher-quality institutions are associated with high dependence on long-term debt. Thus, a greater use of long-term borrowing by corporations in the MENA region is associated with high rule of law, better regulatory quality, and government effectiveness. Nifo et al. (2018) show that an improvement in the institutions leads to a decrease in the number of firms that borrow loans, implying that institutional quality has a negative association with corporate debts.

3.1. Voice & accountability and corporate financial performance

The foundations of economic governance offer extending evidence that corporate financial performance and political influence are not separated. This impact is documented in several studies such as Bloom et al. (2007) and Pástor and Veronesi (2013. E. T. Gomez and Jomo (1997) conclude that political connections are closely related to favoritism. The favoritism in governmental decisions can influence the financial performance of firms. Duchin and Sosyura (2012), Cohen et al. (2011), and Goldman et al. (2009) find that firms can receive more government investment if they have stronger political connections. The latter helps firms in the verge of a financial crisis (Faccio et al., 2006) and firms are unlikely be charged with fraud (Cooper et al., 2010; Yu & Yu, 2011). Sokolov and Solanko (2017), Boubacar *et al.*, (2013), A. Li and Xia (2013), Dicko and Breton (2013), Dicko and Khemakhem (2015), and Dicko (2016) report that firms that have political influence exhibit higher profitability and retain larger financial investments than non-influential firms. Bunkanwanicha and Wiwattanakantang (2009) and Maaloul et al. (2018) argue that the political connections help firms secure changes in the regulatory environment and improve both financial performance and value. Moreover, Agrawal and Knoeber (2001), Khawaja and Mian, (2005), Faccio (2006), Claessens et al. (2008), Cull et al. (2015), C. J. Chen et al. (2011, 2014), Boubakri et al. (2012, 2013), Yeh et al. (2013), Yang et al. (2014), Lashitew (2014), and Preuss and Königsgruber (2021) offer evidence on the easiness to borrow a loan from the bank when firms have good political connection, which, therefore, increases the value of firms and improves financial performance (Fisman, 2001; Johnson & Mitton, 2003; Ramalho, 2007; Roberts, 1990). Accordingly, Bliss and Gul (2012), Ebrahim et al. (2014), and L. Wang (2015) report that politically connected large firms are significantly associated with higher leverage.

Nevertheless, Fan et al. (2007) show that firm efficiency may erode as a result of political connections through replacing professionals with friends in board positions or disposing assets of the firm to political beneficiaries (Mironov & Zhuravskaya, 2016).

3.2. Political stability and corporate financial performance

A safe environment without instability in politics is an essential need for businesses to develop and thrive financial performance. Hoti and McAleer (2004) defined the political risk as a non-business risk introduced strictly by the political forces. Demirbag et al. (2007), Bechtel (2009), Desbordes (2010) and Kyaw et al. (2011), N. Jensen (2008), Meyer et al. (2009), Kesternich and Schnitzer (2010) Al Khattab et al. (2011), N. M. Jensen and Johnston (2011) argue that political risk is quite important in terms of corporate financial and operations. In Africa, political risk is usually relatively high due to political violence, emergence of extreme poverty, corruption, government instability, and concentration of wealth (Carey, 2007; Desbordes, 2010; Kesternich & Schnitzer, 2010; N. M. Jensen & Johnston, 2011). Therefore, when corporations expand their activities in emerging markets like Africa, political risk turns out to be an inevitable variable. This is due to the power exercised by the governments in these markets (Barro, 1991; Girard & Sinha, 2008; Hosny, 2017; N. Jensen, 2008). The political instability in the MENA region specifically after the Arab Spring has been examined by Ghosh (2016) and Matta et al. (2018). These studies show how the return and volatility in banks in MENA economies were influenced by the Arab Spring. The findings also showed that there is an asymmetric influence on the returns caused by political uncertainty that occurred as a result of the Arab Spring. Simser (2011) argues that as far as terrorism is a cause of political instability, it affects corporate financial performance and profitability. Larobina and Pate (2009) indicate that the objective of terrorism is to disrupt and destroy businesses. Therefore, it is critical for governments to work on stabilizing global economy by destroying terrorism from the country. There is a wide agreement that the demand on travel is greatly influenced by terrorism. Goodrich (2002), Mueller and Stewart (2011), and Z. Chen et al. (2017) found that there is a negative impact of terrorism on high oil cost on the airline industry. Gupta (2011) found that the financial performance of the tourism firms has also been affected negatively by the terror attack. Nevertheless, Girard and Sinha (2008) and Desbordes (2010) claim that the high political risk is related with higher expected returns due to the increase of uncertainty. In addition, Kriel (2012) examined the corporations working in Africa and conclude that the relationship between political risk and financial return is positive.

3.3. Government effectiveness and corporate financial performance

Government effectiveness includes many elements such as quality of bureaucracy, infrastructure, quality of primary education, and satisfaction with the education system (Husna & Satria, 2019). Rajan and Zingales (2003) measured the relationship between the quality of bureaucracy and financial market development by examining the extent to which the two components of state bureaucratic performance, public good provision and rule enforcement, constitute the requirements for firm development and financing. Tyler and Steensma (1998) and Barker and Mueller (2002) examined the impact of education on the firm's performance, especially the education of employees. They found that the type of certificate obtained by the CEO affects the funding of both research and development in the firm, thus affecting the firm's performance in terms of productivity and finance. Nevertheless, other studies reported an inverse relationship between educational qualifications of employees and financial performance (Adams & Ferreira, 2009; Boadi & Osarfo, 2019; Haslam et al., 2010), while Bear et al. (2010) and Post and Byron (2015) reported

a positive relationship. There are several theories including Agency Theory, Stewardship Theory, Upper Echelons Theory, Convergence Theory or "Catch up Effects," Resource Dependence Theory, and Social Identity Theory that have confirmed the existence of a positive relationship between educational qualifications of members of the board and corporate financial performance (Cheng et al., 2010). But the Social Identity Theory has supported the existence of an inverse relationship (Cannella et al., 2015; Kim & Kim, 2015; M. Ali et al., 2014). The association between public spending and government efficiency received an extending interest. Aschauer (1989), Fisher (1997), Banchuenvijit and Pariyanont (2012), De Schoenmaker et al. (2014) reported that public infrastructure had a significant impact on the performance of firms in the private sector, especially profits. On the contrary, few studies reported a negative relationship between government effectiveness and corporate financial performance. Mahadeo et al. (2012), Hafsi and Turgut (2013), and Kagzi and Guha (2018) have shown that there is a negative relationship between educational qualification and the diversity for the board members and employees and the financial performance of firms. Ujunwa (2012) and Tacheva and Huse (2006) also added that board members with higher levels of education negatively affect the firm's performance.

3.4. Regulatory quality and corporate financial performance

Government regulatory guality includes different elements such as discriminatory taxes, extent and effect of taxation, bureaucratic inefficiency, and burden of government regulations (World Bank report, 2019; G. Fogel & Zapalska, 2001; Geiger & Hoffman, 1998; Norton, 1998). Several studies have revealed that bureaucratic deficiencies lead to an increase in unnecessary costs that firms bear when involved in doing business with the government. These costs include direct financial costs in addition to the time and effort involved to complete these transactions (F. A. Ali et al., 2010; K. Fogel et al., 2006; Puffer et al., 2010). It has been documented that in emerging economies governments exercise regulatory pressures that have a strong impact on firms, especially when it comes to firms that use more energy and have sensitive environmental consequences (Li etal., 2016; D. Li et al., 2017). The impact of corporate taxes, being controlled by sovereign institutions, is also documented in the literature (Musgrave & Musgrave, 2004; Nwezeaku, 2005; Ojo, 2008; Soyode & Kajola, 2006). Several studies revealed a negative impact of taxes on financial performance (De Mooij & Ederveen, 2003; Gatsi et al., 2013; Mucai et al., 2014; Onuorah & Chiqbu, 2013). Beigi et al. (2013), Kurawa and Saidu (2018) and Olatunji and Oluwatovin (2019) further indicate that corporate financial performance can improve by using the services of tax experts, which is a part of regulatory quality, to participate in legal tax planning such as structuring intra-firm debts until the net tax payments are reduced. This exercise results in an increase in net income after taxes which leads to an increase in corporate profits. In addition, Hoyt (2007) and Rohaya et al. (2010) showed the impact of taxes on the financial performance of firms being a reason that encourages investors to invest abroad. Nevertheless, other studies have been conducted using data from a large-scale firm, and the results reveal that regulatory quality has significant negative impacts on corporate financial performance and growth of the firm (Aidis & Adachi, 2007; Aidis et al., 2008; Chadee & Roxas, 2013; Puffer et al., 2010).

3.5. Rule of law and corporate financial performance

Rule of law includes many different elements such as the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Vu et al., 2019). Hausmann et al. (2005), K. Fogel et al. (2006), Haggard et al. (2008), and D. North (1992a, 1992b) indicate that the rule of law helps create a business environment that leads to growth by protecting property rights, business transactions, and ensuring financial stability for firms. L. Gomez (2016) reports strong evidence on the existence of a positive and significant relationship between the rule of law and sales growth. The impacts of crime and violence being part of the rule of law are documented in the literature. Anderson (1999) and Roxas et al. (2012) conclude that these two factors are costly for individuals and institutions because public expenditure is reallocated to finance crime prevention and treatment instead of enhancing growth and productivity for the country. In terms of property rights, L. Gomez (2016) indicates that the security of property rights greatly affects the size of corporate investments and efficiency. In terms of contract

enforcement, Dixit and Pindyck (2012) indicate that the weak contract enforcement has an impact on investment through several channels leading to an increase in the level of unpredictability and risks that surround business projects. These consequences have inverse impacts of corporate financial performance in the form of increasing operating costs. Nevertheless, Chadee and Roxas (2013) report that the rule of law has strong negative effects on both corporate financial performance and innovation.

3.6. Control of corruption and corporate financial performance

Corruption is generically considered a bad use of delegated power to achieve private gain (Calhoun, 2011; Transparency International, 2010). In terms of government governance, N. M. Jensen et al. (2010) refers to corruption as how to satisfy government officials to obtain private monetary or non-monetary gains. The reason for the prevalence and existence of a relationship between government corruption and business corporations in some countries is the lack of transparency in government laws, regulations, and procedures. In addition, the presence of government agencies charged with arbitrary regulatory powers and weak judicial oversight cause increases in business transaction costs. The latter lead to negative consequences, such as impeding business development, preventing business start-ups, lowering corporate productivity, thus impacting financial performance (Ahlstrom & Bruton, 2010; Aidis & Adachi, 2007; Aidis et al., 2008; Jain, 2001; Ojeka et al., 2019; Puffer et al., 2010; Van Vu et al., 2018). The findings of Smith (2016) and Dutta and Sobel (2016) show specific firm-related consequences of corruption. That is, firms operating in more corrupt areas manage liquidity downward by holding less cash and usually depend on more debt financing. Therefore, the increasing leverage results in lower profits. There have also been empirical results that corruption and crime reduce the competitiveness of firms (Athanasouli et al., 2012; Fisman & Svensson, 2007; Gaviria, 2002; Nguyen & Van Dijk, 2012; Rand & Tarp, 2012). Nevertheless, other studies in the literature document contrarian impacts of corruption. That is, corruption may have a positive side. For instance, Lui (1985) indicates that corruption helps firms to achieve the desired goals or overcome bureaucracy, regulations, or complex procedures that are not clear. As a result, firms will be able to save the time needed to do business more quickly or "greasing the wheels," which in turn will increase firm growth and improve the financial performance of the firms (Acemoglu & Verdier, 2000; Kalyuzhnova & Belitski, 2019; Méon & Weill, 2010; Sahakyan & Stiegert, 2012; Vial & Hanoteau, 2010; Wei, 1998). De Jong et al. (2012) considered that the informal costs that a firm incurs to conduct business may help overcome the challenges they face in entering new markets and will also help firms levering up financial performance. Williams and Martinez-Perez (2016), Ayaydın and Hayaloglu (2014), and Y. Wang and You (2012) indicate that developing economies are characterized by the presence of formal institutional defects such as weak rule of law and ineffective public administration that associate the payment of bribes to corrupt public officials and the advances in corporate performance.

4. Hypotheses

The above-mentioned related studies help developing the testable hypotheses as listed in Table 2.

5. Data, variables, and statistical estimation

5.1. Data

The data are divided into two groups. The first group includes corporate data that are obtained from the financial reports of non-financial firms listed in the major indices in the G8 and the MENA region countries. The G8 countries include Canada, France, Germany, Italy, Japan, Russia, United Kingdom, and United States of America. The MENA countries include Bahrain, Egypt, Iraq, Jordan, Lebanon, Morocco, Oman, Saudi Arabia, Tunisia, and United Arab Emirates. This paper examines a total of 347 non-financial listed firms in the G8 countries and 389 non-financial listed firms in the MENA region. The data cover the years 2017–2020. The second group of data is institutional data related to WGIs that are compiled and available at World Bank Government Governance Indicators (http://info.worldbank.org/governance/wgi/).

5.2. Dependent variables

The dependent variables are the main indicators of corporate financial performance, namely Total Assets Turnover, Dividend payout ratio, Operating Expenses to Total Assets ratio, long-term debt ratio, Inventory to total current assets, and Earnings Yield.

5.3. Independent variables

The independent variables are classified into three groups. The first group includes the components of WGIs being used as proxies for institutional quality, namely (a) Voice and accountability, (b) Political Stability and no violence, (c) Government Effectiveness, (d) Regulatory Quality, (e) Rule of Law, and (f) Control of Corruption. The second group includes proxies for the country effects (dummy variables that take binary values). The third group includes proxies for the duration of WGIs being measured in this paper as the number of years for an increase (improvement) in institutional quality to reflect as increase in corporate financial performance. The descriptive statistics of the variables are reported in the Appendices (a) and (b).

6. Results and discussion

6.1. The association between WGIs and Corporate assets efficiency

The results reported in Table 3 shows the association and significance and trend of the association between WGIs and corporate asset efficiency being measured by total asset turnover. The results in Table 3 show that in the G8 countries, the voice and accountability have positive and significant impacts on corporate total assets turnover. The same association is reported in the MENA region. These results contradict previous results reported by Sokolov and Solanko (2017) as they report a positive association between political connection of the firms and corporate assets turnover. In the case of the G8, the results show that political stability has a positive effect on the corporate total asset turnover. This finding is consistent with previous results reported by Gupta (2011), although using tourism firms. The results in this paper extend this effect to other firms which turns the effect of political stability universal. The results in the MENA countries show that the relationship between the political stability and the corporate total asset turnover is negative and statistically significant.

The dependent variable is Total Asset Turnover that is being used as a measure for Corporate Asset Efficiency. The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of duration, size, and country effects. The estimation method is called Fully Modified Least Squares (FMOLS). Outliers detected are removed. The data fit the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10; the results are reported in Appendix (d). The linearity versus nonlinearity is examined using the Regression Equation Specification Error Test, RESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data has Constant variance; H1: The data has varying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators. The results are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the

form of Least Squares Dummy Variables (LSDVs) that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^{\kappa} \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where t = 1, ..., n; k = number of firms in each group; $\mathbf{y}_{tk} =$ Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long term debt to assets ratio, Inventory current assets, Earnings yield); $\mathbf{X}_{itk} =$ Six pillars of World Governance Indicators; $\lambda_k =$ Random error term due to the individual effect; $v_{tk} =$ Random error. The long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.

In the case of government effectiveness, the results for the G8 countries show positive and significant association with total asset turnover. These results are also documented by Cheng et al.

Table 3. The Association be	tween WGIs	and Corpo	orate Asset	Efficiency								
Independent Variables	Mode Voic Account	l (1) e & ability	Mode Political no Vio	el (2) Stability Ience	Mode Goveri Effecti	el (3) nment veness	Mode Regulator	il (4) y Quality	Mode Rule o	el (5) of Law	Mode Contr Corru	l (6) ol of otion
(MGIs)	68	MENA	G8	MENA	G 8	MENA	68	MENA	68	MENA	68	MENA
Constant	-0.0629 (0.770)	-0.274 (0.587)	0.821** (0.325)	-0.962 (0.931)	1.206* (0.719)	-0.502 (1.132)	1.175* (0.658)	-0.902 (1.168)	0.929 (1.621)	-0.160 (1.828)	0.814 (0.832)	0.661 (0.710)
Total Asset Turnover	0.00525*** (0.00049)	0.0642*** (0.0247)										
			0.00544*** (0.000559)	-0.0325** (0.01088)								
					0.00535*** (0.000500)	-0.0284*** (0.0104)						
							0.00529*** (0.000530)	-0.0360** (0.0168)				
									0.00527*** (0.000497)	-0.0249*** (0.00942)		
											0.0053*** (0.0005)	-0.0338*** (0.0103)
Duration of Voice & Accountability 4 years	0.0412 (0.0740)	0.509** (0.219)										
Duration of Political Stability 4 years			0.0174 (0.0690)	0.432** (0.192)								
Duration of Government Effectiveness 2 years					-0.0743* (0.0415)	0.133 (0.152)						
Duration of Government Effectiveness 4 years					-0.105 (0.107)	0.495*** (0.179)						
Duration of Regulatory Quality 4 years							0.00499 (0.0695)	0.444** (0.188)				
Duration of Control of Corruption 2 years											-0.01000 (0.0432)	0.405* (0.242)
												(Continued)

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I ane o. (continuea)												
Indonondont Variablac	Modé Voic Accoun:	el (1) :e & tability	Mode Political no Vio	el (2) Stability lence	Mode Goveri Effecti	el (3) nment veness	Mode Regulator	il (4) y Quality	Mode Rule o	el (5) A Law	Mode Contr Corru	l (6) ol of ption
(MGIS)	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA
Duration of Control of Corruption 4 years											-0.00645 (0.0794)	0.650*** (0.249)
2nd Quartile Growth of Sales Revenue	0.415*** (0.0462)	-0.219 (0.216)	0.414*** (0.0463)	-0.293 (0.216)	0.411*** (0.0462)	-0.237 (0.216)	0.411*** (0.0463)	-0.256 (0.216)	0.413*** (0.0464)	-0.233 (0.216)	0.414*** (0.0464)	-0.225 (0.216)
3rd Quartile Growth of Sales Revenue	0.908*** (0.0593)	0.290 (0.245)	0.905*** (0.0596)	0.219 (0.245)	0.906*** (0.0594)	0.248 (0.245)	0.904*** (0.0594)	0.246 (0.245)	0.906*** (0.0594)	0.266 (0.246)	0.906*** (0.0595)	0.290 (0.244)
4th Quartile Growth of Sales Revenue	1.521*** (0.0752)	1.360*** (0.287)	1.51 <i>7***</i> (0.0755)	1.277*** (0.287)	1.517*** (0.0753)	1.320*** (0.287)	1.515*** (0.0753)	1.303*** (0.287)	1.519*** (0.0754)	1.336*** (0.288)	1.520*** (0.0754)	1.365*** (0.286)
2nd Quartile Growth of Total Assets	-0.367*** (0.0466)	1.119*** (0.245)	-0.366*** (0.0468)	0.998*** (0.239)	-0.362*** (0.0466)	1.120*** (0.244)	-0.363*** (0.0466)	1.064*** (0.243)	-0.363*** (0.0468)	1.105*** (0.245)	-0.365*** (0.0468)	1.159*** (0.245)
3rd Quartile Growth of Total Assets	-0.886*** (0.0596)	0.668** (0.287)	-0.883*** (0.0599)	0.529* (0.280)	-0.887*** (0.0597)	0.678** (0.287)	-0.884*** (0.0597)	0.601** (0.284)	-0.885*** (0.0597)	0.655** (0.287)	-0.884*** (0.0598)	0.718** (0.286)
4th Quartile Growth of Total Assets	-1.472*** (0.0752)	-0.273 (0.326)	-1.470*** (0.0756)	-0.376 (0.323)	-1.472*** (0.0754)	-0.237 (0.328)	-1.469*** (0.0753)	-0.308 (0.325)	-1.472*** (0.0754)	-0.264 (0.329)	-1.471*** (0.0754)	-0.228 (0.327)
2nd Quartile Growth of Market Value	0.0275 (0.0426)	-0.307* (0.179)	0.0273 (0.0427)	-0.400** (0.175)	0.0246 (0.0426)	-0.311* (0.182)	0.0291 (0.0426)	-0.324* (0.181)	0.0279 (0.0426)	-0.284 (0.182)	0.0284 (0.0426)	-0.297 (0.183)
Country Effect (Dummies) G8	Sig (5%)		Sig (5%)		Sig (5%)		Sig (5%)		Sig (5%)		Sig (5%)	
Country Effect (Dummies) MENA		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)
Z	1384	1,555	1,384	1,555	1,384	1,555	1,384	1,555	1,382	1,555	1,382	1,555
Adjusted R square ($ar{R}^2$)	0.731	0.142	0.7291	0.127	0.731	0.143	0.730	0.140	0.275	0.140	0.730	0.144
Root MSE	0.45489	1.975	0.4561	1.9754	0.4547	1.9739	0.4549	1.9758	0.45527	1.977	0.45542	1.9722
Note: *** p<0.01, ** p<0.05, * p<0.1,	Robust stand	ard errors in J	parentheses									

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* p<0.05, *
*
' p<0.01,

(2010) and Boadi and Osarfo (2019). The authors in the current paper indicate that the positive association is due to the quality of public services such as the quality of education offered in the G8 countries. Nevertheless, in the MENA countries, the results show negative and statistically significant association with total asset turnover. This result is reported by Ujunwa (2012) that indicates a negative association exists between educational quality and firm financial performance. In the case of regulatory quality, the results in the G8 countries show positive association with total asset turnover. This result is also reported by D. Li et al. (2017) and Kurawa and Saidu (2018). The authors in the current paper indicate that the positive association is likely due to bureaucracy efficiency and the improvement in the tax authority (no discriminatory taxes imposed), which help corporations increase investment and assets, thus the total asset turnover. In the case of the rule of law, the results in the G8 countries show positive and significant effect on corporate total asset turnover. The authors argue that the rule of law is usually associated with high transparency and efficiency of judicial system, which help creating a good business environment, including corporate asset turnover (L. Gomez, 2016)

Nevertheless, the results in the MENA countries show a negative effect total asset turnover. The authors argue that in the MENA countries, which are usually associated with weak governance scores, business affairs are run informally at large. The rule of law, in terms of equal treatment and law enforcement, leads to slowing down business operations. In the case of control of corruption, the results in the G8 countries show positive association with total asset turnover. Nevertheless, Asiedu (2002) and Asiedu and Freeman (2009) report opposite findings. That is, a negative relationship exists between corporate investment growth and corruption. This negative effect is also observed in the MENA countries. It is worth noting that the differences in the results reported in the G8 and the MENA companies offer further support to the significance of institutional developments that support country as well as company performance (D. C. North, 1990). The results of the duration of institutional quality show that it takes between two to four years for each pillar of the WGIs to make an effect on corporate total asset turnover. This length of time does not differ between G8 and MENA region. The significant effect of firm size is also reported in several studies in the literature such as Niresh and Velnampy (2014), Husna and Satria (2019), and Becker-Blease et al. (2010). Regarding the country effect, the results show that the relationship between each pillar of the WGI and the corporate total asset turnover varies across countries either in the G8 or the MENA countries. These findings extend those reported by several studies such as Furman (2000), Ghemawat (2003) and Hawawini et al. (2004).

6.2. The association between WGIs and corporate dividends

Table 4 shows that the results for the relationship between WGIs and dividends payout ratios are insignificant statistically, although several studies report the otherwise (Benavides et al., 2016; Hofmann, 2018). The results in Table 4 also show that the duration of institutional quality in the MENA countries takes four years until voice and accountability and control of corruption make a negative effect on corporate dividends payout. Regarding the firm size, in the G8 countries, the results of growth of sales and growth of assets show positive effects over years and across companies and countries. These results extend the findings reported by Vu et al. (2019) and Hung et al. (2021). Regarding the country effects, the results in Table 4 show that institutional quality varies across countries (Furman, 2000; Ghemawat, 2003; Hawawini et al., 2004). It is also worth noting that in MENA region, the results show that the effect is positive in few countries, while in the G8 countries, the results show that the effect is negative in Japan only.

The dependent variable is corporate dividend payout. The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of duration, size, and country effects. The estimation method is Fully Modified Least Squares (FMOLS). Outliers detected are removed. The data fit the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10 (the results are reported in Appendix (d)). The linearity

Table 4. The WGI determinan	ts of corpor	ate divide	nds payout									
	Model	(1)	Model	1 (2)	Model	(3)					Model	(9)
Independent Variables	Voice Account(e & ability	Political St Viole	ability no nce	Governi Effective	ment eness	Model Regulatory	(4) Quality	Mode Rule of	l (5) f Law	Contro Corrup	l of tion
(MGIs)	68	MENA	68	MENA	G8	MENA	68	MENA	68	MENA	68	MENA
Constant	1.626 (2.449)	0.0444 (0.340)	-0.381 (0.608)	0.212 (0.175)	-2.300 (4.182)	-0.231 (0.494)	0.356 (1.668)	0.361 (0.270)	0.633 (4.731)	0.155 (0.421)	2.338 (2.328)	0.0397 (0.520)
Dividends Payout Ratio	-0.0169 (0.0255)	0.00561 (0.0221)										
			0.00379 (0.00688)	-0.00885 (0.0112)								
					0.0240 (0.0437)	0.0116 (0.0145)						
							-0.00430 (0.0178)	-0.0145 (0.0180)				
									-0.00663 (0.0496)	-0.00101 (0.0111)		
											-0.0247 (0.0246)	0.00186 (0.0150)
Duration of Voice & Accountability & Accountability2	0.133 (0.238)	0.0235 (0.0756)										
Duration of Voice & Accountability & Accountability3	0.160 (0.151)	0.150 (0.130)										
Duration of Voice & Accountability 4 years	0.121 (0.154)	-0.114** (0.0532)										
Duration of Control of Corruption 4 years											0.354 (0.543)	-0.128* (0.0769)
2nd Quartile Growth of Sales Revenue	0.306 (0.171)	-0.109 (0.0687)	0.305* (0.168)	-0.104 (0.0690)	0.310* (0.171)	-0.104 (0.0681)	0.308* (0.171)	-0.107 (0.0681)	0.312* (0.175)	-0.105 (0.0684)	0.307* (0.169)	-0.106 (0.0674)
2nd Quartile Growth of Total Assets	0.242** (0.130)	0.0495 (0.0919)	0.245*** (0.131)	0.0499 (0.0936)	0.244* (0.130)	0.0517 (0.0929)	0.242* (0.130)	0.0545 (0.0923)	0.237** (0.125)	0.0517 (0.0933)	0.244** (0.132)	0.0483 (0.0918)
)	Continued)

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Independent Variables	Model Voice Accounto	(1) & sbility	Model Political Sto Violen	(2) ability no nce	Model Governr Effective	(3) nent :ness	Model Regulatory	(4) Quality	Model Rule of	(5) Law	Model Contro Corrup	(6) L of tion
(MGIs)	68	MENA	G 8	MENA	G8	MENA	G8	MENA	G 8	MENA	68	MENA
3rd Quartile Growth of Total Assets	0.320*** (0.115)	-0.106 (0.0963)	0.325*** (0.112)	-0.103 (0.0986)	0.323*** (0.114)	-0.105 (0.0995)	0.320*** (0.116)	-0.0993 (0.0963)	0.320*** (0.114)	-0.100 (0.0986)	0.312*** (0.111)	-0.107 (0.0953)
4th Quartile Growth of Total Assets	0.381** (0.184)	0.122 (0.160)	0.382** (0.185)	0.133 (0.163)	0.385** (0.185)	0.125 (0.161)	0.374** (0.183)	0.131 (0.159)	0.379** (0.185)	0.141 (0.161)	0.368** (0.185)	0.121 (0.161)
Country Effect (Dummies) G8	Insignificant		Insignificant		Insignificant		Insignificant		Insignificant		significant ¹	
Country Effect (Dummies) MENA		Sig (5%) ²		Sig (5%) ²		Sig (5%) ²		Sig (5%) ²		Sig (5%) ²		Sig (5%) ²
Z	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555
Adjusted R square (\overline{R}^2)	0.022	0.016	0.0224	0.015	0.0223	0.0154	0.0224	0.0161	0.0221	0.016	0.0232	0.016
Root MSE	2.065	1.4751	2.0658	1.4574	2.0659	1.4575	2.0658	1.457	2.0661	1.4572	2.0649	1.4574
Note: *** p<0.01, ** p<0.05, * p<0.1, }	Robust standard	errors in po	irentheses									

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*** p<0.01, ** p<0.05, *

versus nonlinearity is examined using RESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data have Constant variance; H1: The data have varying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators. The results are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the form of

LSDVs that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^k \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where t = 1, ..., n; k = number of firms in each group; \mathbf{y}_{tk} = Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long-term debt to assets ratio, Inventory current assets, Earnings yield); \mathbf{X}_{itk} = Six pillars of World Governance Indicators; λ_k = Random error term due to the individual effect; v_{tk} = Random error. The long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.

6.3. The association between WGIs and corporate expense control

The results in Table 5 show that in the G8 countries, voice and accountability have a positive relationship with expense control (being measured as operating expense to total asset). The plausible interpretation of the positive association of voice and accountability is that corporations in the G8 countries are working in a transparent government policymaking with minimal favoritism in decisions of government officials. In this case, transparency helps firms allocate resources efficiently, thus reducing the operating expense. That is, firms can control the expense. Nevertheless, in the MENA region, the results show that voice and accountability have a negative relationship with expense control. In the case of political stability, the results for the G8 countries show that a positive relationship is observed with expense control. The authors suggest that an increase in political stability is usually associated with the stability of government policies. The latter help corporations control expenses. In MENA region, the results are opposite. That is, higher political stability leads to lower expense control. This result is reported by Mueller and Stewart (2011). They report that an increase in corporate operating cost is due to the increase in terrorism being a cause of political instability.

The dependent variable is Corporate Expense Control (Operating Expense to Total Assets). The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of duration, size, and country effects. The estimation method is FMOLS. Outliers detected are removed. The data fit the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10 (the results are reported in Appendix (d)). The linearity versus nonlinearity is examined using RESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data have Constant variance; H1: The data have varying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators. The results are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the form of LSDV that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^k \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where t = 1, ..., n; k = number of firms in each group; \mathbf{y}_{tk} = Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long term debt to assets ratio, Inventory current assets, Earnings yield); \mathbf{X}_{itk} = Six pillars of World Governance Indicators; λ_k = Random error term due to the individual effect; v_{tk} = Random error. The long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.

In the case of government effectiveness, the results for the G8 countries show a positive association with expense control. As far as the elements of government effectiveness are considered, the results indicate that an increase in quality of education is usually associated with

increases in the productivity of the workers, which is associated with less operating expenses. In addition, good country infrastructure helps in reducing operating costs such as transportation costs. This finding is reported by De Schoenmaker et al. (2014). Conversely, in the MENA region, the results show a negative association. That is, a decrease in government effectiveness leads to an increase in the corporate expense control. In the case of regulatory quality, the results for the G8 countries show a positive association with expense control. The authors argue that an improvement in government regulations and tax authority are associated with no discriminatory tax or discriminatory tariffs, which lead to a decrease in corporate operating expenses, thus more of expense control. The authors argue that an improve of expense control. The authors argue that an improve of expense control. The authors argue that an improve of expense control. The authors argue that an improve of expense control. The authors argue that an improvement in government regulations and tax authority are association with expense control. The authors argue that an improvement in government regulations and tax authority are associated with no discriminatory tax or discriminatory tariffs, which lead to a decrease in corporate operating expense control. The authors argue that an improvement in government regulations and tax authority are associated with no discriminatory tax or discriminatory tariffs, which lead to a decrease in corporate operating expense, thus more of expense control. The authors argue that an improvement in government regulations and tax authority are associated with no discriminatory tax or discriminatory tariffs, which lead to a decrease in corporate operating expenses, thus more of expense control. On the contrary, the results for the MENA countries show a negative relationship.

In the case of regulatory guality, the results for the G8 countries show a positive association with expense control. The authors argue that an improvement in government regulations and tax authority are associated with no discriminatory tax or discriminatory tariffs, which lead to a decrease in corporate operating expenses, thus more of expense control. On the contrary, the results for the MENA countries show a negative relationship. In the case of rule of law, the results for the G8 countries show a positive association with expense control. This result shows that an increase in rule of law may lead firms to increase costs of maintaining security. On the other hand, the results for the MENA region show negative association with expenses control. That is, low rule of law leads to high corporate operating expenses. This result is in line with the findings of K. Fogel et al. (2006) that firms bear extra expenses to maintain security in th case of criminal activities spreading significantly in a place. In case of control of corruption, the results for the G8 countries show positive association with expenses control. The authors indicate that an increase in the country's control of corruptions may lead firms to pay more bribes as a cost of entering a market and facilitating firm's survival. Nevertheless, the results for the MENA region show negative association with operating expenses ratio. The authors indicate that a decrease in control of corruption (e.g., an increase in corruption) refers to a lack of transparency in government laws, regulations, and procedures, along with weak judicial oversight. Therefore, these characteristics lead firms to follow the same route of paying bribes to have the business interests fulfilled. These results extend the findings reported by Hoskisson et al. (2000), Gaviria (2002), and Wright et al. (2005) concluding that bribes raise operational costs. The results of the duration of institutional quality show that it takes between two to four years until each pillar of the WGIs to make an effect on expense control. Regarding the effect of corporate size, several studies reported significant effect of size on the financial performance (Hung et al., 2021; Niresh & Velnampy, 2014; Vu et al., 2019). In the G8 countries, the results of sales growth as a proxy for size show that the effect is positive in all years. These results extend the findings reported by Sokolov and Solanko (2017) and Vu et al. (2019) concluding that larger firms tend to be more profitable. On the contrary, the results of growth of assets show that the effect is negative. These contradicting results reflect the discrepancy documented in the literature regarding measures of size of the firm which are also used as measures for growth of the firm (Eldomiaty & Rashwan, 2013). Nevertheless, in the MENA region, the results of growth of sales show that the effect is positive and significant at all levels. Regarding the country effect, the results show that the relationship between each pillar of WGIs and expense control varies across countries either in the G8 or the MENA countries. These findings are also reported by several studies such as Furman (2000), Ghemawat (2003), and Hawawini et al. (2004).

6.4. The association between WGIs and corporate leverage

Table 6 shows a positive association between voice and accountability in the G8 countries and long-term debt ratio. This positive relationship in the G8 countries interpreted that firm efficiency may increase as a result of voice and accountability. Nevertheless, an increase in political

Table 5. The WGI Determ	inants of Co	prporate Ex	pense Conti	rol (Operati	ng Expense	to Total A	ssets)					
Independent Variables	Mode Voic Account	el (1) :e & tability	Modé Political Si Viole	el (2) tability no ence	Mode Govern Effectiv	el (3) 1ment veness	Mode Regulator	el (4) Y Quality	Mode Rule o	il (5) f Law	Mode Contr Corru	l (6) ol of otion
(WGIs)	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA	G 8	MENA
Constant	0.230 (0.754)	-0.733 (0.654)	1.455*** (0.447)	-0.699* (0.395)	1.719** (0.809)	-0.951 (0.625)	1.396* (0.829)	-0.491 (0.472)	3.321 (2.255)	-0.276 (1.299)	1.943* (1.078)	-1.472* (0.856)
Expense Control (Operating Expense to Total Assets)	0.00952*** (0.000637)	-0.0701*** (0.0249)										
			0.0101*** (0.000725)	-0.0591*** (0.0215)								
					0.00966*** (0.000646)	-0.0307*** (0.0106)						
							0.00991*** (0.000685)	-0.0482*** (0.0169)				
									0.00955*** (0.000642)	-0.0283*** (0.00951)		
											0.00960*** (0.00064)	-0.0265** (0.0105)
Duration of Voice & Accountability 2 years	0.00907 (0.0542)	0.369* (0.196)										
Duration of Voice & Accountability 3 years	-0.00529 (0.0685)	0.679** (0.276)										
Duration of Voice & Accountability 4 years	0.0316 (0.0956)	0.550** (0.220)										
Duration of Political Stability 2 years			0.0170 (0.0404)	0.325** (0.140)								
Duration of Political Stability 4 years			-0.0746 (0.0908)	0.336* (0.193)								
Duration of Government Effectiveness 2 years					-0.0943* (0.0536)	0.121 (0.154)						
												(Continued)

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Independent Variables	Mode Voic Account	el (1) ce & tability	Mode Political SI Viole	el (2) tability no ence	Mode Goverr Effectiv	el (3) 1ment veness	Mode Regulato	el (4) Y Quality	Mode Rule o	el (5) f Law	Mode Contr Corruj	l (6) ol of otion
(MGIs)	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA
Duration of Regulatory Quality 2 years							-0.0773 (0.0534)	0.878** (0.355)				
Duration of Regulatory Quality 3 years							-0.0193 (0.0555)	0.592* (0.344)				
2nd Quartile Growth of Sales Revenue	0.377*** (0.0598)	0.757*** (0.218)	0.378*** (0.0601)	0.763*** (0.217)	0.372*** (0.0599)	0.793*** (0.219)	0.372*** (0.0599)	0.788*** (0.217)	0.376*** (0.0599)	0.796*** (0.218)	0.377*** (0.0599)	0.776*** (0.218)
3rd Quartile Growth of Sales Revenue	0.861*** (0.0767)	0.827*** (0.247)	0.860*** (0.0772)	0.821*** (0.247)	0.861*** (0.0768)	0.845*** (0.247)	0.862*** (0.0768)	0.851*** (0.247)	0.860*** (0.0767)	0.854*** (0.248)	0.859*** (0.0769)	0.847*** (0.247)
4th Quartile Growth of Sales Revenue	1.440*** (0.0972)	1.025*** (0.289)	1.437*** (0.0978)	1.005*** (0.289)	1.437*** (0.0973)	1.050*** (0.290)	1.436*** (0.0973)	1.041*** (0.289)	1.440*** (0.0974)	1.052*** (0.291)	1.438*** (0.0974)	1.046*** (0.290)
2nd Quartile Growth of Total Assets	-0.304*** (0.0603)	-0.175 (0.247)	-0.304*** (0.0607)	-0.279 (0.241)	-0.298*** (0.0604)	-0.226 (0.247)	-0.299*** (0.0604)	-0.265 (0.244)	-0.302*** (0.0604)	-0.211 (0.248)	-0.303*** (0.0604)	-0.241 (0.248)
3rd Quartile Growth of Total Assets	-0.783*** (0.0770)	-0.0290 (0.289)	-0.782*** (0.0776)	-0.153 (0.282)	-0.788*** (0.0772)	-0.0814 (0.290)	-0.786*** (0.0771)	-0.135 (0.286)	-0.783*** (0.0771)	-0.0703 (0.290)	-0.781*** (0.0772)	-0.106 (0.290)
4th Quartile Growth of Total Assets	-1.329*** (0.0972)	-0.00790 (0.329)	-1.328*** (0.0979)	-0.108 (0.325)	-1.331*** (0.0974)	-0.0307 (0.332)	-1.327*** (0.0973)	-0.0754 (0.328)	-1.329*** (0.0973)	-0.0158 (0.332)	-1.328*** (0.0973)	-0.0640 (0.331)
Country Effect (Dummies) G8	Sig (1%)		Sig (5%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)	
Country Effect (Dummies) MENA		Sig (5%)		Sig (1%)		Sig (1%)		Sig (5%)		Sig (5%)		Sig (1%)
z	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555
Adjusted R square (r)	0.573	0.052	0.569	0.051	0.573	0.0463	0.573	0.0514	0.573	0.046	0.572	0.0463
Root MSE	0.58749	1.9889	0.5903	1.99	0.58742	1.9948	0.58744	1.9895	0.58784	1.9953	0.588	1.9948
Note: *** <i>p</i> <0.01, ** <i>p</i> <0.05, * <i>p</i> <	0.1, Robust sta	ndard errors i	n parentheses									

Table 6. The WGI dete	erminants of	corporate	leverage (l	-ong Term	Debt to Tol	tal Assets)						
Independent	Mode Voic Account	el (1) e & tability	Mode Political S no Viol	l (2) Stability lence	Mod Gover Effecti	el (3) nment veness	Mode Regulator	el (4) Y Quality	Mode Rule o	el (5) of Law	Mode Control of	ll (6) Corruption
Variables (WGIs)	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA	68	MENA
Constant	-0.0829 (0.338)	-0.174 (0.121)	0.185 (0.132)	-0.268 (0.172)	0.292 (0.330)	-0.0795 (0.126)	-0.234 (0.392)	-0.320 (0.258)	-0.382 (0.726)	0.0304 (0.295)	-0.447 (0.386)	-0.0347 (0.136)
Leverage (Long Term Debt to Total Assets)	0.00272*** (0.000228)	-0.0140** (0.00587)										
			0.00293*** (0.000258)	-0.00587 (0.00508)								
					0.00275*** (0.000231)	-0.00684*** (0.00248)						
							0.00276*** (0.000245)	-0.00694** (0.00399)				
									0.00274*** (0.000229)	-0.00609*** (0.00223)		
											0.00278*** (0.000230)	-0.00697*** (0.00246)
Duration of Control of Corruption 3 years											-0.0601* (0.0329)	0.0626 (0.0762)
2nd Quartile Growth of Sales Revenue	-0.0374* (0.0214)	-0.100* (0.0514)	-0.0374* (0.0214)	-0.111** (0.0512)	-0.0378* (0.0214)	-0.0968* (0.0514)	-0.0373* (0.0214)	-0.102* (0.0513)	-0.0379* (0.0214)	-0.0967* (0.0513)	-0.0371* (0.0213)	-0.0979* (0.0513)
3rd Quartile Growth of Sales Revenue	-0.0626** (0.0274)	-0.0702 (0.0581)	-0.0626** (0.0275)	-0.0774 (0.0582)	-0.0623** (0.0275)	-0.0704 (0.0582)	-0.0629** (0.0274)	-0.0705 (0.0582)	-0.0635** (0.0274)	-0.0684 (0.0582)	-0.0615** (0.0274)	-0.0685 (0.0580)
4th Quartile Growth of Sales Revenue	-0.0752** (0.0348)	-0.0396 (0.0681)	-0.0754** (0.0348)	-0.0469 (0.0682)	-0.0750** (0.0348)	-0.0356 (0.0682)	-0.0752** (0.0348)	-0.0404 (0.0683)	-0.0755** (0.0348)	-0.0349 (0.0683)	-0.0742** (0.0347)	-0.0363 (0.0681)
2nd Quartile Growth of Total Assets	0.0533** (0.0216)	0.243*** (0.0582)	0.0527** (0.0216)	0.214*** (0.0568)	0.0535** (0.0216)	0.246*** (0.0580)	0.0531** (0.0216)	0.227*** (0.0577)	0.0534** (0.0216)	0.249*** (0.0582)	0.0540** (0.0215)	0.248*** (0.0582)
3rd Quartile Growth of Total Assets	0.126*** (0.0275)	0.293*** (0.0681)	0.125*** (0.0276)	0.259*** (0.0666)	0.125*** (0.0276)	0.299*** (0.0681)	0.126*** (0.0276)	0.274*** (0.0675)	0.126*** (0.0275)	0.300*** (0.0682)	0.126*** (0.0275)	0.300*** (0.0681)
												(Continued)

Table 6. (Continued)												
Independent	Mode Voic Account	el (1) :e & tability	Mode Political (no Viol	l (2) Stability lence	Mod Gover Effecti	el (3) nment veness	Mode Regulator	el (4) y Quality	Mode Rule c	el (5) of Law	Mode Control of (l (6) Corruption
Variables (WGIs)	68	MENA	68	MENA	68	MENA	G8	MENA	68	MENA	G8	MENA
4th Quartile Growth of Total Assets	0.0899*** (0.0347)	0.272*** (0.0776)	0.0895** (0.0348)	0.235*** (0.0767)	0.0893** (0.0348)	0.276*** (0.0780)	0.0905*** (0.0348)	0.251*** (0.0773)	0.0902*** (0.0348)	0.276*** (0.0781)	0.0896*** (0.0347)	0.278*** (0.0778)
2nd Quartile Growth of Market Value	-0.0151 (0.0197)	-0.0616 (0.0426)	-0.0163 (0.0197)	-0.0857** (0.0416)	-0.0168 (0.0197)	-0.0560 (0.0433)	-0.0154 (0.0196)	-0.0679 (0.0430)	-0.0159 (0.0196)	-0.0549 (0.0431)	-0.0169 (0.0196)	-0.0569 (0.0434)
3rd Quartile Growth of Market Value	-0.0402* (0.0220)	0.0275 (0.0560)	-0.0413* (0.0220)	-0.0122 (0.0538)	-0.0413* (0.0220)	0.0344 (0.0569)	-0.0415* (0.0220)	0.0151 (0.0563)	-0.0416* (0.0220)	0.0384 (0.0568)	-0.0424* (0.0220)	0.0338 (0.0567)
4th Quartile Growth of Market Value	-0.0687** (0.0274)	0.0687 (0.0580)	-0.0708*** (0.0273)	0.0277 (0.0555)	-0.0695** (0.0274)	0.0713 (0.0587)	-0.0717*** (0.0273)	0.0603 (0.0590)	-0.0697** (0.0274)	0.0833 (0.0592)	-0.0711*** (0.0273)	0.0737 (0.0586)
Country Effect (Dummies) G8	Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)	
Country Effect (Dummies) MENA		Sig (1%)		Sig (5%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)
Z	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555
Adjusted R square (r)	0.562	0.085	0.561	0.083	0.562	0.086	0.562	0.083	0.562	0.087	0.564	0.086
Root MSE	0.20994	0.46906	0.21015	0.46889	0.21001	0.4687	0.20992	0.46904	0.20997	0.46886	0.20957	0.46902
Note: *** p<0.01, ** p<0.05, *	p<0.1, Robust	t standard err	ors in parenth	eses								

*** p<0.01, ** p<0.05, * p<0.1, Robust standard errors in	parentheses
*** p<0.01, ** p<0.05, * p<0.1, Robust standard errors	.⊆
*** p<0.01, ** p<0.05, * p<0.1, Robust standard	errors
*** p<0.01, ** p<0.05, * p<0.1, Robust	standard
*** p<0.01, ** p<0.05, * p<0.1,	Robust
*** p<0.01, ** p<0.05, *	° p<0.1,
*** p<0.01, *	* p<0.05, 1
	*** p<0.01, *

connections, or spread of favoritism, leads to replacing professionals with friends in official positions, which may affect the ability of firms to obtain bank loans positively. This result is in line with the finding reported by Awartani et al. (2016) that high-quality institutions leads to more dependence on long-term debt. Conversely, the results for the MENA region show negative association with leverage. The authors may interpret this result that a decrease in voice and accountability is usually associated with the lack of accountability of public officials, an increase in political connections, and favoritism. These characteristics provide easy access to bank loans that results in an increase in leverage. This result is extended by the findings reported by Agrawal and Knoeber (2001), Johnson and Mitton (2003), Ramalho (2007), Yeh et al. (2013), L. Wang (2015), and Preuss and Königsgruber (2021).

The dependent variable is Corporate Leverage (Long Debt to Total Assets). The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of Duration, size, and country effects. The estimation method is FMOLS. Outliers detected are removed. The data fits the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10 (the results are reported in Appendix (d)). The linearity versus nonlinearity is examined using RESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data have Constant variance; H1: The data havevarying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators. The results are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the form of LSDV that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^k \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where $t = 1, \dots, n$; k = number of firms in each group; \mathbf{y}_{tk} = Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long term debt to assets ratio, Inventory current assets, Earnings yield); X_{iik} = Six pillars of World Governance Indicators; λ_k = Random error term due to the individual effect; $v_{t\nu}$ = Random error. The long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.

In the case of political stability, the results for the G8 countries show a positive association with corporate long-term debt ratio. As far as political instability (risk) is considered, Kyaw et al. (2011) and Gupta (2011) report that an increase political risk, such as terror attacks, decreases the leverage of firms. Therefore, an increase in political stability decreases the cost of debts, thus increasing corporate leverage. In case of government effectiveness, the results for the G8 countries show positive association with corporate leverage ratio. As far as government effectiveness is characterized by quality the of bureaucracy and infrastructure, these elements help firms ease of procedures to get bank loans easily. Thus, an increase in the quality of bureaucracy exerts a positive influence on corporate long-term debt. This result matches the finding reached by Awartani et al. (2016) that a greater use of long-term borrowing is associated with better government effectiveness. On the contrary, the results for the MENA region show negative association. This result matches the finding reported by Nifo et al. (2018) that an improvement in the institutions leads to a decrease in the firm debts.

In case of regulatory quality, the results for the G8 show a positive association with corporate leverage as well. As far as high regulatory quality is associated with less burden on business transactions such as tax effectiveness, companies seek structured financing such as debt. Li *et al.*, (2016a) and Awartani et al. (2016) conclude that government's policies and regulations play a role and impact the business of corporations. Nevertheless, the results for the MENA region show negative association with corporate leverage. This indicates that regulatory quality in this region makes it hard to use debt financing. That is, equity financing is much flexible and usually is not as exposed to excessive regulations as debt financing. The same finding is reached by Nifo et al.

(2018). In case of rule of law, the results for the G8 countries show positive association with longterm debt ratio. This positive associations carries an implication that high rule of law encourages companies to seek structured financing Awartani et al. (2016). Nevertheless, the opposite is observed in the MENA region which carries the same implications that the high rule of law may encourage firms to seek flexible financing such as issuing equity stocks. In the case of control of corruption, the results for the G8 countries show positive association with long-term debt ratio. It is quite plausible to assume that when a country exerts efforts to control corruption, debt covenant help debtors monitor the progress of corporate business. As far as corruption is associated with the lack of transparency in government laws, regulations, and procedures and weak judicial oversight, companies in less corrupted countries are able to abide by the borrowing covenants (Jain, 2001) and Van Vu et al. (2018). Conversely, in the MENA region, the results show negative association with long-term debt ratio. Awartani et al. (2016) added that the more corruption in a country, the lower the firm long-term debts, this is probably due the fact that the widespread corruption may raise the cost of long-term loans by requiring firms to pay to government officials in order to get risky loans.

Regarding the size of the firm, several studies document the impact of size on financial performance, especially leverage (Hung et al., 2021; Husna & Satria, 2019; Pervan & Višić, 2012). In the majority of the studies, the effect is positive (Niresh & Velnampy, 2014; Vu et al., 2019), although Becker-Blease et al. (2010) reports a negative effect. In the case of the G8 countries, the results of growth of sales and growth of market value show negative effect (Becker-Blease et al., 2010). On the contrary, the results for growth of assets show positive effect over all the years. In the MENA region, the results of growth of sales show negative effect, but the results of growth of assets show positive effect. The authors extend the same implications that measures of growth and size of the firms are associated with discrepancy (Eldomiaty & Rashwan, 2013). Regarding the country's impact, the results in Table (6) also show that the relationship between each pillar of WGIs and leverage varies across countries either in the G8 or the MENA countries. Furman (2000) Ghemawat (2003) and Hawawini et al. (2004) conclude that corporate financial performance varies across countries significantly. This result offers extended evidence that country's institutional change matters (D. C. North, 1990).

6.5. The association between WGIs and corporate liquidity

The results reported in Table 7 show a positive association between voice and accountability and corporate inventory ratio in the G8 and MENA countries. This result shows that when the effects of political influence and favoritism decrease, corporate inventory ratio increases. This result is in line with the finding reported by Dicko (2016) that the liquidity of the corporation is negatively influenced by favoritism. In case of political stability, the results in Table 7 show a positive association with corporate inventory ratio in both the G8 and MENA countries. It is quite obvious that political factors may encourage companies to expand business which requires an increasing inventory. This result goes in line with the finding reported by Gupta (2011) that the liquidity, especially in tourism firms, has been decreased in the countries suffering from terror attacks and political instability.

The dependent variable is Corporate Liquidity (Inventory to Current Assets). The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of duration, size, and country effects. The estimation method is FMOLS. Outliers are detected are removed. The data fit the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10 (the results are reported in Appendix (d)). The linearity versus nonlinearity is examined using the RRESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data have Constant variance; H1: The data have varying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators.

Table 7. The WGI determin	nants of cor	porate liqui	dity (Invent	tory to Cur	rent Assets							
	Mod	el (1)	Mode	il (2)	Mode	il (3)					Mode	(9)
Independent Variahles	Void Accoun	ce & itability	Political no Vio	Stability lence	Goveri Effecti	ıment veness	Mode Regulator	l (4) y Quality	Mode Rule o	el (5) of Law	Contr Corrul	ol of otion
(WGIs)	68	MENA	68	MENA								
Constant	0.156 (0.347)	0.378*** (0.0807)	0.268** (0.127)	0.349*** (0.0490)	0.345 (0.331)	0.461*** (0.108)	0.541* (0.324)	0.378*** (0.0678)	0.0571 (0.731)	0.489*** (0.148)	0.347 (0.353)	0.408*** (0.0953)
Liquidity (Inventory to Current Assets)	0.00278*** (0.000198)	0.0227*** (0.00271)										
			0.00289*** (0.000225)	0.0150*** (0.00236)								
					0.00276*** (0.000201)	0.0103*** (0.00114)						
							0.00274*** (0.000213)	0.0146*** (0.00184)				
									0.00280*** (0.000200)	0.00926*** (0.00103)		
											0.00281*** (0.000201)	0.00951*** (0.00113)
Duration of Government Effectiveness 2 years					0.0139 (0.0167)	-0.0396** (0.0166)						
Duration of Regulatory Quality 2 years							-0.00451 (0.0166)	0.108*** (0.0386)				
Duration of Rule of Law 2 years									-0.00195 (0.0136)	-0.0458*** (0.0161)		
2nd Quartile Growth of Sales Revenue	0.183*** (0.0186)	0.0831*** (0.0237)	0.183*** (0.0187)	0.0934*** (0.0238)	0.184*** (0.0186)	0.0785*** (0.0236)	0.183*** (0.0187)	0.0842*** (0.0236)	0.183*** (0.0186)	0.0807*** (0.0235)	0.183*** (0.0186)	0.0825*** (0.0236)
3rd Quartile Growth of Sales Revenue	0.215*** (0.0239)	0.118*** (0.0268)	0.213*** (0.0240)	0.125*** (0.0270)	0.214*** (0.0239)	0.118*** (0.0267)	0.214*** (0.0239)	0.119*** (0.0268)	0.214*** (0.0239)	0.120*** (0.0267)	0.214*** (0.0239)	0.119*** (0.0267)
4th Quartile Growth of Sales Revenue	0.276*** (0.0303)	0.152*** (0.0314)	0.274*** (0.0303)	0.161*** (0.0317)	0.276*** (0.0303)	0.148*** (0.0313)	0.276*** (0.0303)	0.154*** (0.0314)	0.276*** (0.0303)	0.153*** (0.0313)	0.276*** (0.0303)	0.151*** (0.0314)
												(Continued)

Table 7. (Continued)												
Independent Variables	Mod Voi Accoun	el (1) ce & itability	Mode Political : no Vio	el (2) Stability lence	Modé Goverr Effectiv	el (3) nment veness	Mode Regulator	l (4) y Quality	Modé Rule o	ן (5) וּך Law	Mode Contr Corruț	l (6) ol of otion
(WGIs)	G8	MENA	68	MENA	G8	MENA	G8	MENA	G8	MENA	G 8	MENA
2nd Quartile Growth of Total Assets	-0.0974*** (0.0188)	-0.0477* (0.0268)	-0.0975*** (0.0188)	-0.0170 (0.0264)	-0.0980*** (0.0188)	-0.0506* (0.0267)	-0.0972*** (0.0188)	-0.0400 (0.0266)	-0.0973*** (0.0188)	-0.0590** (0.0267)	-0.0976*** (0.0188)	-0.0500* (0.0268)
3rd Quartile Growth of Total Assets	-0.158*** (0.0240)	-0.0375 (0.0314)	-0.157*** (0.0241)	-0.00417 (0.0309)	-0.157*** (0.0240)	-0.0441 (0.0313)	-0.158*** (0.0240)	-0.0297 (0.0311)	-0.157*** (0.0240)	-0.0517* (0.0313)	-0.157*** (0.0240)	-0.0412 (0.0314)
4th Quartile Growth of Total Assets	-0.201*** (0.0303)	-0.140*** (0.0358)	-0.200*** (0.0304)	-0.106*** (0.0356)	-0.200*** (0.0303)	-0.145*** (0.0358)	-0.201*** (0.0303)	-0.129*** (0.0356)	-0.201*** (0.0303)	-0.153*** (0.0358)	-0.200*** (0.0303)	-0.144*** (0.0359)
2nd Quartile Growth of Market Value	0.0132 (0.0171)	-0.0351* (0.0197)	0.0118 (0.0171)	-0.00972 (0.0193)	0.0117 (0.0171)	-0.0449** (0.0199)	0.0127 (0.0171)	-0.0376* (0.0198)	0.0125 (0.0171)	-0.0458** (0.0198)	0.0130 (0.0171)	-0.0439** (0.0200)
3rd Quartile Growth of Market Value	0.0111 (0.0192)	0.0179 (0.0258)	0.00964 (0.0192)	0.0582** (0.0250)	0.00839 (0.0192)	0.00511 (0.0262)	0.0102 (0.0192)	0.0194 (0.0259)	0.0101 (0.0192)	0.00157 (0.0261)	0.0108 (0.0192)	0.0101 (0.0261)
Country Effect (Dummies) G8	Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)	
Country Effect (Dummies) MENA		Sig (1%) Sig (1%)				Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)
Z	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555
Adjusted R square (r)	0.580	0.602	0.579	0.594	0.580	0.605	0.580	0.601	0.580	0.606	0.580	0.602
Root MSE	0.1828	0.21498	0.18311	0.21489	0.18288	0.21428	0.5734	0.21441	0.18281	0.21427	0.18288	0.215
Note: *** p<0.01, ** p<0.05, * p<0.	1, Robust stan	idard errors in p	oarentheses									

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errors
standard
Robust
* p<0.1,
p<0.05,
*
p<0.01,
**

are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the form of LSDV that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^k \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where $t = 1, \ldots, n$; k = number of firms in each group; $\mathbf{y}_{tk} =$ Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long term debt to assets ratio, Inventory current assets, Earnings yield); $\mathbf{X}_{itk} =$ Six pillars of World Governance Indicators; $\lambda_k =$ Random error term due to the individual effect; $v_{tk} =$ Random error. The Long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.

In case of government effectiveness, regulatory quality, rule of law, and control of corruption, the results in Table 7 show also a positive association with inventory ratio in both the G8 and MENA countries. Indeed, these results carry the same implications of political stability. That is, a government effort to improve the quality of education, quality of infrastructure, quality of regulations, rule of law, and control of corruption help companies expand business which requires increases in inventory. Smith (2016) reports that a firm operates with less liquidity due to expropriation by corrupt local officials.

The results of the duration show that it takes two years until each pillar of the WGIs make either positive or negative effect on the corporate inventory ratio. This effect is significant in MENA region only. Regarding the effect of the size of the firm, the results show that this effect differs when using different measures of size. That is, in G8 countries, the results of growth of sales show positive effect. But when growth of assets, the effect is negative in all years. In the MENA region, the results of growth of sales show positive effect. On the contrary, the results of growth of assets and growth of market value show negative effect. These results are also reported in other studies. For example, Pervan and Višić (2012), Niresh and Velnampy (2014), and Vu et al. (2019) report that the size affects corporate financial performance significantly. Conversely, Becker-Blease et al. (2010) and Banchuenvijit and Pariyanont (2012) report that the size of the firm has a negative impact on corporate financial performance. Regarding the country effect, the results show that the relationship between each pillar of the WGIs and the corporate inventory ratio varies across countries either in the G8 or MENA countries. Furman (2000) Ghemawat (2003) and Hawawini et al. (2004) conclude that corporate financial performance varies across countries significantly.

6.6. The association between WGIs and corporate profitability

The results reported in Table 8 show that a negative association exits between voice and accountability and earnings yield in the G8 countries. This negative association indicates that a lack of accountability of public officials in addition to the emergence of favoritism lead to low earnings yield. This result opposes the finding reported by Sokolov and Solanko (2017) and Maaloul et al. (2018) that corporate political connection and favoritism have a positive impact on corporate profitability, which matches the results for the MENA region being reported in this paper.

In case of political stability, the results show negative association with earnings yield in both the G8 and MENA region. The authors argue that in times of political stability, competition intensifies between corporations that results in lower earnings yield. These results are in line with the finding reported by Girard and Sinha (2008), Desbordes (2010) and Kriel (2012) that high political risk (e.g., low political stability) is associated with higher expected return and increase in corporate profitability. The authors of the current paper extend the same argument that, in times of increasing political risk, corporation usually increases prices for hedging purposes that end up with high profitability.

The dependent variable is Corporate Profitability (Earnings Yield). The independent variables include the six pillars of WGI as well as dummy variables that capture the effects of duration, size, and country effects. The estimation method is FMOLS. Outliers detected are removed. The data fit the fixed the effects using Hausman test (Hausman & Taylor, 1981; Hausman, 1978). The results are reported in Appendix (c). The multicollinearity is examined, and the variables are associated with VIF < 10 (the

Table 8. The WGI det	erminants o	f corporate	profitability	/ (Earnings Y	'ield)							
-	Mode Voic	l (1) e & ability	Mode Political St Viole	l (2) ability no ince	Model Governi Effectiv	. (3) ment eness	Model Regulatory	(4) Quality	Model Rule of	(5) Law	Model Control of C	(6) orruption
Independent Variables (WGIs)	68	MENA	G8	MENA	G8	MENA	68	MENA	G8	MENA	68	MENA
Constant	-0.00501 (0.0510)	-0.0359 (0.135)	-0.00402 (0.0410)	0.307 (0.304)	-0.00201 (0.0110)	0.604 (0.457)	0.0360 (0.0262)	0.251 (0.302)	-0.00311 (0.0210)	0.729 (0.655)	0.00978 (0.0118)	-0.154 (0.183)
Profitability (Earnings Yield)	-4.65*** (1.20)	0.0171*** (0.00575)										
			-5.46*** (1.36)	-0.00908** (0.00551)								
					-4.91*** (1.22)	0.00547** (0.00243)						
							-5.515*** (1.29)	0.00797** (0.00392)				
									-4.69*** (1.21)	0.00468** (0.00219)		
											-4.76*** (1.22)	0.00763*** (0.00241)
Duration of Political Stability 2 years			0.000269 (0.000759)	-0.0529*** (0.0190)								
Duration of Government Effectiveness 2 years					0.000744 (0.00101)	-0.0590** (0.0355)						
2nd Quartile Growth of Sales Revenue	0.000429 (0.00113)	0.175*** (0.0504)	0.000422 (0.00113)	0.194*** (0.0502)	0.000460 (0.00113)	0.181*** (0.0504)	0.000468 (0.00113)	0.182*** (0.0503)	0.000448 (0.00113)	0.182*** (0.0504)	0.000432 (0.00113)	0.174*** (0.0503)
3rd Quartile Growth of Sales Revenue	0.000483 (0.00145)	0.299*** (0.0570)	0.000416 (0.00145)	0.316*** (0.0571)	0.000469 (0.00145)	0.309*** (0.0571)	0.000442 (0.00145)	0.306*** (0.0571)	0.000509 (0.00145)	0.308*** (0.0572)	0.000490 (0.00145)	0.298*** (0.0568)
4th Quartile Growth of Sales Revenue	0.00151 (0.00184)	0.386*** (0.0668)	0.00148 (0.00184)	0.408*** (0.0669)	0.00150 (0.00184)	0.396*** (0.0669)	0.00152 (0.00184)	0.396*** (0.0669)	0.00152 (0.00184)	0.398*** (0.0671)	0.00150 (0.00184)	0.384*** (0.0667)
2nd Quartile Growth of Total Assets	0.000302 (0.00114)	-0.268*** (0.0570)	0.000317 (0.00114)	-0.227*** (0.0557)	0.000272 (0.00114)	-0.250*** (0.0569)	0.000262 (0.00114)	-0.245*** (0.0565)	0.000283 (0.00114)	-0.253*** (0.0571)	0.000297 (0.00114)	-0.268*** (0.0570)
												(Continued)

Table 8. (Continued)												
Independent	Mode Voic Account	el (1) :e & tability	Mode Political St Viole	il (2) ability no ince	Model Governi Effectiv	l (3) ment eness	Mode Regulatory	l (4) / Quality	Model Rule of	1 (5) ^F Law	Mode Control of C	l (6) corruption
Variables (WGIs)	68	MENA	68	MENA	G8	MENA	68	MENA	G8	MENA	68	MENA
3rd Quartile Growth of Total Assets	0.000426 (0.00145)	-0.376*** (0.0667)	0.000487 (0.00146)	-0.328*** (0.0653)	0.000477 (0.00146)	-0.359*** (0.0668)	0.000462 (0.00145)	-0.350*** (0.0662)	0.000416 (0.00145)	-0.360*** (0.0669)	0.000419 (0.00146)	-0.378*** (0.0668)
4th Quartile Growth of Total Assets	0.00153 (0.00184)	-0.456*** (0.0760)	0.00155 (0.00184)	-0.409*** (0.0752)	0.00156 (0.00184)	-0.439*** (0.0765)	0.00150 (0.00184)	-0.435*** (0.0758)	0.00152 (0.00184)	-0.444*** (0.0767)	0.00151 (0.00184)	-0.459*** (0.0763)
2nd Quartile Growth of Market Value	-0.00202* (0.00104)	0.0224 (0.0418)	-0.00202* (0.00104)	0.0223 (0.0255)	-0.00198* (0.00104)	0.0346 (0.0425)	-0.00205** (0.00104)	0.0321 (0.0422)	-0.00201* (0.00104)	0.0292 (0.0423)	-0.00201* (0.00104)	0.0174 (0.0425)
3rd Quartile Growth of Market Value	-0.00306*** (0.00116)	0.0488 (0.0548)	-0.00306*** (0.00116)	0.0513 (0.0591)	-0.00304*** (0.00116)	0.0709 (0.0559)	-0.00307*** (0.00116)	0.0699 (0.0552)	-0.00303*** (0.00116)	0.0636 (0.0558)	-0.00303*** (0.00116)	0.0454 (0.0556)
4th Quartile Growth of Market Value	-0.00539*** (0.00145)	0.0778 (0.0568)	-0.00540*** (0.00144)	0.0820 (0.0924)	-0.00542*** (0.00145)	0.110* (0.0576)	-0.00538*** (0.00144)	0.101* (0.0578)	-0.00540*** (0.00145)	0.0969* (0.0581)	-0.00536*** (0.00144)	0.07 <i>67</i> (0.0574)
Country Effect (Dummies) G8	Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)		Sig (1%)	
Country Effect (Dummies) MENA		Sig (1%)		Sig (10%)		Sig (5%)		Sig (5%)		Sig (5%)		Sig (1%)
z	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555	1,382	1,555
Adjusted R square (r)	0.025	0.057	0.0114	0.052	0.026	0.056	0.027	0.054	0.025	0.055	0.025	0.058
Root MSE	0.0111	0.45978	0.01109	0.45978	0.01109	0.45918	0.01108	0.46013	0.0111	0.45956	0.01109	0.45965
Note: *** <i>p</i> < 0.01, ** <i>p</i> < 0.0	15, * <i>p</i> < 0.1, Rob	oust standard	errors in parent	theses								

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results are reported in Appendix (d)). The linearity versus nonlinearity is examined using the RESET (Ramsey, 1969; Sapra, 2005; Thursby & Schmidt, 1977; Thursby, 1979; Wooldridge, 2006). The results are reported in Appendix (e). The Heteroskedasticity is examined using Breusch-Pagan/Cook-Weisberg test. The hypotheses are Ho: The data have Constant variance; H1: The data have varying variance. The results show that the variances of residuals are not constant, which requires the use the robust estimators. The results are reported in Appendix (f). The estimating equation of the fixed effect linear model takes the form of LSDV that follows. $\mathbf{y}_{tk} = \alpha_k + \sum_{i=1}^k \beta_{ik} \mathbf{X}_{itk} + \lambda_k + v_{tk}$; Where $t = 1, \ldots, n$; k = number of firms in each group; \mathbf{y}_{tk} = Corporate financial indicators (Total asset turnover, Dividend payout ratio, Operating Expenses/Total Assets, Long term debt to assets ratio, Inventory current assets, Earnings yield); $\mathbf{X}_{itk} = \text{Six pillars of World Governance Indicators; } \lambda_k = \text{Random error term due to the individual effect; } v_{tk} = \text{Random error. The long-run covariance estimate; Bartlett Kernel, Andrews bandwidth = 23.00. The coefficients estimates are adjusted using White heteroskedasticity-consistent standard errors and covariance.$

In case of government effectiveness, the results for the G8 countries show a negative association with earnings yield. This result is in line with the finding reported by Tacheva and Huse (2006), Hafsi and Turgut (2013), and Kagzi and Guha (2018) that an inverse association exists between employee's educational background and qualification and corporate earnings yield. The results in the MENA region show an opposite trend. That is, the association between government effectiveness and earnings yield is positive. It is quite obvious that employee's educational background and qualification are taken care of through institutional improvements. In case of regulatory guality, the results of the G8 countries show a negative association with earnings yield. That is, improvements in regulatory guality (i.e., competition and tax regulations) are usually synonym to a burden to corporate business that obviously have an adverse effect on corporate earnings yield. The MENA countries show opposite results. It seems that the intense of competition and tax regulations are not as much as in developed countries. That is, the improvements in these institutional aspects lead to an improvement in corporate earnings yield. This argument is in line with the findings of D. Li et al. (2017) that strict governmental regulations (i.e., high guality of regulations) lead to improvements in corporate profitability. In case of rule of law, the results show a negative association with earnings yield in the G8 countries. This result matches the finding reported by Chadee and Roxas (2013) that the rule of law negatively affects both innovation and corporate profitability in Russian firms. Nevertheless, the results in the MENA countries show an opposite trend. That is, rule of law affects earnings yield positively. This result may be interpreted that an equal treatments of business affairs and enforcement of law reduce the cases of accounting and financial manipulations. In case of control of corruption, the results in the G8 show a negative association with earnings yields. This result is in line with the finding reported by Y. Wang and You (2012) and Ayaydın and Hayaloglu (2014) that corruption leads to an increase in profitability of firms. That is, it is likely that bureaucratic delays can be overcome by illegal practices and payments as "speed money" that takes various forms such as bribes paid to government employees to facilitate corporate business. This is being referred to as corruption "greasing the wheel" in relevant students in the literature (Kalyuzhnova & Belitski, 2019; Méon & Weill, 2010; Wei, 1998). The results in the MENA region are opposite. That is, a positive association exists between control of corruption and earnings yield. In this region, it is obvious that the control of corruption is associated with controlling business malpractices that eventually affect earning yield positively. In case of the duration of institutional auality, the results show that this variable is significant in the MENA region only and for two WGIs only namely, political stability and government effectiveness. The results show that it takes a minimum of two years for the two pillars to have an effect on corporate earnings yield. Regarding the effect of firm size, there are many studies that examined the effect of firm size on the firm financial performance such as Niresh and Velnampy (2014) and Hung et al. (2021). In the G8 countries, the results show that the effect of market value as a proxy for size is negative in all years. In the MENA countries, the effect of sales revenue as a proxy for size is positive in all years. This result matches the finding reported by Pervan and Višić (2012). On the contrary, the results of total assets as a proxy for size show that the effect is negative in all years. Here, it is worth noting that measures of the size of the firm still subject to asymmetry. Regarding the country effect, the results show that the relationship between WGIs and earnings yield vary across countries either in the G8 or the MENA. These findings are supported by previous several studies such as (Furman, 2000; Ghemawat, 2003; Hawawini et al., 2004). Furthermore, Collins (1990) reports that firms in developed countries have higher profitability than those in developing countries.

7. Conclusion

Generally, this paper offers a link between macro (institutional quality) and micro (firm) levels of analysis. The paper examines the institutional determinants of corporate financial performance in developed and developing countries. The analysis shows that the institutional quality varies between the G8 and MENA significantly. To that extent, the paper shows the extent to which corporate financial performance is affected by the status of institutional quality. The six pillars of WGIs are used as measures of institutional quality, namely voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. The financial performance of firms is measured using the common financial categories that include asset efficiency, dividends, expense control, leverage, liquidity, and profitability. The final findings can be summed up as follows.

7.1. Potentials of convergence in institutional quality

As far as governments ideally develop concerns about improving rules and regulations (e.g., institutional quality), a question of concern is whether those efforts may narrow the gap between developed and developing countries. The findings in this paper indicate that elements of convergence in institutional quality are observed in the G8 and MENA countries. Precisely, three pillars of WGIs are converging, namely (a) voice & accountability, (b) political stability, and (c) government effectiveness. The three pillars have positive and significant impact of firms' financial performance in terms of liquidity and profitability.

7.2. Potentials of divergence in institutional quality

Nevertheless, the findings show that a road still to be paved in the MENA countries to improve the status of institutional quality likewise developed countries. Three critical pillars of WGIs distinct firms' financial performance in the G8 and MENA countries. These three pillars are (a) Rule of law, (b) Control of Corruption, and (c) Regulatory Quality. The three pillars have significant effects of firms' asset efficiency, expense control, and leverage. The findings of the control variables carry significant implications as well. Differences between countries are significant, although the effects of (a) voice & accountability, (b) political stability, and (c) government effectiveness are common, which is to be considered as indications of convergence in institutional quality. In terms of measures of size of the firm, the findings show asymmetric results when using different measures of size.

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Author details

Tarek Ibrahim Eldomiaty¹

E-mail: Tarek_eldomiaty@aucegypt.edu ORCID ID: http://orcid.org/0000-0002-4382-9615

- Marina Apaydin¹
- Ahmed El-Sehwagy²
- Mohamed Hashim Rashwan³
- ¹ School of Business, The American University in Cairo, New Cairo, Egypt.
- ² College of Management and Technology, Arab Academy for Science and Technology and Maritime Transport, Cairo, Egypt.
- ³ Business Department, The British University in Egypt, Cairo, EGYPT.

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Notes

Japan only.
Bahrain, Oman, Lebanon and Tunisia.

Data sharing availability statement

The data that support the findings of this study is available at: •World Development Indicator https://databank. worldbank.org/source/world-development-indicators

Author contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by [Tarek Ibrahim Eldomiaty], [Marina

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References

- Acemoglu, D., & Verdier, T. (2000). The choice between market failures and corruption. *The American Economic Review*, *90*(1), 194–211. https://doi.org/10. 1257/aer.90.1.194
- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 2(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10. 007
- Agrawal, A., & Knoeber, C. R. (2001). Do some outside directors play a political role? *Journal of Law & Economics*, 44(1), 179–198. https://doi.org/10.1086/ 320271
- Ahlstrom, D., & Bruton, G. D. (2010). Rapid institutional shifts and the co-evolution of entrepreneurial firms in transition economies. *Entrepreneurship: Theory & Practice*, 34(3), 531–554. https://doi.org/10.1111/j. 1540-6520.2010.00373.x
- Aidis, R., & Adachi, Y. (2007). Russia: Firm entry and survival barriers. *Economic Systems*, 31(4), 391–411. https://doi.org/10.1016/j.ecosys.2007.08.003
- Aidis, R., Estrin, S., & Mickiewicz, T. (2008). Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6), 656–672. https://doi.org/10.1016/j. jbusvent.2008.01.005
- Ali, F. A., Fiess, N., & MacDonald, R. (2010). Do institutions matter for foreign direct investment? Open Economies Review, 21(2), 201–219. https://doi.org/10. 1007/s11079-010-9170-4
- Ali, M., Ng, Y. L., & Kulik, C. T. (2014). Board age and gender diversity: A test of competing linear and curvilinear predictions. *Journal of Business Ethics*, 125(3), 497–512. https://doi.org/10.1007/s10551-013-1930-9
- Al Khattab, A. A. R., Awwad, A., Anchor, J., & Davies, E. (2011). The use of political risk assessment techniques in Jordanian multinational corporations. *Journal* of Risk Research, 14(1), 97–109. https://doi.org/10. 1080/13669877.2010.505346
- Anderson, D. A. (1999). The aggregate burden of crime. Journal of Law & Economics, 42(2), 611–642. https:// doi.org/10.1086/467436
- Aschauer, D. A. (1989). Is public expenditure productive? Journal of Monetary Economics, 23(2), 177–200. https://doi.org/10.1016/0304-3932(89)90047-0
- Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: Is Africa different? *World Development*, 30(1), 107–119. https://doi.org/10.1016/S0305-750X(01)00100-0
- Asiedu, E., & Freeman, J. (2009). The effect of corruption on investment growth: Evidence from firms in Latin America, Sub-Saharan Africa, and transition countries. Review of Development Economics, 13(2), 200–214. https://doi.org/10.1111/j.1467-9361.2009. 00507.x
- Athanasouli, D., Goujard, A., & Sklias, P. (2012). Corruption and firm performance: Evidence from Greek firms. International Journal of Economic Sciences and Applied Research, 5(2), 43–67. http://ijbesar.teiemt. gr/docs/volume5_issue2/corruption_firm_perfor mance.pdf
- Awartani, B., Belkhir, M., Boubaker, S., & Maghyereh, A. (2016). Corporate debt maturity in the MENA region: Does institutional quality matter? *International*

Review of Financial Analysis, 46, 309–325. https://doi. org/10.1016/j.irfa.2015.10.002

- Ayaydın, H., & Hayaloglu, P. (2014). The effect of corruption on firm growth: Evidence from firms in Turkey. Asian Economic and Financial Review, 4(5), 607–624. https://archive.aessweb.com/index.php/5002/article/ view/1180
- Banchuenvijit, W., & Pariyanont, Y. (2012). Factors affecting the percentage change in stock prices of listed companies on the stock exchange of Thailand in the health sector. University of the Thai Chamber of Commerce Journal, 32(1), 50–64. https://scholar.utcc. ac.th/entities/publication/75e31787-d0a6-4572-9ada-b6a0478f5879
- Barker, V. L., III, & Mueller, G. C. (2002). CEO characteristics and firm R&D spending. *Management Science*, 48(6), 782–801. https://doi.org/10.1287/mnsc.48.6. 782.187
- Barro, R. (1991). Economic growth in a cross-section of countries. *Quarterly Journal of Economics*, 106(2), 407–443. https://doi.org/10.2307/2937943
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, 97(2), 207–221. https://doi.org/10. 1007/s10551-010-0505-2
- Bechtel, M. M. (2009). The political sources of systematic investment risk: Lessons from a consensus democracy. The Journal of Politics, 71(2), 661–677. https://doi.org/10.1017/S0022381609090525
- Becker-Blease, J. R., Kaen, F. R., Etebari, A., & Baumann, H. (2010). Employees, firm size and profitability of US manufacturing industries. Investment Management & Financial Innovations, 7(2), 7–23. https://www.busi nessperspectives.org/images/pdf/applications/pub lishing/templates/article/assets/3235/imfi_en_2010_ 02_Becker.pdf
- Beigi, M. R., Rafat, B., & Mozafari Panah, H. (2013). The analysis of the effect of tax on profitability indices in listed companies of Tehran Stock Exchange. European Online Journal of Natural and Social Sciences, 2(3), 86–98. https://core.ac.uk/download/ pdf/296306566.pdf
- Benavides, J., Berggrun, L., & Perafan, H. (2016). Dividend payout policies: Evidence from Latin America. *Finance Research Letters*, 17, 197–210. https://doi. org/10.1016/j.frl.2016.03.012
- Bliss, M. A., & Gul, F. A. (2012). Political connection and cost of debt: Some Malaysian evidence. *Journal of Banking and Finance*, 36(5), 1520–1527. https://doi. org/10.1016/j.jbankfin.2011.12.011
- Bloom, N., Bond, S., & Van Reenen, J. (2007). Uncertainty and investment dynamics. *The Review of Economic Studies*, 74(2), 391–415. https://doi.org/10.1111/j. 1467-937X.2007.00426.x
- Boadi, I., & Osarfo, D. (2019). Diversity and return: The impact of diversity of board members' education on performance. Corporate Governance the International Journal of Business in Society, 19(4), 824–842. https:// doi.org/10.1108/CG-01-2019-0017
- Boubakri, N., Cosset, J. C., & Saffar, W. (2012). The impact of political connections on firm's operating performance and financing decisions. *Journal of Financial Research*, 35(3), 397–423. https://doi.org/10.1111/j. 1475-6803.2012.01322.x
- Boubakri, N., Mansi, S. A., & Saffar, W. (2013). Political institutions, connectedness, and corporate risk-taking. *Journal of International Business Studies*, 44(3), 195–215. https://doi.org/10.1057/jibs.2013.2
- Bunkanwanicha, P., & Wiwattanakantang, Y. (2009). Big business owners in politics. *The Review of Financial*

Studies, 22(6), 2133–2168. https://doi.org/10.1093/ rfs/hhn083

- Calhoun, M. A. (2011). Carving Up Corruption: Analyzing the "Rule" Component of the Corruption Event. Journal of Management Policy and Practice, 12(4), 11– 22. http://www.na-businesspress.com/JMPP/cal houn abstract.html
- Çam, İ., & Özer, G. (2022). The influence of country governance on the capital structure and investment financing decisions of firms: An international investigation. Borsa Istanbul Review, 22(2), 257–271. https://doi.org/10.1016/j.bir.2021.04.008
- Cannella, A. A., Jr., Jones, C. D., & Withers, M. C. (2015). Family-versus lone-founder-controlled public corporations: Social identity theory and boards of directors. Academy of Management Journal, 58(2), 436–459. https://doi.org/10.5465/amj.2012.0045
- Carey, S. C. (2007). Rebellion in Africa: Disaggregating the effect of political regimes. *Journal of Peace Research*, 44(1), 47–64. https://doi.org/10.1177/ 0022343307072176
- Chadee, D., & Roxas, B. (2013). Institutional environment, innovation capacity and firm performance in Russia. *Critical Perspectives on International Business*, 9(1/2), 19–39. https://doi.org/10.1108/17422041311299923
- Cheng, L. T., Chan, R. Y., & Leung, T. (2010). Management demography and corporate performance: Evidence from China. *International Business Review*, 19(3), 261–275. https://doi.org/10.1016/j.ibusrev.2009.12.007
- Chen, C. J., Li, Z., Su, X., & Sun, Z. (2011). Rent-seeking incentives, corporate political connections, and the control structure of private firms: Chinese evidence. *Journal of Corporate Finance*, 17(2), 229–243. https:// doi.org/10.1016/j.jcorpfin.2010.09.009
- Chen, Z., Rose, A. Z., Prager, F., & Chatterjee, S. (2017). Economic consequences of aviation system disruptions: A reduced-form computable general equilibrium analysis. *Transportation Research Part A: Policy & Practice*, 95, 207–226. https://doi.org/10.1016/j.tra. 2016.09.027
- Chen, Y.-S., Shen, C.-H., & Lin, C.-Y. (2014). The benefits of political connection: Evidence from individual bank-loan contracts. *Journal of Financial Services Research*, 45(3), 287–305. https://doi.org/10.1007/ s10693-013-0167-1
- Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3), 554–580. https://doi.org/10.1016/j. jfineco.2006.11.003
- Cohen, L., Coval, J., & Malloy, C. (2011). Do powerful politicians cause corporate downsizing? *Journal of Political Economy*, 119(6), 1015–1060. https://doi.org/ 10.1086/664820
- Collins, J. M. (1990). A market performance comparison of US firms active in domestic, developed and developing countries. *Journal of International Business Studies*, *21*(2), 271–287. https://doi.org/10.1057/pal grave.jibs.8490335
- Cooper, M. J., Gulen, H., & Ovtchinnikov, A. V. (2010). Corporate political contributions and stock returns. *The Journal of Finance*, 65(2), 687–724. https://doi. org/10.1111/j.1540-6261.2009.01548.x
- Cull, R., Li, W., Sun, B., & Xu, L. C. (2015). Government connections and financial constraints: Evidence from a large representative sample of Chinese firms. *Journal of Corporate Finance*, 32, 271–294. https:// doi.org/10.1016/j.jcorpfin.2014.10.012
- De Jong, G., Tu, P. A., & van Ees, H. (2012). Which entrepreneurs bribe and what do they get from it? Exploratory evidence from Vietnam.

Entrepreneurship: Theory & Practice, 36(2), 323–345. https://doi.org/10.1111/j.1540-6520.2010.00400.x

- Demirbag, M., Tatoglu, E., & Glaister, K. W. (2007). Factors influencing perceptions of performance: The case of western FDI in an emerging market. *International Business Review*, 16(3), 310–336. https://doi.org/10. 1016/j.ibusrev.2007.02.002
- De Mooij, R. A., & Ederveen, S. (2003). Taxation and foreign direct investment. *International Tax and Public Finance*, 10(6), 673–693.
- Desbordes, R. (2010). Global and diplomatic political risks and foreign direct investment. *Economics & Politics*, 22(1), 92–125. https://doi.org/10.1111/j.1468-0343. 2009.00353.x
- De Schoenmaker, S., Van Cauwenberge, P., & Vander Bauwhede, H. (2014). Effects of local fiscal policy on firm profitability. *The Service Industries Journal, 34* (16), 1289–1306. https://doi.org/10.1080/02642069. 2014.942654
- Diamond, D. W. (2004). Presidential address, committing to commit: Short-term debt when enforcement is costly. The Journal of Finance, 59(4), 1447–1479. https://doi.org/10.1111/j.1540-6261.2004.00669.x
- Dicko, S. (2016). The impact of political connections on the performance and solvency of Canadian financial institutions. International Journal of Economics and Finance, 8(11), 1–11. https://doi.org/10.5539/ijef. v8n11p1
- Dicko, S., & Breton, G. (2013). Do directors' connections really matter. International Academic Research Journal of Business and Management, 1(7), 1–19. http://acrpub.com/searchresult.php?searchauthor name=Dicko
- Dicko, S., & Khemakhem, H. (2015). S&P/TSX 300 companies' political connections, compliance with board of directors regulations and financial performance. *International Journal of Business & Management*, 10 (1), 14–24. https://doi.org/10.5539/ijbm.v10n1p14
- Dixit, R. K., and Pindyck, R. S. (2012). Investment under uncertainty. Princeton university press. https://doi. org/10.2307/j.ctt7sncv
- Djankov, S., La Porta, R., Lopez de Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics*, 88(3), 430–465. https://doi.org/10.1016/j.jfineco.2007.02.007
- Djankov, S., McLiesh, C., & Shleifer, A. (2007). Private credit in 129 countries. Journal of Financial Economics, 84(2), 299–329. https://doi.org/10.1016/j.jfineco.2006.03.004
- Duchin, R., & Sosyura, D. (2012). The politics of government investment. *Journal of Financial Economics*, 106 (1), 24–48. https://doi.org/10.1016/j.jfineco.2012.04. 009
- Dutta, N., & Sobel, R. (2016). Does corruption ever help entrepreneurship? *Small Business Economics*, 47(1), 179–199. https://doi.org/10.1007/s11187-016-9728-7
- Ebrahim, M. S., Girma, S., Shah, M. E., & Williams, J. (2014). Dynamic capital structure and political patronage: The case of Malaysia. *International Review of Financial Analysis*, 31, 117–128. https://doi.org/10. 1016/j.irfa.2013.11.004
- Eldomiaty, T., & Rashwan, M. (2013). Monitoring Competing Models of Firm Growth using Financial Data. International Journal of Economics & Business Research, 6(1), 69–86.
- Eldomiaty, T., & Rashwan, M. (2013). Monitoring competing models of firm growth using financial data? International Journal of Economics & Business Research, 6(1), 69–86.
- Faccio, M. (2006). Politically connected firms. The American Economic Review, 96(1), 369–386. https:// doi.org/10.1257/000282806776157704

- Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. *The Journal of Finance*, 61(6), 2597–2635. https://doi.org/ 10.1111/j.1540-6261.2006.01000.x
- Fan, J. P., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. Journal of Financial Economics, 84(2), 330–357. https://doi.org/10.1016/j.jfineco.2006.03.008
- Fisher, R. C. (1997). The effects of state and local public services on economic development. *New England Economic Review*, 53–66. https://www.bostonfed.org/ publications/new-england-economic-review/1997issues/issue-march-april-1997/the-effects-of-stateand-local-public-services-on-economic-develop ment.aspx
- Fisman, R. (2001). Estimating the value of political connections. The American Economic Review, 91(4), 1095–1102. https://doi.org/10.1257/aer.91.4.1095
- Fisman, R., & Svensson, J. (2007). Are corruption and taxation really harmful to growth? Firm level evidence. Journal of Development Economics, 83(1), 63–75. https://doi.org/10.1016/j.jdeveco.2005.09.009
- Fogel, K., Hawk, A., Morck, R., & Yeung, B. (2006). Institutional obstacles to entrepreneurship. Oxford University Press London.
- Fogel, G., & Zapalska, A. (2001). A comparison of small and medium-size enterprise development in Central and Eastern Europe. *Comparative Economic Studies*, 43(3), 35–68. https://doi.org/10.1057/ces.2001.13
- Furman, J. (2000). Does industry matter differently in different places. Evidence from four OECD countries. Working Paper, MIT Sloan School of Management (https://www.semanticscholar.org/paper/DOES-INDUSTRY-MATTER-DIFFERENTLY-IN-DIFFERENT -A-of-Furman/4415459654ac5665d778fd266 c7e4e1cd0056514#citing-papers) Retrieved January , 2022
- Gatsi, J. G., Gadzo, S. G., & Kportorgbi, H. K. (2013). The effect of corporate income tax on financial performance of listed manufacturing firms in Ghana. *Research Journal of Finance & Accounting*, 4(15), 118–124. https://www.researchgate.net/publication/ 317786265_The_Effect_of_Corporate_Income_Tax_ on_Financial_Performance_of_Listed_ Manufacturing_Firms_in_Ghana
- Gaviria, A. (2002). Assessing the effects of corruption and crime on firm performance: Evidence from Latin America. Emerging Markets Review, 3(3), 245–268. https://doi.org/10.1016/S1566-0141(02)00024-9
- Geiger, S. W., & Hoffman, J. J. (1998). The impact of the regulatory environment and corporate level diversification on firm performance. *Journal of Managerial Issues*, 10(4), 439–453. https://www.jstor.org/stable/ 40604211
- Ghemawat, P. (2003). Semiglobalization and international business strategy. Journal of International Business Studies, 34(2), 138–152. https://doi.org/10.1057/pal grave.jibs.8400013
- Ghosh, S. (2016). Political transition and bank performance: How important was the Arab Spring? *Journal of Comparative Economics*, 44(2), 372–382. https:// doi.org/10.1016/j.jce.2015.02.001
- Girard, E., & Sinha, A. (2008). Risk and return in the next frontier. Journal of Emerging Market Finance, 7(1), 43–80. https://doi.org/10.1177/ 097265270700700103
- Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value? The Review of Financial Studies, 22(6), 2331–2360. https://doi.org/ 10.1093/rfs/hhn088

- Gomez, L. (2016). How does rule of law affect firm performance? Comparing the effect of rule of law in companies located in countries with different level of development. Retrieved from
- Gomez, E. T., & Jomo, K. S. (1997). Malaysia's political economy: Patronage and profits. *The Journal of Asian Studies*, 58(2), 571–573. https://www.jstor.org/stable/ 25798517
- Goodrich, J. N. (2002). September 11, 2001 attack on America: A record of the immediate impacts and reactions in the USA travel and tourism industry. *Tourism Management*, 23(6), 573–580. https://doi. org/10.1016/S0261-5177(02)00029-8
- Gupta, A. (2011). Terrorism and its impact on financial performance: A case of tourism industry. International Journal of Financial Management, 1(4), 46–52.
- Hafsi, T., & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of Business Ethics*, 112(3), 463–479. https://doi.org/10.1007/s10551-012-1272-z
- Haggard, S., MacIntyre, A., & Tiede, L. (2008). The rule of law and economic development. *Annual Review of Political Science*, 11, 205–234. https://doi.org/10. 1146/annurev.polisci.10.081205.100244
- Haslam, S. A., Ryan, M. K., Kulich, C., Trojanowski, G., & Atkins, C. (2010). Investing with prejudice: The relationship between women's presence on company boards and objective and subjective measures of company performance. *British Journal of Management*, 21(2), 484–497. https://doi.org/10. 1111/j.1467-8551.2009.00670.x
- Hausman, J. A. (1978). Specification tests in econometrics. Econometrica: Journal of the Econometric Society, 46(6), 1251–1271. https://doi. org/10.2307/1913827
- Hausmann, R., Pritchett, L., & Rodrik, D. (2005). Growth accelerations. Journal of Economic Growth, 10(4), 303–329. https://doi.org/10.1007/s10887-005-4712-0
- Hausman, J. A., & Taylor, W. E. (1981). Panel data and unobservable individual effects. *Econometrica: Journal of the Econometric Society*, 49(6), 1377–1398. https://doi.org/10.2307/1911406
- Hawawini, G., Subramanian, V., & Verdin, P. (2004). The home country in the age of globalization: How much does it matter for firm performance? *Journal of World Business*, 39(2), 121–135. https://doi.org/10.1016/j. jwb.2003.08.012
- Hofmann, H. S. (2018). Dividend Payout, Effective Future Firm Value and the Role of National Governance. University of Groningen. Faculty of Economics and Business.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. Academy of Management Journal, 43(3), 249–267. https://doi.org/ 10.2307/1556394
- Hosny, A. (2017). Political stability, firm characteristics and performance: Evidence from 6,083 private firms in the Middle East. *Review of Middle East Economics and Finance*, 13(1), 1–21. https://doi.org/10.1515/ rmeef-2017-0005
- Hoti, S., & McAleer, M. (2004). An empirical assessment of country risk ratings and associated models. *Journal* of Economic Surveys, 18(4), 539–588. https://doi.org/ 10.1111/j.0950-0804.2004.00230.x
- Hoyt, B. (2007). Tax haves today, the benefits and the pitfalls of banking and investing offshore. *John Wiley & Sons*. https://hoytharher.corn/tax-havenstoday
- Hung, &., Vinh, &., & Thai, &. (2021). The impact of firm size on the performance of Vietnamese private

enterprises: A case study. 19(2), 243–250. https://doi. org/10.21511/ppm.19(2).2021.20

- Husna, A., & Satria, I. (2019). Effects of return on asset, debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value. *International Journal of Economics and Financial Issues*, 9(5), 50–54. https://doi.org/10.32479/ijefi.8595
- Ilesanmi, O. (2011). The impact of strategic planning on the performance of Nigerian Banks. *European Journal* of Scientific Research, 65(1), 131–143.
- Iswatia, S., & Anshoria, M. (2007). The influence of intellectual capital to financial performance at insurance companies in Jakarta Stock Exchange (JSE). Paper presented at the Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia.
- Jain, A. K. (2001). Corruption: A review. Journal of Economic Surveys, 15(1), 71–121. https://doi.org/10. 1111/1467-6419.00133
- Jensen, N. (2008). Political risk, democratic institutions, and foreign direct investment. *The Journal of Politics*, 70(4), 1040–1052. https://doi.org/10.1017/ S0022381608081048
- Jensen, N. M., & Johnston, N. P. (2011). Political risk, reputation, and the resource curse. *Comparative Political Studies*, 44(6), 662–688. https://doi.org/10. 1177/0010414011401208
- Jensen, N. M., Li, Q., & Rahman, A. (2010). Understanding corruption and firm responses in cross-national firm-level surveys. *Journal of International Business Studies*, 41(9), 1481–1504. https://doi.org/10.1057/ jibs.2010.8
- Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: Evidence from Malaysia. Journal of Financial Economics, 67(2), 351–382. https://doi.org/10.1016/ S0304-405X(02)00255-6
- Kagzi, M., & Guha, M. (2018). Does board demographic diversity influence firm performance? Evidence from Indian-knowledge intensive firms. *Benchmarking: An International Journal*, 25(3), 1028–1058. https://doi. org/10.1108/BIJ-07-2017-0203
- Kalyuzhnova, Y., & Belitski, M. (2019). The impact of corruption and local content policy in on firm performance: Evidence from Kazakhstan. *Resources Policy*, 61, 67–76. https://doi.org/10.1016/j.resourpol.2019.01.016
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: methodology and analytical issues1. *Hague Journal on the Rule of Law*, 3(2), 220–246. https://doi.org/10.1017/ S1876404511200046
- Kesternich, I., & Schnitzer, M. (2010). Who is afraid of political risk? Multinational firms and their choice of capital structure. *Journal of International Economics*, 82(2), 208–218. https://doi.org/10.1016/j.jinteco. 2010.07.005
- Kim, N., & Kim, E. (2015). Board capital and exploration: From a resource provisional perspective. Management Decision, 53(9), 2153–2174. https://doi. org/10.1108/MD-11-2014-0648
- Kriel, L. (2012). The relationship between political risk and financial performance of firms in Africa. University of Pretoria.
- Kurawa, J., & Saidu, H. (2018). Corporate tax and financial performance of listed Nigerian consumer goods. *Journal of Accounting and Financial Management*, 4 (4), 2504–8856. https://www.iiardjournals.org/get/ JAFM/VOL.%204%20NO.%204%202018/CORPORATE %20TAX.pdf
- Kyaw, N. A., Manley, J., & Shetty, A. (2011). Factors in multinational valuations: Transparency, political risk and diversification. Journal of Multinational Financial

Management, 21(1), 55–67. https://doi.org/10.1016/j. mulfin.2010.12.007

- Larobina, M. D., & Pate, R. L. (2009). The impact of terrorism on business. Journal of Global Business Issues, 3(1), 147–156. https://works.bepress.com/richard_ pate/5/
- Lashitew, A. A. (2014). The effect of political connections on credit access: Does the level of financial development matter? *Kyklos*, 67(2), 227–254. https://doi.org/ 10.1111/kykl.12051
- Li, D., Cao, C., Zhang, L., Chen, X., Ren, S., & Zhao, Y. (2017). Effects of corporate environmental responsibility on financial performance: The moderating role of government regulation and organizational slack. *Journal of Cleaner Production*, 166, 1323–1334. https://doi.org/10.1016/j.jclepro.2017.08.129
- Li, A., & Xia, X. (2013). Political connections, financial crisis and firm's value: Evidence from chinese listed firms. International Journal of Business & Management, 8 (18), 63–77. https://doi.org/10.5539/ijbm.v8n18p63
- Li, D., Xin, L., Sun, Y., Huang, M., & Ren, S. (2016). Assessing Environmental Information Disclosures and the Effects of Chinese Nonferrous Metal Companies. *Polish Journal of Environmental Studies*, *25*(2), 663–671. https://doi.org/10.15244/pjoes/61116
- Lui, F. T. (1985). An equilibrium queuing model of bribery. Journal of Political Economy, 93(4), 760–781. https:// doi.org/10.1086/261329
- Maaloul, A., Chakroun, R., & Yahyaoui, S. (2018). The effect of political connections on companies' performance and value: Evidence from Tunisian companies after the revolution. Journal of Accounting in Emerging Economies, 8(2), 185–204. https://doi.org/10.1108/ JAEE-12-2016-0105
- Mahadeo, J. D., Soobaroyen, T., & Hanuman, V. O. (2012). Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. *Journal of Business Ethics*, 105(3), 375–388. https://doi.org/10.1007/s10551-011-0973-z
- Mann, H. B., & Whitney, D. R. (1947). On a test of whether one of two random variables is stochastically larger than the other. Annals of Mathematical Statistics, 18 (1), 50–60. https://doi.org/10.1214/aoms/ 1177730491
- Matta, S., Appleton, S., & Bleaney, M. (2018). The microeconomic impact of political instability: Firm-level evidence from Tunisia. *Review of Development Economics*, 22(4), 1590–1619. https://doi.org/10. 1111/rode.12388
- Méon, P.-G., & Weill, L. (2010). Is corruption an efficient grease? World Development, 38(3), 244–259. https:// doi.org/10.1016/j.worlddev.2009.06.004
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1), 61–80. https://doi.org/10.1002/smj.720
- Mironov, M., & Zhuravskaya, E. (2016). Corruption in procurement and the political cycle in tunneling: Evidence from financial transactions data. *American Economic Journal: Economic Policy*, 8(2), 287–321. https://doi.org/10.1257/pol.20140188
- Mitton, T. (2004). Corporate governance and dividend policy in emerging markets. *Emerging Markets Review*, 5(4), 409–426. https://doi.org/10.1016/j.eme mar.2004.05.003
- Mucai, G. P., Kinya, G. S., Noor, A. I., & James, E. R. (2014). Tax Planning and Financial Performance of Small-Scale Enterprises in Kenya. *International Review of Management and Business Research*, 3(2), 1236–1243. https://www.irmbrjournal.com/papers/ 1405508793.pdf

- Mueller, J., & Stewart, M. G. (2011). Balancing the risks, benefits, and costs of homeland security. *Homeland* Security Affairs, 7(16), 1–28. https://www.hsaj.org/ articles/43
- Musgrave, R. A., & Musgrave, P. B. (2004). Public Finance in Theory and Practice (5th ed.). New Delhi, Tata McGraw.
- Naser, K., & Mokhtar, M. (2004). Determinants of corporate performance of Malaysian companies. Paper presented at the Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, Singapore.
- Nguyen, T. T., & Van Dijk, M. A. (2012). Corruption, growth, and governance: Private vs. state-owned firms in Vietnam. Journal of Banking and Finance, 36(11), 2935–2948. https://doi.org/10.1016/j.jbankfin.2012. 03.027
- Nifo, A., Ruberto, S., & Vecchione, G. (2018). Does institutional quality matter for lending relationships? *Journal of Applied Finance & Banking*, 8(2), 69–100. http://www.scienpress.com/Upload/JAFB%2fVol% 208_2_4.pdf
- Niresh, J. A., & Velnampy, T. (2014). Firm size and profitability: A study of listed manufacturing firms in Sri Lanka. International Journal of Business & Management, 9(4), 57–64. https://doi.org/10.5539/ ijbm.v9n4p57
- North, D. (1992a). Institutions and economic theory. The American Economist, 36(1), 3–7. https://doi.org/10. 1177/056943459203600101
- North, D. C. (1990). Institutions, Institutional Change and Economic Performance. Cambridge University PressUK. https://doi.org/10.1017/CB09780511808678
- North, D. C. (1992b). Transaction Costs, Institutions and Economic Performance. An International Center for Economic Growth Publication.
- Norton, S. W. (1998). Poverty, property rights, and human well-being: A cross-national study. *The Cato Journal*, 18(2), 233-245. https://www.cato.org/sites/cato.org/ files/serials/files/cato-journal/1998/11/cj18n2-4.pdf
- Nwezeaku, N. (2005). Taxation in Nigeria: Principles and Practice. Springfield Publisher Ltd.
- Ojeka, S., Adegboye, A., Adegboye, K., Umukoro, O., Dahunsi, O., & Ozordi, E. (2019). Corruption perception, institutional quality and performance of listed companies in Nigeria. *Heliyon*, 5(10), 1–10. https:// doi.org/10.1016/j.heliyon.2019.e02569
- Ojo, S. (2008). Fundamental Principles of Nigerian Tax, Lagos (2nd ed.). Sagribra Tax Publications.
- Olatunji, O. C., & Oluwatoyin, A. E. (2019). Effect of corporate taxation on the profitability of firms in NIGERIA. Journal of Economics and Behavioral Studies, 11(1), 191–201. https://doi.org/10.22610/ jebs.v11i1(J).2759
- Onuorah, A., & Chigbu, E. (2013). A comparative analysis of the impact of corporate taxation on company's reserve and dividend policy in Nigeria: 2000-2011. *Journal of Developing Country Studies*, 3(1), 154–161. https://www.iiste.org/Journals/index.php/DCS/article/ view/3894
- Pástor, Ľ., & Veronesi, P. (2013). Political uncertainty and risk premia. Journal of Financial Economics, 110(3), 520–545. https://doi.org/10.1016/j.jfineco.2013.08.007
- Pervan, M., & Višić, J. (2012). Influence of firm size on its business success. Croatian Operational Research Review, 3(1), 213–223. https://hrcak.srce.hr/file/ 142467
- Porta, R. L., Lopez de Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. Journal of Political Economy, 106(6), 1113–1155. https://doi.org/ 10.1086/250042

- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. Academy of Management Journal, 58(5), 1546–1571. https://doi. org/10.5465/amj.2013.0319
- Preuss, S., & Königsgruber, R. (2021). How do corporate political connections influence financial reporting? A synthesis of the literature. *Journal of Accounting* and Public Policy, 40(1), 106802. https://doi.org/10. 1016/j.jaccpubpol.2020.106802
- Puffer, S. M., McCarthy, D. J., & Boisot, M. (2010). Entrepreneurship in Russia and China: The impact of formal institutional voids. Entrepreneurship: Theory & Practice, 34(3), 441–467. https://doi.org/10.1111/j. 1540-6520.2009.00353.x
- Rajan, R. G., & Zingales, L. (2003). The great reversals: The politics of financial development in the twentieth century. *Journal of Financial Economics*, 69(1), 5–50. https://doi.org/10.1016/S0304-405X(03)00125-9
- Ramalho, R. (2007). The persistence of corruption: Evidence from the 1992 presidential impeachment in Brazil. Unpublished paper, World Bank, available at http://www.enterprisesurveys.org/documents/collorpaper jan 16. pdf.
- Ramsey, J. B. (1969). Tests for specification errors in classical linear least-squares regression analysis. *Journal of the Royal Statistical Society: Series* B (Methodological), 31(2), 350–371. https://doi.org/ 10.1111/j.2517-6161.1969.tb00796.x
- Rand, J., & Tarp, F. (2012). Firm-level corruption in Vietnam. Economic Development & Cultural Change, 60(3), 571–595. https://doi.org/10.1086/664022
- Roberts, B. E. (1990). A dead senator tells no lies: Seniority and the distribution of federal benefits. American Journal of Political Science, 34, 31–58. https://doi.org/ 10.2307/2111510
- Rohaya, M., Fadzillah, N., & Mastuki, N. (2010). Corporate tax planning: a study on corporate effective tax rates of malaysian listed companies. *International Journal* of Trade, Economics and Finance, 1(2), 189–193. https://doi.org/10.7763/IJTEF.2010.V1.34
- Roxas, B., Chadee, D., & Erwee, R. (2012). Effects of rule of law on firm performance in South Africa. European Business Review, 24(5), 478–492. https://doi.org/10. 1108/09555341211254544
- Sahakyan, N., & Stiegert, K. W. (2012). Corruption and firm performance. Eastern European Economics, 50(6), 5–27. https://doi.org/10.2753/EEE0012-8775500601
- Sapra, S. (2005). A regression error specification test (RESET) for generalized linear models. *Economics Bulletin*, 3(1), 1–6. http://www.accessecon.com/pubs/ EB/2005/Volume3/EB-04C50033A.pdf
- Simser, J. (2011). Terrorism financing and the threat to financial institutions. *Journal of Money Laundering Control*, 14, 334–345. https://doi.org/10.1108/ 13685201111173811
- Smith, J. D. (2016). US political corruption and firm financial policies. Journal of Financial Economics, 121(2), 350–367. https://doi.org/10.1016/j.jfineco.2015.08.021
- Sokolov, V., & Solanko, L. (2017). Political influence, firm performance and survival. *Higher School of Economics Research, 20*, 1–37. https://doi.org/10. 2139/ssrn.3000367
- Soyode, L., & Kajola, S. O. (2006). Taxation principles and practice in Nigeria. Silicon Publishing Company.
- Tacheva, S., & Huse, M. (2006). Women directors and board task performance: Mediating and moderating effects of board working style. Paper presented at the European Academy of Management Conference. Norwegian School of Management, University of St. Gallen.

- Thursby, J. G. (1979). Alternative specification error tests: A comparative study. *Journal of the American Statistical Association*, 74(365), 222–225. https://doi. org/10.1080/01621459.1979.10481641
- Thursby, J. G., & Schmidt, P. (1977). Some properties of tests for specification error in a linear regression model. Journal of the American Statistical Association, 72(359), 635–641. https://doi.org/10. 1080/01621459.1977.10480627
- Transparency International. (2010). Corruption Perceptions Index 2010. (Accessed 2021).
- Tyler, B. B., & Steensma, H. K. (1998). The effects of executives' experiences and perceptions on their assessment of potential technological alliances. *Strategic Management Journal*, 19(10), 939–965. doi:10.1002/(SICI)1097-0266(199810)19:10<939: AID-SMJ978>3.0.CO;2-Z
- Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. Corporate Governance the International Journal of Business in Society, 12(5), 656–674. https://doi.org/10.1108/ 14720701211275587
- Van Vu, H., Tran, T. Q., Van Nguyen, T., & Lim, S. (2018). Corruption, types of corruption and firm financial performance: New evidence from a transitional economy. *Journal of Business Ethics*, 148(4), 847–858. https://doi.org/10.1007/s10551-016-3016-y
- Vial, V., & Hanoteau, J. (2010). Corruption, manufacturing plant growth, and the Asian paradox: Indonesian evidence. World Development, 38(5), 693–705. https://doi.org/10.1016/j.worlddev.2009.11.022
- Vu, T.-H., Nguyen, V.-D., Ho, M.-T., & Vuong, Q.-H. (2019). Determinants of Vietnamese listed firm performance: Competition, wage, CEO, firm size, age, and international trade. *Journal of Risk and Financial Management*, 12(2), 1–19. https://doi.org/10.3390/ jrfm12020062
- Wang, L. (2015). Protection or expropriation: Politically connected independent directors in China. Journal of Banking and Finance, 55, 92–106. https://doi.org/10. 1016/j.jbankfin.2015.02.015

- Wang, Y., & You, J. (2012). Corruption and firm growth: Evidence from China. *China Economic Review*, 23(2), 415–433. https://doi.org/10.1016/j.chieco.2012.03. 003
- Wei, S.-J. (1998). Foreign, quasi-foreign, and false-foreign direct investment in China. Paper presented at the Ninth East Asian Seminars on Economics.
- Williams, C. C., & Martinez-Perez, A. (2016). Evaluating the impacts of corruption on firm performance in developing economies: An institutional perspective. International Journal of Business & Globalisation, 16 (4), 401–422. https://eprints.whiterose.ac.uk/95700/ 3/WRR0_95700.pdf
- Williamson, O. E. (1985). The economic institutions of capitalism. Free Press.
- Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. Administrative Science Quarterly, 36(2), 269–296. https://doi.org/10.2307/2393356
- Wooldridge, J. M. (2006). Introductory Econometrics-A Modern Approach. Thomson South-Western. International Student Edition.
- World Bank Report. (2019). http://info.worldbank.org/gov ernance/wgi/#home. (Accessed 2021)
- Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, 42(1), 1–33. doi:10.1111/j. 1467-6486.2005.00487.x
- Yang, D., Lu, Z., & Luo, D. (2014). Political connections, media monitoring and long-term loans. *China Journal* of Accounting Research, 7(3), 165–177. doi:10.1016/j. cjar.2014.08.004
- Yeh, Y.-H., Shu, P.-G., & Chiu, S.-B. (2013). Political connections, corporate governance and preferential bank loans. Pacific-Basin Finance Journal, 21(1), 1079–1101. doi:10.1016/j.pacfin.2012.08.003
- Yu, F., & Yu, X. (2011). Corporate lobbying and fraud detection. The Journal of Financial and Quantitative Analysis, 46(6), 1865–1891. doi:10.1017/ S0022109011000457

Appendix

(a) Descriptive Statistics for the G8 Countries

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Total Assets Turnover	1,384	0.000331	5.833	0.689	0.531
Dividend payout ratio	1,382	-41.71	41	0.399	2.0741
Operating Expenses/Total Assets	1,382	-3.176	11.2	0.620	.64194
Long term debt to assets ratio	1,382	0.231	0.214	0.000	3.794
Inventory current assets	1,382	0.1987	0.1973	0.000	0.9012
Earnings Yield	1,382	00007	0.0111	-0.309	0.1079
Voice and Accountability	1,384	17.73	96.06	79.661	21.961
Political Stability No Violence	1,384	15.24	93.81	58.371	16.05
Government Effectiveness	1,384	44.71	97.12	85.746	13.59
Regulatory Quality	1,384	31.25	97.6	84.680	18.32
Rule of Law	1,384	20.67	96.63	81.614	22.064
Control of Corruption	1,384	17.31	96.15	81.006	22.858

(b) Descriptive Statistics for the MENA Countries

Descriptive Statistics

	Ν	Minimum	Maximum	Mean	Std. Deviation
Total Assets Turnover	1555	-54.3355	19.6394	0.5434	2.0463
Dividend payout ratio	1555	-7.2222	50	0.4289204	1.458406
Operating Expenses/Total Assets	1555	-35	10.434	-0.1566017	2.028172
Long term debt to assets ratio	1555	0.1128668	0.4738441	-14.59801	6.786982
Inventory current assets	1555	0.2515583	0.2291226	0.00	0.9882629
Earnings Yield	1555	0.0394813	0.4685281	-3.12296	15.17496
Voice and Accountability	1555	4.9261	56.6502	17.5550	11.9612
Political Stability No Violence	1555	1.4286	72.8571	28.1289	15.4387
Government Effectiveness	1555	9.1346	90.8654	54.4104	17.6753
Regulatory Quality	1555	9.6154	80.7692	48.8894	17.0543
Rule of Law	1555	3.3654	78.3654	53.3039	17.2506
Control of Corruption	1555	6.2500	84.1346	55.3058	18.1899

(c) Hausman test: G8 and MENA countries

The test looks for the correlation between the observed and the unobserved, thus is run under the hypotheses that H_0 : $cov(x_{it}, \lambda_k) = 0$; H_1 : $cov(x_{it}, \lambda_k) \neq 0$, Where x_{it} = regressors, and λ_k =error term.

	Chi ² Stat. (Prob>Chi ²)	Total asset turnover	Dividend payout ratio	Operating Expenses/ Total Assets	Long term debt to assets ratio	Inventory current assets	Earnings yield
G8	Voice &	93.56	133.9	25.48	33.70	46.86	100.66
Countries	Accountability	(0.00)	(0.00)	(0.0199)	(0.0001)	(0.00)	(0.00)
	Political Stability no Violence	105.26 (0.00)	100.47 (0.00)	53.01 (0.00)	23.27 (0.0385)	65.67 (0.00)	77.74 (0.00)
	Government	107.53	122.23	38.24	49.09	59.54	130.05
	Effectiveness	(0.00)	(0.00)	(0.0003)	(0.0000)	(0.00)	(0.00)
	Regulatory	128.4	120.86	56.46	28.24	56.06	155.92
	Quality	(0.00)	(0.00)	(0.00)	(0.0084)	(0.00)	(0.00)
	Rule of Law	95.45 (0.00)	100.56 (0.00)	46.68 (0.00)	24.94 (0.0235)	40.57 (0.0001)	100.56 (0.00)
	Control of	101.6	190.64	44.95	45.01	45.93	133.08
	Corruption	(0.00)	(0.00)	(0.00)	(0.0000)	(0.00)	(0.00)
MENA	Voice &	193.27	213.09	155.18	40.53	141.97	80.38
Countries	Accountability	(0.00)	(0.00)	(0.00)	(0.0001)	(0.00)	(0.0000)
	Political Stability no Violence	1310.45 (0.00)	171.01 (0.00)	188 (0.00)	44.47 (0.00)	39.52 (0.00)	79.98 (0.00)
	Government	99.98	263.49	133.34	47.80	99.80	82.38
	Effectiveness	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	Regulatory	96.93	96.90	277.61	43.32	39.66	77.93
	Quality	(0.00)	(0.00)	(0.00)	(0.00)	(0.0002)	(0.0002)
	Rule of Law	117.17 (0.00)	88.40 (0.00)	144.8 (0.00)	47.62 (0.00)	96.83 (0.00)	89.99 (0.00)
	Control of	118.23	95.58	233.89	45.94	29.57	83.29
	Corruption	(0.00)	(0.00)	(0.00)	(0.00)	(0.0054)	(0.00)

The results reported in table above show that the best model for fitting the data in the six models in G8 and MENA countries is fixed effect model as the p-value associated with the test is less than 5%.

	VIF scores	Total asset turnover	Dividend payout ratio	Operating Expenses/ Total Assets	Long term debt to assets ratio	Inventory current assets	Earnings yield
G8 Countries	Voice & Accountability	2.30	9.54	7.43	0.07	9.40	7.62
	Political Stability no Violence	2.51	3.14	9.90	0.82	2.85	1.65
	Government Effectiveness	4.72	5.75	3.06	6.41	3.00	6.15
	Regulatory Quality	5.97	3.03	1.85	2.09	8.20	1.62
	Rule of Law	0.10	0.21	3.57	3.08	3.48	6.28
	Control of Corruption	7.20	1.96	4.46	2.19	3.53	5.62
MENA countries	Voice & Accountability	4.15	6.47	5.84	9.05	0.28	4.22
	Political Stability no Violence	7.56	9.08	0.91	7.80	2.20	5.31
	Government Effectiveness	8.64	5.99	5.72	9.77	4.01	6.56
	Regulatory Quality	2.28	9.34	4.43	2.66	5.86	8.73
	Rule of Law	0.98	8.80	2.03	9.97	6.08	1.50
	Control of Corruption	9.75	3.04	3.24	4.97	1.95	9.73

(d) Multicollinearity Test: G8 and MENA Countries

(e) Linearity versus Non-Linearity Test: G8 Countries

Ramsey RESET test using powers of the fitted values of corporate financial indicators. The hypotheses are Ho: model has no omitted variables; H1: model has omitted variables. The results for the G8 and MENA countries show that, at 95% confidence interval, the null hypothesis is not rejected which means that the linear model is appropriate

	F stat (Prob. F)	Total asset turnover	Dividend payout ratio	Operating Expenses/ Total Assets	Long term debt to assets ratio	Inventory current assets	Earnings yield
G8 Countries	Voice & Accountability	F(3, 1360) = 2.18 (0.088615)	F(3, 1358) = 1.84 (0.1375)	F(3, 1358) = 1.81 (0.14343)	F(3, 1358) = 1.15 (0.3290)	F(3, 1358) = 1.40 (0.2409)	F(3, 1358) = 1.55 (0.19982)
	Political Stability no Violence	F(3, 1360) = 1.38 (0.247227)	F(3, 1358) = 1.79 (0.147169)	F(3, 1358) = 1.64 (0.178286)	F(3, 1358) = 1.39 (0.2450)	F(3, 1358) = 1.50 (0.2117)	F(3, 1358) = 1.69 (0.16287)
	Government Effectiveness	F(3, 1360) = 2.17 (0.089787)	F(3, 1358) = 2.6 (0.0506)	F(3, 1358) = 1.35 (0.256597)	F(3, 1358) = 2.06 (0.1043)	F(3, 1358) = 1.33 (0.2639)	F(3, 1358) = 1.60 (0.187574)
	Regulatory Quality	F(3, 1529) = 1.50 (0.212806)	F(3, 1358) = 2.04 (0.10639)	F(3, 1529) = 1.22 (0. 301034)	F(3, 1358) = 1.14 (0.3318)	F(3, 1358) = 1.57 (0.1946)	F(3, 1358) = 1.99 (0.113617)
	Rule of Law	F(3, 1360) = 2.19 (0.087457)	F(3, 1358) = 1.53 (0.2053)	F(3, 1358) = 1.95 (0. 119681)	F(3, 1358) = 1.38 (0.2467)	F(3, 1358) = 1.36 (0.2522)	F(3, 1358) = 1.23 (0.297385)
	Control of Corruption	F(3, 1360) = 1.8 (0.145287)	F(3, 1358) = 1.71 (0.163063)	F(3, 1358) = 1.10 (0. 348031)	F(3, 1529) = 0.95 (0.4151)	F(3, 1358) = 1.62 (0.1838)	F(3, 1358) = 1.57 (0.194838)
MENA countries	Voice & Accountability	F(3, 1529) = 2.33 (0.0747)	F(3, 1529) = 2.14 (0.0936)	F(3, 1529) = 1.74 (0.156861)	F(3, 1529) = 1.87 (0.132689)	F(3, 1529) = 1.29 (0.2777)	F(3, 1529) = 1.15 (0.3293)
	Political Stability no Violence	F(3, 1529) = 1.27 (0.28313)	F(3, 1529) = 1.81 (0.14337)	F(3, 1529) = 1.61 (0.18515)	F(3, 1529) = 1.27 (0.10097)	F(3, 1529) = 1.14 (0.3335)	F(3, 1529) = 1.12 (0.39769)
	Government Effectiveness	F(3, 1529) = 1.19 (0.31217)	F(3, 1529) = 1.04 (0.37381)	F(3, 1529) = 1.87 (0.132689)	F(3, 1529) = 1.66 (0.173746)	F(3, 1529) = 1.46 (0.2242)	F(3, 1529) = 1.09 (0.4214)
	Regulatory Quality	F(3, 1529) = 2.24 (0.08183)	F(3, 1529) = 2.04 (0.10639)	F(3, 1529) = 1.91 (0.125993)	F(3, 1529) = 1.70 (0.1651)	F(3, 1529) = 1.37 (0.2493)	F(3, 1529) = 1.22 (0.3893)
	Rule of Law	F(3, 1529) = 1.61 (0.18515)	F(3, 1529) = 1.05 (0.36936)	F(3, 1529) = 1.61 (0.171545)	F(3, 1529) = 1.48 (0.218161)	F(3, 1529) = 1.07 (0.3586)	F(3, 1529) = 1.99 (0.1983)
	Control of Corruption	F(3, 1529) = 1.91 (0.12599)	F(3, 1529) = 12.36 (0.0702)	F(3, 1529) = 1.91 (0.163003)	F(3, 1529) = 1.43 (0.23225)	F(3, 1529) = 1.49 (0.2150)	F(3, 1529) = 1.77 (0.1982)

(f): Heteroskedasticity test: G8 and MENA countries

The results of Breusch-Pagan/Cook-Weisberg test for heteroskedasticity. In the G8 and MENA countries, the null hypothesis is rejected at confidence interval 95%. This means that variances of residuals are not constant, which requires the use the robust estimators.

	Chi ² Stat. (Prob>Chi ²)	Total asset turnover	Dividend payout ratio	Operating Expenses/ Total Assets	Long term debt to assets ratio	Inventory/ current assets	Earnings yield
G8	Voice & Accountability	chi2(1) = 44.46 (0.0000)	chi2(1) = 462.8 (0.0000)	chi2(1) = 622.73 (0.0000)	chi2(1) = 104.12 (0.0000)	chi2(1) = 109.81 (0.0000)	chi2(1) = 1916.93 (0.0000)
	Political Stability no Violence	chi2(1) = 45.56 (0.0000)	chi2(1) = 435.39 (0.0000)	chi2(1) = 672.9 (0.0000)	chi2(1) = 104.46 (0.0000)	chi2(1) = 107.72 (0.0000)	chi2(1) = 2330.87 (0.0000)
	Government Effectiveness	chi2(1) = 51.29 (0.0000)	chi2(1) = 610.85 (0.0000)	chi2(1) = 654.12 (0.0000)	chi2(1) = 112.62 (0.0000)	chi2(1) = 105.12 (0.0000)	chi2(1) = 2257.45 (0.0000)
	Regulatory Quality	chi2(1) = 47.31 (0.0000)	chi2(1) = 468.73 (0.0000)	chi2(1) = 690.7 (0.0000)	chi2(1) = 125.02 (0.0000)	chi2(1) = 109.14 (0.0000)	chi2(1) = 3573.68 (0.0000)
	Rule of Law	chi2(1) = 43.41 (0.0000)	chi2(1) = 485.41 (0.0000)	chi2(1) = 636.55 (0.0000)	chi2(1) = 110.00 (0.0000)	chi2(1) = 109.52 (0.0000)	chi2(1) = 1927.20 (0.0000)
	Control of Corruption	chi2(1) = 43.43 (0.0000)	chi2(1) = 585.54 (0.0000)	chi2(1) = 630.38 (0.0000)	chi2(1) =123.83 (0.0000)	chi2(1) = 107.20 (0.0000)	chi2(1) = 2074.20 (0.0000)
MENA	Voice & Accountability	chi2(1) = 1308.10 (0.0000)	chi2(1) = 2043.03 (0.0000)	chi2(1) = 2531.39 (0.0000)	chi2(1) = 5203.70 (0.0000)	chi2(1) = 7.58 (0.0059)	chi2(1) = 11618.07 (0.0000)
	Political Stability no Violence	chi2(1) = 1437.98 (0.0000)	chi2(1) = 2353.68 (0.0000)	chi2(1) = 2387.65 (0.0000)	chi2(1) = 5431.92 (0.0000)	chi2(1) = 7.76 (0.0053)	chi2(1) = 11676.56 (0.0000)
	Government Effectiveness	chi2(1) = 1608.91 (0.0000)	chi2(1) = 2340.97 (0.0000)	chi2(1) = 2163.11 (0.0000)	chi2(1) = 5868.29 (0.0000)	chi2(1) = 10.76 (0.0010)	chi2(1) = 12677.67 (0.0010)
	Regulatory Quality	chi2(1) = 1398.88 (0.0000)	chi2(1) = 2160.34 (0.0000)	chi2(1) = 2497.33 (0.0000)	chi2(1) = 5335.33 (0.0000)	chi2(1) = 6.95 (0.0084)	chi2(1) = 11477.54 (0.0084)
	Rule of Law	chi2(1) = 1441.13 (0.0000)	chi2(1) = 2283.98 (0.0000)	chi2(1) = 2137.09 (0.0000)	chi2(1) = 5355.51 (0.0000)	chi2(1) = 10.68 (0.0011)	chi2(1) = 12258.03 (0.0011)
	Control of Corruption	chi2(1) = 1569.92 (0.0000)	chi2(1) = 2121.43 (0.0000)	chi2(1) = 2119.15 (0.0000)	chi2(1) = 5442.84 (0.0000)	chi2(1) = 8.13 (0.0044)	chi2(1) = 13208.05 (0.0044)