Adv Syst Sci Appl 2024; **03**; 11-30
Published online at https://ijassa.ipu.ru.

Does Political Instability Affect Business Efficiency of Russian Firms?

Han-Sol Lee[1], Aleksei Kurbatskii[2*], Nikita Artamonov[3]

[1]*Patrice Lumumba RUDN University, Moscow, Russia*

[2]*Lomonosov Moscow State University, Moscow, Russia*

[3]*MGIMO University, Moscow Russia*

Abstract. This study delves into the impact of political instability on the business efficiency (proxied by growth rate of ROA) of 3,706 Russian firms for the period 2019-2022. The aim of the study is to reveal the impact of governance quality on the managerial efficiency of Russian companies during recent years with a particular concern of the on-going political instability: the Russia-Ukraine conflict. The results from the binary probit regression analysis allow us to substantiate that the probability of ROA growth and governance quality are inversely related in the recent years. However, when the governance indicators are interacted with the year dummy 2022, its effect becomes positive on the probability of growth of ROA. This implies that due to the ongoing Russia-Ukraine conflict the improved governance quality starts to exert impacts on the business efficiency of Russian firms. The overall impact of governance indicators is stronger for SMEs than for large companies in Russia, indicating that large companies have better capacity to withstand external shocks and instabilities than SMEs.

Key words: Political economy, governance, micro-data analysis, Russia, Russia-Ukraine conflict

1. INTRODUCTION

In recent years, the world has become more turbulent in many ways, and Russia holds one of the central places in the ongoing geopolitical and economic processes. Some researchers believe that Russia has suffered significant damage due to the severe sanctions, brain drain, and withdrawal of companies from the Russian market [6]. Conclusions about the significant impact of sanctions on GDP were made during the period of the first sanctions after March 2014 in the works [21, 47]. Another camp of economists believes that despite certain limitations Russia has the opportunity to once again become the leader of the global economic system [11, 28]. Regardless of these polar points of view, the issue of effective governance is more acute than ever for the country's leadership and business [34, 46].

Do not forget that Russia in the 20th century was repeatedly the epicenter of political instability (participation in two world wars, the revolution, the collapse of the USSR). At the same time, extraordinary measures were often required to stabilize the situation, and the economy often had a mobilizational character [33]. The current political situation in Russia and the world is fundamentally different from previous turbulent periods, which gives additional relevance to the study on assessing the impact of public administration on economic indicators. This study will analyse microdata of Russian companies, thus, an attempt will be

* Corresponding author: akurbatskiy@gmail.com

made to reflect the influence of management factors in unstable political and economic situations on Russian business (proxied by growth rate of ROA).

It should be noted that the current unstable situations in the economy and political life of countries do not entail the consequences that could have been expected 20-30 years ago. This is largely due to digitalization, which has entered all spheres of life [7]. Even with such a vivid phenomenon as brain drain during periods of instability in the country, we now cannot draw the unambiguous conclusions that were obvious to most studies in the 20th century [10].

The current situation in Russia's economy and politics was preceded by several, though not so comprehensive, crisis periods. The work [44] is devoted to the analysis of factors determining the efficiency of enterprises in countries with unstable economies using the example of the Russian manufacturing industry for the period 2012-2016. We note one of the authors' conclusions that an increase in interest rates can have a negative effect on the profitability of companies, and in Russia they are currently at a high level. For enterprises from various industries, the multidirectional effects of various variables, in particular, internal financial factors, are highlighted. An analysis of the activities of companies in three industries during the turbulent period of 2013-2017 in Russia showed that an aggressive strategy has a positive effect on efficiency. It also surpasses the conservative one during the crisis [5]. This indirectly indicates that external public administration, if it is not very strict, may not play a primary role in the performance of firms.

Many studies have been devoted to the effectiveness of government policy to support enterprises during the Covid19 pandemic, as well as various aspects of improving economic policy in crisis and post-crisis periods [40, 50]. The paper [20] discusses the features of a turbulent business environment and examines various effective strategies that companies can use to adapt to the new realities that occurred during and after the Covid19 pandemic. Our research fully covers these periods and additionally includes the challenging year 2022. The purpose of this study is to reveal the impact of governance quality on the managerial efficiency of Russian firms during the post-Covid19 periods with special concern for the ongoing Russia-Ukraine conflict. Although, multiple papers delve into the significant role of governance in Russia [15, 27, 37, 48], the changing role of governance under this ongoing political instability has not yet been investigated.

Remaining sections of the paper is composed of as follows. In Section 2, previous studies will be studied and hypotheses will be developed. Section 3 presents data and methodology. Section 4 describes regression results. Section 5 compares our results with the previous studies and provides policy implications. Section 6 concludes the study.

2. LITERATURE REVIEW

2.1. The Impact of the Governance on the Economy

Governance measures how well the government creates and enforces regulations, as w ell as provides services and is concerned with agents' achievements in conducting the objectives of principals, rather than the aims set by leaders [19]. However, as Rothste in [42] has pointed out, strictly separating governance from the executive capabilities from the normative goals that government is intended to serve is rather difficult. But, at the same time, he criticizes the World Governance Indicators (WGI) for containing an excessive number of criteria that reflect normative policy preferences. Even that, WGI is the most widely adopted as a proxy to the governance quality in empirical st udies due to its comprehensiveness, large coverage of countries and periods and reliab ilities of sources. However, as pointed out by Rothstein [42] and Fukuyama [19], the

high scores in WGI do not fully guarantee that the government showed a better performance in the aspect of outcomes but rather mostly do that it follows well the standards that are commonly considered good, when to interpret the regression results, it should be taken into account.

As can be expected, the significance of the good governance and its positive impact on the economy were empirically demonstrated in a plethora of studies [8, 12, 14, 17, 22, 24, 32]. The results of these studies support the importance of implementing good governance policies, such as citizen participation, transparency, systemized regulatory bodies and law, fight against corruption and so forth, to promote sustainable economic growth. Some studies demonstrate the significance of a specific factor of the good governance. For instance, [41] demonstrated that stronger democratic institutions influence governance by limiting the actions of corrupt officials and thereby democracy is a significant determinant of growth, but only to the extent that it is associated with better governance. [9] revealed that corruption has a significant negative impact on gross domestic product (GDP) per capita.

However, interestingly, some heterogeneities are found in previous researches. The study by [23] examined the relationship between governance and economic growth in twelve Asian countries classified as "free", "partly free" and "non-free" according to a country's level of democracy. The paper found that, overall, various aspects of good governance led to more significant economic growth in "non-free" countries compared to "free" and "partly free" countries. In particular, [2] demonstrated that although the relationship between the good governance and economic growth relationship are positive, but its significance varies depending on the level of development of each country during the crisis-period: its significance is strongly shown in highly developed nations but not in medium and less developed nations.

On the other hand, some studies demonstrated that the bad governance can serve as a chance to gain benefits. [18] revealed that transnational companies (with own strategic resources and competencies) in the Nigerian oil industry sometimes even benefit from political risk. [36] demonstrated that political stability and regulatory quality boost economic growth, while government effectiveness negatively influences on it and the role of anti-corruption in it is ambiguous. [49] revealed that solid regulatory control and political stability have a positive association with the economic growth but its significance depends on the income level of the country. While, the study added that in some cases corruption can play a positive role because it bypasses ineffective rules and bureaucratic bottlenecks. In a study of [1], it is turned out that political instability has a negative impact on economic growth as hypothesized, while, unlike the general notion, democracy also can have a negative effect on economic growth.

In addition, there are very limited studies in this type of topic, which is dedicated to the Russian economy. [25] empirically measured the relation between efficient public administration and the Russian economic growth. The study revealed that the association between regional governance system performance indicators and socioeconomic territorial growth is absent, while higher maintenance expenditures of the local executive authorities (e.g., the wage of civil servants, the number of civil servants, etc.) can exert significant effects on the socioeconomic growth in Russia. [31] revealed a non-linear relationship between the democracy and economic growth of Russian regions: regions with either high or low democracy outperform those with intermediate. On the other hand, the topic of governance in Russia has been extensively studied [15, 27, 37, 48], but few papers have directly measured its impact on the economy like the two aforementioned.

From the review of previous studies several research gaps were identified. First of all, considering the significance of geo-political factors in Russia, some papers have addressed the governance issue but it is rare to find studies that measure its effects on the economy. Secondly, most studies investigated the macro-economic impact, although it is interesting and worthwhile

to see its effects at the micro-level. Thirdly, in spite of the fact that the impact of the quality governance on the economy can vary depending on the geopolitical stability, most of previous studies have not considered such potential heterogeneity. To elaborate on this point, suppose that the impact of the governance quality on the economy turned out to be insignificant when there is no geopolitical conflict. However, during the era when the external instability is sharply enhanced due to factors such as global conflicts, economic crisis, and others, the systematic governance can be highly important and relieve the negative effects from the external instability on the economy. Our study will provide new insights in the following two strands:

(1) To empirically prove the impact of the governance factors on the business efficiency of the Russian firms by employing the micro-level data;

(2) To estimate the heterogeneity depending on the political instability.

2.2. Hypothesis Development

Based on the above literature review, research hypotheses can be formulated. First of all, the relationship between the quality of governance and economic (profit) growth of the country (firms) is rather vague. Companies can maximize profits under well-established governance and low-risk environments. However, in some cases, they may utilize the lenient governmental systems and consider it as an additional business opportunity for existing companies. To elaborate on this point, entrepreneurship is suppressed under the poor governance due to a high risk of opening a business and which will reduce the market entry of new firms and competitions as well accordingly. Thereby, it is difficult to say that a quality governance always leads to better firms' performance. Meanwhile, the drawbacks from the government systems can be beneficial to existing companies in some cases. If the former effects are larger, then the relationship between the two will be positive, while if the latter effects are larger, then it will be negative.

Hypothesis 1 (H1): The impact of governance quality on business efficiency (proxied by the probability of ROA growth) of Russian firms is uncertain.

However, during the period that the social instabilities are sharply enhanced due to international political (e.g., war, conflict, etc.) or economic (e.g., financial crisis, inflation, currency depreciation, etc.) issues, the risk of conducting business increases remarkably for existing companies because the nation's consumer confidence can be weakened and the household's purchasing power can be reduced due to related financial policies such as interest rate, inflation rate, exchange rate, and so forth. During such unstable era, there is low motivations of the market entry of new firms (especially foreign firms) regardless of the governance quality but the consumptions for existing firms may decrease. In this case, the risk may be way larger than the benefits that firms can enjoy from the lenient governmental systems and firms may prefer more stable governmental environments than before because it can lead to the promotion of the nation's consumer confidence. Thereby, we can conjecture that:

Hypothesis 2 (H2): The interaction term between the governance quality indicators and the year 2022 variable is positively correlated with business efficiency (proxied by the probability of ROA growth) of Russian firms.

3. DATA AND METHODOLOGY

For our study, binary probit model is adopted. The dependent variable is either 1 or 0. The calculation for the probability of Y=1 can be made as follows:

$$Prob(Y = 1|x) = \Phi(x^{\top}\beta) \quad (1)$$

Here x is a vector of independent variables, while β is a a vector of coefficients. Φ is a distribution function of standard gaussian distribution. In the same way, the probability of y=1

can be rendered as follows [29]:

$$Prob(Y = 0|x) = 1 - \Phi(x^{\top}\beta) \quad (2)$$

The probit model of our study is follows:

$$Prob\left(Grw_{ROA_{it}}\right) = \Phi(\beta_0 + \beta_i Governance_t + \beta_2 Governance * 2022_t + \beta_3 Control_{it}) \quad (3)$$

The description of variables and its sources are presented in Table 1. In the baseline model,

$$Grw\_ROA_{it} = \begin{cases} 1, & if\ growth\ rate\ of\ ROA\ > 0 \\ 0, & if\ growth\ rate\ of\ ROA\ \leq\ 0 \end{cases}$$

while, in the model for the robustness checks, an alternative threshold is used as follows:

$$Grw\_ROA_{it} = \begin{cases} 1, & if\ growth\ rate\ of\ ROA\ \geq 0.5 \\ 0, & if\ growth\ rate\ of\ ROA\ <\ 0.5 \end{cases}$$

The key variable is:

$$Governance_t \in \{VA, PA, GE, RQ, RL, CC, Cluster1, Cluster2, Cluster3, All\}.$$

$Governance * 2022_t$ is an interaction term between governance indicators and the year 2022 to see the effect of the Russo-Ukrainian conflict. Due to multicollinearity, it is not advisable to include six governance variables in one model. In general, there are three ways to build a model using WGI datasets. First, consider one variable at a time and create 6 models [17, 23]. Second, create 3 clusters of variables [3, 4] and generate 3 models. To simply use the average value of six indicators and make 1 model [4, 16, 30]. In our study, all three approaches are adopted.

Control variables are as follows: $Control_{it} \in \{Grw\_expense, Ln(age)\}$. For the robustness checks, models with alternative control variables (which are *Grw_GDP, openness, Ln(BoP)*, and *FDI_ratio*) as well as a logit estimator are also constructed. In addition, the issue of heterogeneity depending on the company size is explored.

Table 1. Variable Definitions and Data Sources

Notation	Definition	Source
i	Companies in Russia	SPARK
t	Year (2019-2022)	SPARK
Grw_ROA_{it}	Growth rate of ROA of company i in year t, binary dependent variable (1 or 0)	SPARK
VA_t	Voice and Accountability (VA) of Russia in year t in the interval [-2.5, +2.5]	The world governance indicators (WGI)
PA_t	Political Stability and Absence of Violence/Terrorism (PA) of Russia in year t in the interval [-2.5, +2.5]	WGI
GE_t	Government Effectiveness (GE) of Russia in year t in the interval [-2.5, +2.5]	WGI
RQ_t	Regulatory Quality (RQ) of Russia in year t in the interval [-2.5, +2.5]	WGI
RL_t	Rule of Law (RL) of Russia in year t in the interval [-2.5, +2.5]	WGI
CC_t	Control of Corruption (CC) of Russia in year t in the interval [-2.5, +2.5]	WGI
$Cluster1_t$	The average of VA and PA of Russia in year t in the interval [-2.5, +2.5]	WGI
$Cluster2_t$	The average of GE and RQ of Russia in year t in the interval [-2.5, +2.5]	WGI
$Cluster3_t$	The average RL and CC in the interval [-2.5, +2.5]	WGI

All_t	The average VA, PA, GE, RQ, RL and CC of Russia in year t in the interval [-2.5, +2.5]	WGI
2022_t	Year dummy (2022=1, otherwise 0)	-
$Grw\_expense_{it}$	The growth rate of the sum of the commercial and management expenses of company i in year t	SPARK
$Ln(age)_{it}$	The age of company i in year t	SPARK
Grw_GDP_t	The GDP growth rate of Russia in year t	The world development indicators (WDI)
$Openness_t$	Trade openness of Russia in year t	WDI
$Ln(BoP)_t$	Balance of payment in trade of Russia in year t	WDI
FDI_ratio_t	FDI inflows/GDP ratio of Russia in year t	WDI
ϵ_{it}	Error term	-

Note: Before calculating ROA and expenses in a growth term, the current values in rubles are converted to constant values in ruble by applying the GDP deflator of Russia (base year=2016) from the World Development Indicators (WDI).

Figure 1 illustrates the dynamics of governance quality in Russia for the period 2018-2022. In 2019, the average of governance indicators was the highest because 4 out of 6 indicators increased. Particularly, Government Effectiveness (GE) was above than the 0 in this year. However, due to the Russia-Ukraine conflict since the early 2022, all the governance indicators decreased from 2021 to 2022 to the level below than before. Especially, the downward slope of Regulatory Quality (RQ) was the steepest, while Control of Corruption (CC) showed the most minimal decreases.

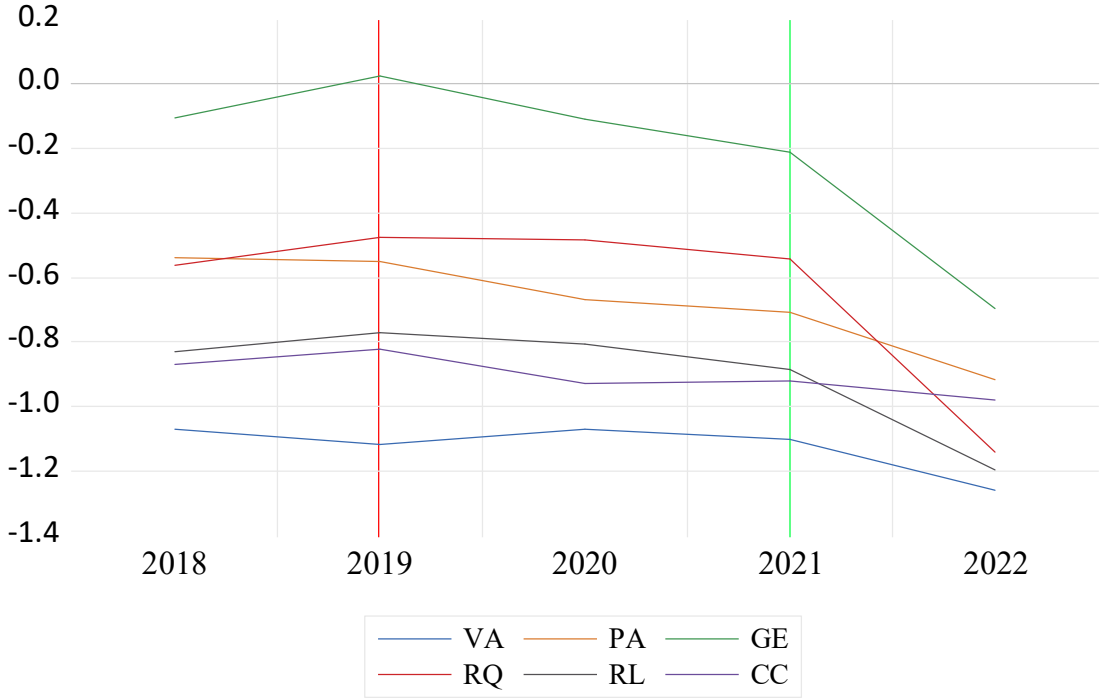

Figure 1. The world governance indicators in Russia

Figure 2 depicts the mean of ROA dynamics of Russian companies for the period 2018-2022. In 2019, the mean of ROA hit the bottom and its patterns are retrieved as it had continuously increased till 2021. In 2022, its ROA increased while the slope of the rising curve became flatter. This pattern is commonly shown without the heterogeneity in the firm size. Throughout the study period, the mean of ROA was higher in SMEs than large companies. Although the slope of the rising curve of ROA became flatter both in large and SMEs, the

degree of flatness is more severe in SMEs. It seems that the Russia-Ukraine conflict somewhat applied the brakes of the rising tendencies of ROA, and influences much strongly on SMEs than large companies.

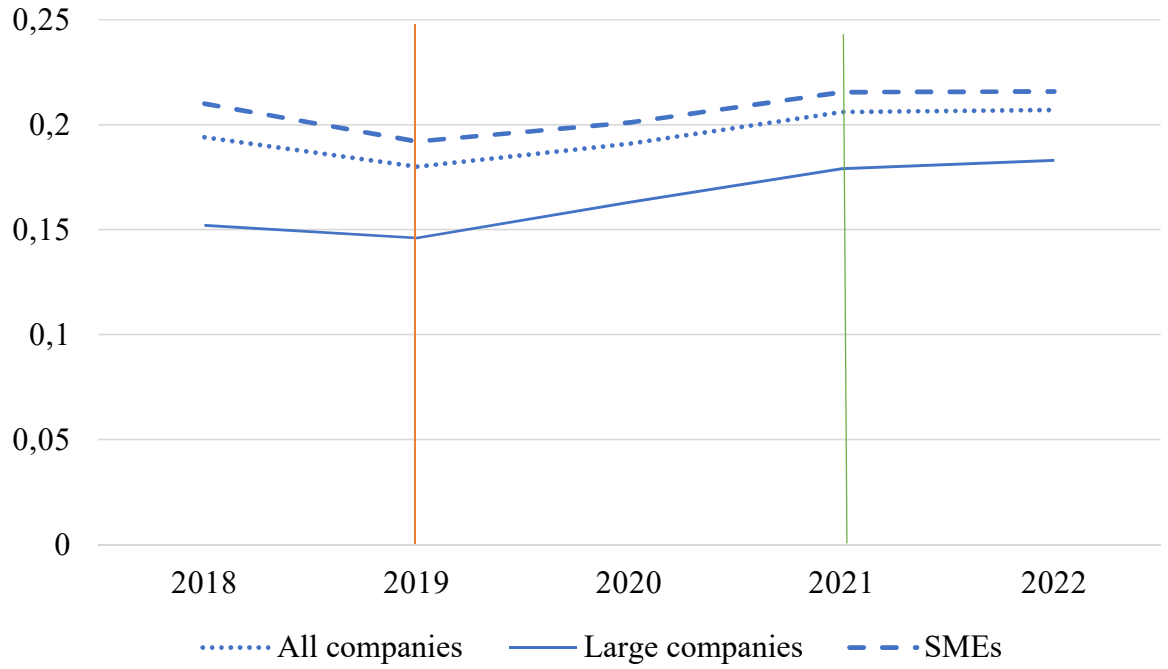

Figure 2. The mean of ROA of companies in Russia

4. RESULTS

Table 2 presents the results of the baseline regressions. VA is positively correlated with the probability of the growth of ROA at the 1% significant level. However, when interacted with the year 2022 dummy variable, its coefficient becomes negative. It implies that during the recent years citizens freedom in politics, expressions, media, and so forth enhances the probability of firms' business efficiency but its positive impact turns negative when interacted with the year 2022. To take into account the factor of political instability in 2022, to restrict the voices of citizens to a certain level is beneficial to firms' efficient business management.

On the other hand, it is revealed that PA, GE, RQ, RL and CC are negatively associated with the probability of the growth of ROA at the 1% significant level. However, when it is interacted with the year 2022 dummy variable, its coefficient becomes positive. It is likely that during the recent years, Russian firms take advantages even from the vulnerability of society and systems, such as political conflict/violence, inferiority of public service, inability of government's policy implementation and vulnerability of law and corruption, to increase the efficiency of their business. However, as the political instability and uncertainty becomes deepened, a situation and status of firms has changed, and as a result, having a bit more stable and quality governance than before leads to increase in the probability of firms' business efficiency. The same results are shown in clustered variables (i.e., Cluster 1, Cluster2, Cluster3, and All). To interpret the results intuitively, Eq.(4) is rendered as follows from the Table 2:

$$Prob(Grw_{ROA}) = \Phi\left(-1.64 - 2.13 \cdot All + 0.76 \cdot (All \cdot 2022) + 0.02 \cdot Grw_{expense} + 0.09 \cdot Ln(age)\right) \quad (4)$$

At here, the coefficient of the interaction term of governance and the year 2022 (All*2022)

is positive, while its absolute value $|+0.76|$ is less than the absolute value of the coefficient of the governance indicator (All) $|-2.13|$. It indicates that the negative correlation between governance indicators and the probability of ROA growth is reduced during the year 2022, while its correlation still remains negative.

The results are consistent in models with a different threshold of ROA, logit estimator, and alternative control variables [See Table A1, A2 and A3][1].

To check the heterogeneity, observations are divided by company size. Table 3 represents regression results of large companies, while Table 4 depicts that of SMEs. The results are following that of the baseline regressions in general. However, there are points that require o give a special attention. First of all, RQ and RQ*2022 turned out to be insignificant for large companies. Second, the absolute value of the coefficient is larger in SMEs than large companies. This implies that SMEs are much influenced by external governance factors than large companies. It seems that large companies have better capacities to mitigate external shocks and instabilities than SMEs through their internal systems and these systems acts as a cushion against shocks, while SMEs absorb shocks more completely without a shock-resistant mediator.

[1] Models for robustness checks are presented in Appendix.

Table 2. Baseline regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	5.22***	-1.23***	-0.31***	-1.18***	-1.49***	-2.26***	-2.99***	-0.65***	-2.18***	-1.64***
	(0.70)	(0.12)	(0.05)	(0.21)	(0.21)	(0.22)	(0.36)	(0.07)	(0.23)	(0.18)
VA	4.97***									
	(0.64)									
*VA*2022*	-0.62***									
	(0.09)									
PA		-1.59***								
		(0.18)								
*PA*2022*		0.51***								
		(0.06)								
GE			-1.01***							
			(0.12)							
*GE*2022*			0.90***							
			(0.11)							
RQ				-1.91***						
				(0.41)						
*RQ*2022*				1.10***						
				(0.23)						
RL					-1.55***					
					(0.25)					
*RL*2022*					0.51***					
					(0.08)					
CC						-2.30***				
						(0.25)				
*CC*2022*						0.24***				
						(0.03)				
Cluster1							-3.20***			
							(0.42)			
*Cluster1*2022*							0.67***			
							(0.09)			
Cluster2								-1.46***		
								(0.20)		
*Cluster2*2022*								1.01***		
								(0.13)		
Cluster3									-2.31***	
									(0.27)	
*Cluster3*2022*									0.52***	
									(0.06)	
All										-2.13***
										(0.27)
*All*2022*										0.76***
										(0.10)
Grw_expense	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ln(age)	0.10***	0.09***	0.09***	0.10***	0.10***	0.09***	0.09***	0.09***	0.09***	0.09***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
McFadden R-squared	$5x10^{-3}$	$6x10^{-3}$	$5x10^{-3}$	$3x10^{-3}$	$4x10^{-3}$	$6x10^{-3}$	$5x10^{-3}$	$5x10^{-3}$	$6x10^{-3}$	$5x10^{-3}$
N	14824	14824	14824	14824	14824	14824	14824	14824	14824	14824

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, ***: p<0.01)

Table 3. Heterogeneity checks: The impact of governance indicators on ROA of large companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	6.14***	-0.93***	-0.08***	-0.65	-0.99**	-2.02***	-2.39***	-0.36**	-1.78***	-1.24***
	(1.37)	(0.24)	(0.11)	(0.40)	(0.40)	(0.43)	(0.70)	(0.15)	(0.45)	(0.36)
VA	5.60***									
	(1.24)									
*VA*2022*	-0.75***									
	(0.17)									
PA		-1.47***								
		(0.35)								
*PA*2022*		0.42***								
		(0.12)								
GE			-0.89***							
			(0.24)							
*GE*2022*			0.73***							
			(0.22)							
RQ				-1.27						
				(0.79)						
*RQ*2022*				0.69						
				(0.45)						
RL					-1.20**					
					(0.49)					
*RL*2022*					0.36**					
					(0.16)					
CC						-2.29***				
						(0.48)				
*CC*2022*						0.18***				
						(0.06)				
Cluster1							-2.76***			
							(0.81)			
*Cluster1*2022*							0.54***			
							(0.17)			
Cluster2								-1.24***		
								(0.38)		
*Cluster2*2022*								0.81***		
								(0.26)		
Cluster3									-2.10***	
									(0.53)	
*Cluster3*2022*									0.43***	
									(0.12)	
All										-1.86***
										(0.52)
*All*2022*										0.62***
										(0.19)
Grw_expense	$-7x10^{4}$	$-9x10^{5}$	$-4x10^{4}$	$-1x10^{3}$	$-1x10^{3}$	$1x10^{43}$	$-5x10^{4}$	$-6x10^{4}$	$-2x10^{4}$	$-4x10^{4}$
	(0.01)	(0.01)	0.01	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ln(age)	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
N	3916	3916	3916	3916	3916	3916	3916	3916	3916	3916

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, ***: p<0.01)

Table 4. Heterogeneity checks: The impact of governance indicators on ROA of SMEs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	5.06***	-1.41***	-0.42***	-1.45***	-1.76***	-2.47***	-3.39***	-0.80***	-2.46***	-1.89***
	(0.82)	(0.14)	(0.06)	(0.24)	(0.24)	(0.26)	(0.43)	(0.09)	(0.27)	(0.22)
VA	4.92***									
	(0.75)									
*VA*2022*	-0.61***									
	(0.10)									
PA		-1.72***								
		(0.21)								
*PA*2022*		0.56***								
		(0.07)								
GE			-1.10***							
			(0.15)							
*GE*2022*			1.01***							
			(0.13)							
RQ				-2.25***						
				(0.48)						
*RQ*2022*				1.30***						
				(0.27)						
RL					-1.76***					
					(0.29)					
*RL*2022*					0.59***					
					(0.09)					
CC						-2.42***				
						(0.29)				
*CC*2022*						0.26***				
						(0.04)				
Cluster1							-3.54***			
							(0.49)			
*Cluster1*2022*							0.76***			
							(0.10)			
Cluster2								-1.62***		
								(0.23)		
*Cluster2*2022*								1.13***		
								(0.16)		
Cluster3									-2.51***	
									(0.32)	
*Cluster3*2022*									0.57***	
									(0.07)	
All										-2.34***
										(0.32)
*All*2022*										0.85***
										(0.11)
Grw_expense	0.08***	0.09***	0.09***	0.08***	0.08***	0.09***	0.09***	0.09***	0.09***	0.09***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Ln(age)	0.14***	0.13***	0.13***	0.13***	0.13***	0.13***	0.13***	0.13***	0.13***	0.13***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
N	10908	10908	10908	10908	10908	10908	10908	10908	10908	10908

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, ***: p<0.01)

5. DISCUSSION

From the regression results, two main findings are rendered. First of all, the relationship between the quality of governance and the probability of ROA growth in Russia is negative. This implies that companies were more likely to experience ROA growth during the period when WGI scores for Russia are low. These results are contradicting previous studies like [8, 12, 14, 17, 22, 24, 32]. However, some previous studies support the idea that lenient governance can act as an opportunity to obtain benefits the other way around [18, 49]. One possible explanation of the results is that business in Russia were prepared to a certain extent.

It is worth noting that the first international sanctions on Russian business were introduced back in 2014 [13], when the Russia-Ukraine conflict actually began. It was then that import substitution tasks were set in many industries, and counter-sanctions were adopted [43]. Also in 2018, after the election of the President of Russia, national projects were announced, one of which is called "small and medium-sized entrepreneurship and support for individual entrepreneurial initiative." The government is well aware of the priority tasks facing the country, but their implementation will require the development of appropriate institutions. In fact, in our opinion, institutions of catch-up development are needed to build coordination between the government and business in Russia [38].

Companies, and not only Russian ones, will have to adapt to the current situation and the consequences of the Russia-Ukraine conflict. At the same time, it is not so much the date of the end of hostilities that is unpredictable and extremely important for business, but how world trade will be change and what restrictions will be lifted from Russia [39]. The results of the work [35] provide an interesting look at the capabilities of firms during external shocks. It is noted that new firms can find themselves in favourable conditions due to arbitration opportunities, and existing firms are better able to focus on innovation. Apparently, the activity and adaptability of business in Russia makes it possible to avoid serious shocks in the economy, which were assumed by the West when introducing various kinds of restrictions.

It is impossible not to note that the results are based on WGI indicators, the limits of applicability of which [45], especially for Russia, may be considerably worse than desired. It is worth paying attention to the fact is that as criticized by [42] and [19], the composition of WGI indicators is largely dependent on whether a nation adheres well to the normative values of good governance rather than whether a nation achieves outcomes effectively. This implies that there is a chance that when Russia did not follow the norms of governance which is perceived good in general, adversely, the real efficiency and outcomes of governmental administrations were improved.

In addition, as hypothesized, the interaction term between governance and the year 2022 variable turned out to be positive. It implies that during the politically unstable period, firms performed better under the improved governance quality. The year 2022 moderated the negative effect of the governance quality on the probability of ROA growth. As explained previously in the hypothesis development, during the politically unstable period, the good governance may enhance the consumer confidence, while firms are reluctant to enter in the market due to excessively high risks. During the politically stable period, bad governance can play a chance for existing companies as it prevents the entry of new companies. However, during the politically crisis period, the firms' motivation of entry in the market is reduced already regardless of the quality of governance. At this point, the quality of governance becomes a factor in determining consumer confidence. Although, the overall effects of governance quality in the year 2022 on the Russian firms were negative, if its time spans are enlarged, it can turn into be positive even. One thing that we need to focus on is that the on-going Russia-Ukraine conflict made foreign companies highly careful when to enter in or return

back to the Russian market. Thereby, we can expect that the future competition in the market will be reduced even when the conflictual situation ends. In this sense, we can somehow expect that the overall effect of governance quality can turn into positive in Russia in the long-term as it will enhance the consumer confidence and increase efficiency of the market. However, our conclusions cannot be considered exceptional, discussions on similar issues have been ongoing on for quite a long time [26]. In our opinion, only the course of further events and the availability of necessary new data will allow us to see how long-term the identified trends are.

6. CONCLUSION

This study explores the impact of governance quality and political instability on the b usiness efficiency of Russian companies. Probit models are constructed based on panel data of 3,706 Russian firms for the period 2019-2022. The aim of the study is to rev eal the impact of governance quality on the managerial efficiency of Russian compani es during the recent years with a particular concern of the on-going political instabilit y: the Russia-Ukraine conflict. The results from the binary probit regression analysis a llow us to substantiate that the probability of ROA growth and governance quality are inversely related in recent years. However, when the governance indicators are interact ed with the 2022 dummy variable, its effect becomes positive on the probability of R OA growth. This implies that during the recent years, Russian firms have taken advantages from the vulnerability of society and systems, such as political conflict/violence, inferiority of public service, inability of government's policy formulation/implementation and vulnerability of law and corruption, to increase the efficiency of their business. However, as the political instability and uncertainty becomes deepened, a situation and status of firms has changed, and as a result, having an improved governance leads to increase in the probability of firms' business efficiency. The overall impact of governance indicators is stronger for SMEs than larges companies in Russia and it shows that large companies have better capacities to relieve external shocks and instabilities than SMEs.

As pointed out previously, WGI indicators are normative and may not fully describe the quality of governance in some countries. Thus, we can conjecture that there is a chance that when Russia did not adhere to the norms of governance which is perceived good in general (thus, marked low in the WGI), the efficiency and outcomes of governmental administrations may have improved. On the other hand, it could also be true that some companies obtain more business chances under the weak governmental system. Thus, the interpretation of the negative relationship between the ROA growth probability and governance quality leaves larges rooms for interpretations and discussions.

While, during the politically unstable period, the good governance may enhance the consumer confidence, while firms are loath to enter in the market due to excessively high risks. During the politically unstable period, the firms' motivation of entry in the market is reduced already regardless of the quality of governance. At this point, the quality of governance is a factor only to determine the consumer confidence not a market competition. Thus, we can cautiously conjecture that although, the overall effects of governance quality in 2022 on Russian firms were negative, if its time span is extended, it can turn into be positive even considering the expected reductions in future foreign direct investments and following low competitions at the Russian market. However, our conclusions cannot be considered exceptional, and only the course of further events and the availability of new necessary data will allow us to determine how long-term the identified trends are.

REFERENCES

1. Aisen, A., & Veiga, F. J. (2013). How does political instability affect economic growth? *European Journal of Political Economy*, **29**, 151–167. doi: 10.1016/j.ejpoleco.2012.11.001

2. AlBassam, B. A. (2013). The relationship between governance and economic growth during times of crisis, *European Journal of sustainable development*, **2**(2), 1–1. doi: 10.14207/ejsd.2013.v2n2p1

3. Al-Marhubi, F. (2004). The determinants of governance: A cross-country analysis. *Contemporary Economic Policy,* **22**(3), 394–406. doi: 10.1093/cep/byh029

4. Al-Marhubi, F. A. (2005). Openness and governance: Evidence across countries. *Oxford Development Studies,* **33**(3–4), 453–471. doi: 10.1080/13600810500199269

5. Anokhin, S. A., Spitsin, V., Akerman, E., & Morgan, T. (2021). Technological leadership and firm performance in Russian industries during crisis, *Journal of Business Venturing Insights*, **15**, e00223. doi: 10.1016/j.jbvi.2021.e00223

6. Åslund, A., & Snegovaya, M. (2022). *Impact of Western Sanctions on Russia and how They Can be Made Even More Effective*, [Online]. Available: https://www.atlanticcouncil.org/in-depth-research-reports/report/the-impact-of-western-sanctions-on-russia/

7. Autio E., Mudambi, R., & Yoo, Y. (2021). Digitalization and globalization in a turbulent world: Centrifugal and centripetal forces, *Global Strategy Journal*, **11**, 3–16. doi: 10.1002/gsj.1396

8. Azam, M. (2022). Governance and economic growth: evidence from 14 Latin America and Caribbean countries, *Journal of the Knowledge Economy,* **13**(2), 1470–1495, doi: 10.1007/s13132-021-00781-2

9. Azam, M., & Emirullah, C. (2014). The role of governance in economic development: Evidence from some selected countries in Asia and the Pacific, *International Journal of Social Economics,* **41**(12), 1265–1278. doi: 10.1108/IJSE-11-2013-0262

10. Bakalova, I., Fidrmuc, J., Berlinschi, R., & Dzjuba, Y. (2021). COVID-19, working from home and the potential reverse brain drain, [Online]. Available: https://ssrn.com/abstract=3862238

11. Balatsky, E. V. (2022). Russia in the epicenter of geopolitical turbulence: Signs of eventual domination, *Economic and Social Changes: Facts, Trends, Forecast,* **15**(5), 33–54. doi: 10.15838/esc.2022.5.83.2

12. Bayar, Y. (2016). Public governance and economic growth in the transitional economies of the European Union, *Transylvanian Review of Administrative Sciences*, **12**(48), 5–18.

13. Belozyorov, S. A. & Sokolovska, O. (2020). Economic Sanctions against Russia: Assessing the Policies to Overcome their Impact, *Ekonomika regiona [Economy of region],* **16**(4), 1115–1131, https://doi.org/10.17059/ekon. reg.2020-4-8

14. Cooray, A. (2009). Government expenditure, governance and economic growth, *Comparative economic studies*, **51**, 401–418. doi: 10.1057/ces.2009.7

15. Domańska, M. (2017). Crisis in Russia. The degradation of the model of economic governance, [Online]. Available: https://www.osw.waw.pl/en/publikacje/osw-studies/2017-03-03/crisis-russia-degradation-model-economic-governance.

16. Easterly, W., & Levine, R. (2003). Tropics, germs, and crops: how endowments influence economic development, *Journal of Monetary Economics*, **50**(1), 3–39. doi: 10.1016/S0304-3932(02)00200-3

17. Fayissa, B., & Nsiah, C. (2013). The impact of governance on economic growth in Africa, *The Journal of Developing Areas*, **47**(1), 91–108.

18. Frynas, J. G., & Mellahi, K. (2003). Political risks as firm-specific (dis) advantages: Evidence on transnational oil firms in Nigeria, *Thunderbird International Business Review,* **45**(5), 541–565. doi: 10.1002/tie.10090

19. Fukuyama, F. (2013). What is governance?, *Governance,* **26**(3), 347–368. doi: 10.1111/gove.12035

20. Gukasyan, Z. O., Tavbulatova, Z. K., Aksenova, Z. A., Gasanova, N. M., & Karpunina, E. K. (2022). Strategies for Adapting Companies to the Turbulence Caused by the COVID-19 Pandemic. In: Popkova, E.G. (Eds.) Business 4.0 as a Subject of the Digital Economy. *Advances in Science, Technology & Innovation.* Springer, Cham. https://doi.org/10.1007/978-3-030-90324-4_102

21. Gurvich, E., & Prilepskiy, I. (2015). The impact of financial sanctions on the Russian economy, *Russian journal of economics*, **1**(4), 359–385. doi: 10.1016/j.ruje.2016.02.002

22. 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), 20170005. doi: 10.1515/rmeef-2017-0005

23. Huang, C. J., & Ho, Y. H. (2017). Governance and economic growth in Asia, *The North American journal of economics and finance,* **39**, 260–272. doi: 10.1016/j.najef.2016.10.010

24. Huang, C. J., & Ho, Y. H. (2021). The impact of governance on economic growth in Malaysia, *International Journal of the Malay World and Civilization,* **9**(1), 3–9. doi: 10.17576/jatma-2021-0901-01

25. Kalinina, A., Petrova, E., & Buyanova, M. (2015). Efficiency of public administration and economic growth in Russia: Empirical analysis, *European Research Studies Journal,* **18**(3), 77–90.

26. Kaufmann, D., Kraay, A., & Mastruzzi, M. (2007). Growth and governance: A reply, *The Journal of politics*, **69**(2), 555–562. doi: 10.1111/j.1468-2508.2007.00550.x

27. Kropp, S., Aasland, A., Berg-Nordlie, M., Holm-Hansen, J., & Schuhmann (2017). *Governance in Russian regions: a policy comparison*. Berlin, Germany: Springer.

28. Kuvalin, D. B. (2022). Russian economy under tough external sanctions: Problems, risks and opportunities, *Economic and Social Changes: Facts, Trends, Forecast,* **15**(6), 79–93. doi: 10.15838/esc.2022.6.84.4

29. Ledyaeva, S., & Linden, M. (2006). Testing for foreign direct investment gravity model for Russian regions, [Online]. Available: https://www.semanticscholar.org/paper/Testing-for-Foreign-Direct-Investment-Gravity-Model-Ledyaeva-Linden/80732a2d3e0ea3f9bee47b8aebb3bbf8d76902fe

30. Lee, H. S., Zobov, A. M., & Degtereva, E. A. (2022). The role of governance and market openness on bilateral trade flows of South Korea with CEE and CIS countries, *Russian Journal of Economics*, **8**(4), 333–351. doi: 10.32609/j.ruje.8.84097

31. Libman, A. (2012). Democracy, size of bureaucracy, and economic growth: evidence from Russian regions, *Empirical economics,* **43**, 1321–1352. doi: 10.1007/s00181-011-0525-5

32. Mark, J., & Nwaiwu, J. N. (2015). Impact of political environment on business performance of multinational companies in Nigeria, *African Research Review,* **9**(3), 1–10. doi: 10.4314/afrrev.v9i3.1

33. Mazaev V. D. (2022) Russian Constitutionalism and the Mobilization Trend in the Economy. Law, *Journal of the Higher School of Economics*, **15**(5), 177–197. doi: 10.17323/2072-8166.2022.5.177.197

34. Moiseev, V.V., Sudorgin, O.A., Nitsevich, V.F., Stroev, V.V. (2020). State Policy of Decreasing the Effectiveness of Western Sanctions. In: Solovev, D. (Eds.) *Smart Technologies and Innovations in Design for Control of Technological Processes and Objects: Economy and Production. FarEastCon 2018. Smart Innovation, Systems and Technologies*, vol 138. Springer, Cham. doi: 10.1007/978-3-030-15577-3_64

35. Morgan, T., Anokhin, S., Ofstein, L., & Friske, W. (2020). SME response to major exogenous shocks: The bright and dark sides of business model pivoting, *International Small Business Journal*, **38**(5), 369–379. doi: 10.1177/0266242620936590

36. Omoteso, K., & Ishola Mobolaji, H. (2014). Corruption, governance and economic growth in Sub-Saharan Africa: a need for the prioritisation of reform policies, *Social Responsibility Journal,* **10**(2), 316–330. doi: 10.1108/SRJ-06-2012-0067

37. Polishchuk, L. (2004). Decentralization in Russia: impact on quality of governance. In: Kimeneyi M., Meagher P. (Eds.) *Devolution and Development. Governance Prospects in Decentralizing States* (pp. 307–344). Aldershot, UK: Ashgate.

38. Polterovich,V. M. (2016). Institutions of Catching-up Development (On the Project of a New Model for Economic Development of Russia), *Economic and Social Changes: Facts, Trends, Forecast*, **5**(47), 34–56. doi: 10.15838/esc.2016.5.47.2

39. Prohorovs, A. (2022). Russia's War in Ukraine: Consequences for European Countries' Businesses and Economies, *Journal of Risk and Financial Management*, **15**(7): 295. doi: 10.3390/jrfm15070295

40. Razumovskaia, E., Yuzvovich, L., Kniazeva, E., Klimenko, M., & Shelyakin, V. (2020). The effectiveness of Russian government policy to support smes in the COVID-19 pandemic, *Journal of Open Innovation: Technology, Market, and Complexity*, **6**(4), 160. doi: 10.3390/joitmc6040160

41. Rivera-Batiz, F. L. (2002). Democracy, governance, and economic growth: theory and evidence, *Review of Development Economics,* **6**(2), 225–247. doi: 10.1111/1467-9361.00151

42. Rothstein, B. (2011). *The quality of government: Corruption, social trust, and inequality in international perspective*. Chicago, IL: Chicago University Press.

43. Skrypnik, D. V., Zaytsev, A. A., & Shakleina, M. V. (2024). Agri-Food Countersanctions and the Welfare of the Russian Population, *Ekonomicheskaya Politika*, **19**(1), 30–65. doi: 10.18288/1994-5124-2024-1-30-65

44. Spitsin, V., Ryzhkova, M., Vukovic, D., & Anokhin, S. (2020). Companies profitability under economic instability: evidence from the manufacturing industry in Russia, *Journal of Economic Structures*, **9**, 1–20. doi: 10.1186/s40008-020-0184-9

45. Thomas, M. A. (2010). What do the worldwide governance indicators measure?, *The European Journal of Development Research,* **22**, 31–54. doi: 10.1057/ejdr.2009.32

46. Tkachev, V., Grishchenko, V., & Summanen, K. (2022). The Russian financial sector: opportunities in an unstable environment and sanctions. In *Handbook of banking and finance in emerging markets* (pp. 763–792). Chaltnam, UK: Edward Elgar Publishing. doi: 10.4337/9781800880900.00051

47. Ulyukaev, A., & Mau, V. (2015). From economic crisis to economic growth, or How to prevent the crisis from turning into stagnation, *Voprosy Ekonomiki*, **4**, 5–19. doi: 10.32609/0042-8736-2015-4-5-19

48. Wendland, K. J., Lewis, D. J., & Alix-Garcia, J. (2014). The effect of decentralized governance on timber extraction in European Russia, *Environmental and Resource Economics,* **57**, 19–40. doi: 10.1007/s10640-013-9657-8

49. Xu, X., Abbas, H. S. M., Sun, C., Gillani, S., Ullah, A., & Raza, M. A. A. (2021). Impact of globalization and governance determinants on economic growth: An empirical analysis of Asian economies, *Growth and Change,* **52**(2), 1137–1154. doi: 10.1111/grow.12475

50. Zemtsov S.P., Chepurenko A.Y., Barinova V.A., & Krasnoselskih A.N. (2020). New entrepreneurship policy in Russia after the 2020 crisis, *Voprosy Ekonomiki*, **10**, 44–67. doi: 10.32609/0042-8736-2020-10-44-67

51. Zhemkova, A. (2023). The Impact of Government Support on Firms' Productivity during COVID-19, *HSE Economic Journal*, **27**(4), 481–505. doi: 10.17323/1813-8691-2023-27-4-481-505.

APPENDIX

Table A1. Robustness checks: alternative threshold of ROA growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	3.78***	-1.52***	-0.79***	-1.39***	-1.64***	-2.37***	-2.82***	-1.05***	-2.25***	-1.81***
	(0.75)	(0.13)	(0.05)	(0.22)	(0.22)	(0.24)	(0.39)	(0.08)	0.25	(0.20)
VA	4.11***									
	(0.68)									
*VA*2022*	-0.54***									
	(0.09)									
PA		-1.25***								
		(0.19)								
*PA*2022*		0.37***								
		(0.06)								
GE			-0.77***							
			(0.13)							
*GE*2022*			0.66***							
			(0.12)							
RQ				-1.31***						
				(0.43)						
*RQ*2022*				0.74***						
				(0.24)						
RL					-1.12***					
					(0.27)					
*RL*2022*					0.35***					
					(0.09)					
CC						-1.86***				
						(0.27)				
*CC*2022*						0.16***				
						(0.03)				
Cluster1							-2.42***			
							(0.45)			
*Cluster1*2022*							0.49***			
							(0.09)			
Cluster2								-1.10***		
								(0.21)		
*Cluster2*2022*								0.74***		
								(0.14)		
Cluster3									-1.79***	
									(0.29)	
*Cluster3*2022*									0.38***	
									(0.07)	
All										-1.62***
										(0.29)
*All*2022*										0.56***
										(0.10)
Grw_expense	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ln(age)	0.06***	0.05**	0.05**	0.05***	0.05***	0.05**	0.05**	0.05**	0.05**	0.05**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
N	14824	14824	14824	14824	14824	14824	14824	14824	14824	14824

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, *** p<0.01); the threshold of Grw_ROA is $\geq$ 0.5 in these models.

Table A2. Robustness checks: alternative logit model

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	8.42***	-2.03***	-0.53***	-1.96***	-2.45***	-3.71***	-4.92***	-1.08***	-3.60***	-2.71***
	(1.13)	(0.20)	(0.08)	(0.33)	(0.33)	(0.36)	(0.58)	(0.12)	(0.38)	(0.30)
VA	8.05***									
	(1.02)									
*VA*2022*	-1.01***									
	(0.14)									
PA		-2.60***								
		(0.29)								
*PA*2022*		0.83***								
		(0.10)								
GE			-1.65***							
			(0.20)							
*GE*2022*			1.47***							
			(0.18)							
RQ				-3.13***						
				(0.65)						
*RQ*2022*				1.79***						
				(0.37)						
RL					-2.53***					
					(0.40)					
*RL*2022*					0.83***					
					(0.13)					
CC						-3.75***				
						(0.39)				
*CC*2022*						0.38***				
						(0.05)				
Cluster1							-5.24***			
							(0.67)			
*Cluster1*2022*							1.10***			
							(0.14)			
Cluster2								-2.38***		
								(0.31)		
*Cluster2*2022*								1.65***		
								(0.21)		
Cluster3									-3.78***	
									(0.44)	
*Cluster3*2022*									0.84***	
									(0.10)	
All										-3.47***
										(0.43)
*All*2022*										1.24***
										(0.15)
Grw_expense	0.08***	0.09***	0.08***	0.07***	0.08***	0.09***	0.08***	0.08***	0.09***	0.08***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Ln(age)	0.17***	0.16***	0.16***	0.17***	0.16***	0.16***	0.16***	0.16***	0.16***	0.16***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
N	14824	14824	14824	14824	14824	14824	14824	14824	14824	14824

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, *** p<0.01)

Table A3. Robustness checks: alternative control variables

	Threshold: Grw_ROA>0				Threshold: Grw_ROA≥0.5			
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Constant	-1.69***	-0.14	3.83***	-1.44***	-1.92***	-0.54	2.99***	-1.70***
	(0.19)	(0.32)	(1.08)	(0.18)	(0.20)	(0.34)	(1.14)	(0.20)
All	-2.51***	-2.52***	-2.31***	-2.39***	-1.93***	-1.95***	-1.76***	-1.83***
	(0.27)	(0.28)	(0.27)	(0.27)	(0.30)	(0.30)	(0.29)	(0.29)
*All*2022*	0.81***	1.04***	0.69***	1.13***	0.59***	0.80***	0.49***	0.88***
	(0.10)	(0.11)	(0.10)	(0.12)	(0.10)	(0.12)	(0.10)	(0.13)
Grw_GDP	-0.90***				-0.80***			
	(0.18)				(0.19)			
Openness		-3.15***				-2.80***		
		(0.64)				(0.67)		
Ln(BoP)			-0.21***				-0.19***	
			(0.04)				(0.05)	
FDI_ratio				-8.80***				-7.83***
				(1.78)				(1.87)
N	14824	14824	14824	14824	14824	14824	14824	14824

Note: Standard errors are in parentheses (*: p<0.1, **: p<0.05, *** p<0.01)