

# EKONOMIA I PRAWO. ECONOMICS AND LAW

Volume 23, Issue 2, June 2024 p-ISSN 1898-2255, e-ISSN 2392-1625 www.apcz.umk.pl/EiP

ORIGINAL ARTICLE

received 07.05.2023; revised 18.12.2023; accepted 01.05.2024 Citation: Koubaa, S. (2024). Corruption, government economic performance and institutional trust in the MENA region. *Ekonomia i Prawo. Economics and Law*, 23(2), 395–411. https://doi.org/10.12775/EiP.2024.020.

# Corruption, government economic performance and institutional trust in the MENA region

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# Abstract

Motivation: Countries in the MENA region are perceived as highly corrupt. They are struggling to achieve clear results against corruption. Unfortunately, no country has reached a significant improvement on the Corruption Perceptions Index (CPI) published by Transparency International in 2022. The United Arab Emirates and Qatar are the top performers in the region. The former was scored 69/100, the latter 58 out of 100. Libya (17/100), Yemen (16/100), and Syria (13/100) awfully damaged by the war are the worst. The state-of-the-art impacts trust at the national level and the performance of public institutions as well.

Aim: This paper aims at studying the relationship between corruption and trust, and its impact on public economic performance in the MENA region, based on the data provided by Arab Barometer, 2018-2019. Our sample includes 8215 individuals located in 12 countries in that region. To test all our hypotheses simultaneously, we have used the structural equation modelling method with SmartPLS software. The latent variables of the research model – corruption, fighting corruption, and economic performance of the government – are used as a reflective measurement.

However, trust is included in the model as a formative measurement. Results: The findings show that trust in public institutions, measured by a formative



scale, is negatively impacted by the level of corruption (-0,36). It also depends on the efforts made by the state to fight corruption in public agencies and institutions (0,37). Trust is one of the most important components of social capital. The performance of public policies is highly correlated to the level of trust between public administration and individuals. The government's economic performance depends on the level of that trust (0,341), the efforts made to fight corruption (0,173), and public corruption (-230). Consequently, corruption is seen as the main explanatory variable which directly impacts trust towards public institutions, and indirectly by mediating the government economic performance. The former means that there is an association between performance and corruption. The latter consists in transmitting the effect of corruption on institutional trust through the government economic performance which acts as a competitive mediator.

Keywords: Corruption; Institutional Trust; Government's performance, Structural Equation Modelling, Formative Measurement JEL: H11- H59- H89- D73 - C53.

# 1. Introduction

Scholars have recently paid considerable attention to the relationship between corruption and trust in public institutions (Kubbe, 2013; Lavallée et al., 2008; Morris & Klesner, 2010; Wang, 2016; Yang & Holzer, 2006). This is because trust is seen as a lubricant that oils the way for society in its movement forward. It is a substantial ingredient in social and economic progress. It should exist everywhere in public and private institutions. It has a great impact on government performance, but it is also influenced by the level of institutional corruption. The literature on political corruption and economic policy shows trust as being both the cause and consequence of corruption. In this research, trust is seen as an outcome because the effect of corruption on trust is greater than the opposite, as sometimes claimed (Uslaner, 2004).

Countries in the MENA region are perceived as highly corrupt. They are struggling to achieve clear results against corruption. Unfortunately, no country has reached a significant improvement on the Corruption Perceptions Index (CPI) published by Transparency International in 2021. The United Arab Emirates and Qatar are the top performers in the Region as they were respectively scored 69/100, the latter 58 out of 100. Libya (17/100), Yemen (16/100), and Syria (13/100), awfully damaged by the war, were the worst. The state-of-the art shows that corruption impacts trust at the national level and the performance of public institutions as well.

This paper studies the relationship between corruption and trust, and its impact on governmental economic performance in MENA countries. It is based on the data provided by Arab barometer, 2018-2019. Our sample includes 8215 individuals. To test all our hypotheses simultaneously, we have used the structural equation



modelling method with SmartPLS software. The latent variables of the research model - corruption, economic performance of the government, and institutional trust – are used as a formative measurement.

Accordingly, the paper starts, in the first and second sections, with a review of the literature, followed by the hypotheses about institutional corruption, trust in public administration, and government performance. Section 3 provides an empirical analysis, together with the method, data, and variables. Section 4 links empirically the variables of the model using structural equation modeling before the concluding statement. Section 5 discusses the findings and concludes this research.

# 2. Theory and hypotheses

Corruption is "the use of bribery to influence the actions of a public official. It refers to obtaining private gain from public office through bribes, extortion, and embezzlement of public funds". As an egocentric and rational behavior, "corruption rests on a diametrically opposed view of human nature: we rob because we value creature comforts" (Uslaner, 2004: 4). For international transparency, corruption is seen as the abuse of entrusted power for private gain<sup>2</sup>.

In contrast, trust seems to be an irrational behavior because it is simply based on the expectation that others will behave predictably. According to Gambetta (2000), when we say we trust someone or that someone is trustworthy we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him. Correspondingly, when we say that someone is untrustworthy, we imply that the probability is low enough for us to refrain from doing so' (pp. 217-218).

Conversely, for Coleman (1988), on the other hand, trusting someone or not depends on the expected gains and losses involved. This means that trust is the difference between the likelihood of having the expected gains and the one of having the losses happen. As a result, the idea of trust may be seen as a pondered choice.

The relationship between corruption, institutional trust and government performance has been studied by many scholars in political science (Kubbe, 2013; Lavallée et al., 2008; Morris & Klesner, 2010; Wang, 2016; Yang & Holzer, 2006). However, with the exclusion of research on entrepreneurship, one can safely assert that economists have not paid enough attention to the impact of corruption on the performance of governments and, consequently, on institutional trust. Therefore, since the government is seen as an economic agent, the topic of the performance of its institutions is one of the most important research questions in economics.

According to Oxford reference, https://www.oxfordreference.com/view/10.1093/oi/authority. 20110803095640745

<sup>&</sup>lt;sup>2</sup> https://www.transparency.org/en/what-is-corruption

Trust in public agencies or institutions can be referred to institutional or cultural levels. According to North (1991), for example, trust is conceived as endogenous to political institutions while it is exogenous in cultural theory (Wang, 2016). Our ineterest in this research is in public institutions because trust depends on their performance (Wang, 2016). That is to say, trust in political institutions arises from citizens' rational evaluations of the government's performance. Scholars who have adhered to this institutional approach have focused especially on the importance of government performance. As a matter of fact, institutional trust could be improved if public agencies showed their ability to provide good policies. As a result, if they want to create higher levels of institutional trust, they must perform well (Wang, 2016). Thus, the economic performance of public institutions reflecs the relationship between corruption and trust. As argued by many studies, government performance drives institutional trust because citizens trust their institutions as long as the economy goes well (Kim, 2010; Wang, 2016). In the case of impotent agencies, distrust will necessarily set in.

Trust plays an important role in social and economic growth because it is the lubricant that keeps society moving forward. At the individual level, trust leads to a positive view of public institutions (Rothstein & Uslaner, 2005). At the interorganizational level, trust is one of the factors which fundamentally influence cooperation between organizations (Koubaâ, 2014). In political sciences, the relationship between corruption and trust has been studied by many scholars (Kubbe, 2013; Morris & Klesner, 2010; Rothstein & Uslaner, 2005; Uslaner, 2004). They have found a dialectical link between corruption and trust. On the one hand, corruption as an outcome is positively correlated with interpersonal trust. The latter is seen as an explanatory variable. On the other hand, corruption is a significant predictor of trust. It destroys interpersonal trust and consequently trust in public administration.

Research has shown that governmental corruption may make society skeptical (Richey, 2010; Rothstein, 2013). In the same vein, Rothstein and Uslaner (2005) have concluded that equality and corruption generalize an important level of trust in society. Moreover, Kubbe (2013) has designed a model with corruption as a mediator and trust as both the cause and consequence of corruption. The findings show that corruption reduces both interpersonal and institutional trust in Europe. Kubbe's hypothesis was based on previous research which had demonstrated the negative effect of corruption on trust in Latin America and Asia (Beesley & Hawkins, 2022; Chang & Chu, 2006; Richey, 2010).

Consequently, the empirical analysis in Kubbe's research has confirmed that a high level of corruption can negatively influence people's trust in political institutions which reflects lack of institutional trust. This outcome can possibly erode citizens' willingness to work with others or the government to look for solutions to the problem of corruption (Morris & Klesner, 2010).

That suggests that corruption undermines trust in government institutions by gradually destroying the belief that officials act to serve the best interest of citizens (Beesley & Hawkins, 2022). Several studies have found corruption as a determinant



the government to look for solutions to the problem of corruption (Morris & Klesner, 2010).

That suggests that corruption undermines trust in government institutions by gradually destroying the belief that officials act to serve the best interest of citizens (Beesley & Hawkins, 2022). Several studies have found corruption as a determinant of trust in government in many countries (Levi & Stoker, 2000; van der Meer, 2017). Moreover, trust is also influenced by government performance. In this line, Wang (2016:213) has referred to several studies to argue that policy performance, especially economic performance, is the single major determinant of trust in political institutions. Our research model (scheme 1) shows that economic performance is a mediator. That is to say that corruption in public institutions directly impacts institutional trust and also indirectly through the economic performance of public agencies. Thus, the panel below presents three hypotheses which are:

- H1: Corruption negatively impacts governmental economic performance.
- H2: Corruption negatively influences institutional trust.
- H3: The Government's economic performance positively impacts institutional performance.

In this research, knowing whether the citizens choose to trust the government or not depends on gains and losses. In other words, the perceived gains and losses are the main components of citizens' evaluation of the government's performance and the corruption of its agencies (Wang, 2016). Indeed, better government performance indicates better expected outcomes to bring benefits to people. But corruption might cause government dysfunctions and damage to people's benefit.

# 3. Data and methods

The research method used in this paper is based on the data provided by Arabbarometer, 2018-2019. After having cleaned the dataset, 8215 observations located in 12 countries will be analyzed. To test all our hypotheses simultaneously, we have used the structural equation modeling (SEM) method with SmartPLS software. SEM is a multivariate statistical analysis that is used to analyze structural relationships. It is the combination of factor analysis and multiple regression analysis that is used to test the relationships between latent and observable variables. Each latent variable of the research model – corruption, economic performance of the government, and institutional trust – is measured by a set of items called indicators or observable variables.

In this research, our three constructs are seen as formative measurements (scheme 2). This means that they are caused by their indicators. Any change in one indicator or more of the underlying indicators causes change in the construct. However, the underlying assumption, in the case of reflective measurements, is that items correlate with each other, and that this correlation is determined by the underlying construct(J. F. Hair et al., 2019; Jr. J. F. Hair et al., 2017; Jarvis et al., 2003) .That is to say that a change in the construct causes a change in all its items.

# 4. Measurement and models

The formative measurement is based on four important criteria (Jarvis et al., 2003):

- The direction of causality: when the causality is from the items to the latent construct, the measurement is formative. Otherwise, the measurement is reflective.
- Interchangeability: if the items need not to be interchangeable, the measurement is formative. However, if they should be interchangeable, the assessment is reflective.
- Correlation: In the formative scale, the items do not need to correlate highly with each other. But the correlation between items in reflective measurement is highly
- Nomological net: it may differ in the formative measurement, but it should not in the reflective one.

In applying these decision rules, consider the explained variable of our research model, institutional trust (IT) as measured by Arab Barometer (2018) using the items shown in tablel. This measure illustrates a situation in which the indicators labelled Q201A\_1, Q2011\_2, Q201A\_3, Q201A\_42 et Q201A\_5 define how scholars operationalize the concept of institutional trust. If one or more indicators improve, such as trust in government, courts and the legal system or other institutions, then institutional trust has also improved. As result, the construct institutional trust is caused by the five items given in the table below. Using the general form presented by Bollen and Lennox (Bollen & Lennox, 1991), this illuminating regression equation of the construct of institutional trust can be written thus:

$$IT = \beta_1 Q 201 A_1 + \beta_2 Q 201 A_2 + \beta_3 Q 201 A_3 + \beta_4 Q 201 A_{42} + \beta_5 Q 201 A_5 + \zeta$$

The second latent construct of our model is Government Economic Performance (GEP). Three indicators have been selected to evaluate the economic performance in the MENA region: creating employment opportunities, keeping prices down, and narrowing the gap between rich and poor. In addition to that, a single reflective item (Q513) is taken from the database to evaluate the convergent validity. This is seen as a global evaluation of the government's performance made by using individual perception. Using the three items, as causes (table 1 we can write the following formative measurement model of the construct 'GEP':

$$GEP = \beta_1 Q 204_2 + \beta_2 Q 204_{20} + \beta_3 Q 204_3 + \zeta$$

The third construct is corruption (COR). To measure it, three items have been used among a set of questions asked in the Arab Barometer Survey. As we can see in the table below, these questions were asked about corruption, as perceived within the national state agencies and institutions in each country, within local/municipal government, and whether it was necessary to bribe (pay a rashwa<sup>3</sup> to) a civil servant to receive better education services.

# $COR = \beta_1 Q 210 + \beta_2 Q 211 A_{20} + \beta_3 Q 211 B + \zeta$

Where:

- βi: (i= 1,2,3,4 ^5) beta weights for items
- $\zeta$ : a disturbance term.

The second criterion is to examine if the items are interchangeable or not. If they are interchangeable and have a common theme, the construct is reflective. But in the IT construct, the items used by Arab Barometer are not interchangeable and employ different themes (institutions) such as government, courts, and the legal system, parliament, local government, and police. Looking at the five items, we can see that different aspects have been measured. Moreover, each indicator is critical for measuring the construct. Dropping one of the items would impact the meaning of the IT since it is determined by these items.

The third criterion refers to the statistical realm because it focuses on whether the items covary with one another. While measures for reflective constructs must be covaried with one another, those for formative constructs do not need to covary. Formative items should not have strong correlations with one another.

The fourth and final rule consists in whether the items of the construct have the same antecedents and outcomes. A formative construct is a composite of indicators that may be very different. That is to say that it is not necessary to have the same consequences and antecedents because of the non-interchangeability principle. Each item may have a distinct antecedent and/or outcome.

Before reporting the results given by our measurement model assessment and those related to the structural model, it seems important to shed light on some preliminary considerations such as sample size and the secondary data used. The sample in this research is based on secondary data used. The sample in this research is based on secondary data provided by Arab Barometer, 2018-2019. It includes 8215 individuals located in 12 countries located in the Middle East and North Africa. To test all our hypotheses simultaneously, we have used the structural equation modelling method with SmartPLS software. PLS-SEM is the preferred technique when formative constructs are used in the structural model (Hair et al., 2019; Hair et al., 2017).

# 5. Findings and discussion

The findings of this research are divided into two parts. The first one presents the triad's measurement model to show the relationships between latent variables and the items and the second is related to the structural model and shows the relationships between corruption, performance, and trust.

<sup>&</sup>lt;sup>3</sup> Rashwa is the Arabic word for bribe.

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# 5.1. CPT's measurement model

Assessing the results of formative measurement models should be done following the procedure given by Hair et al. (2017). The first step consists in evaluating the construct's convergent validity by correlating the formatively measured construct with the reflective measure of the same construct.

The key statistic for assessing a formative measurement is the indicator's weight. According to Cenfetelli and Bassellier (2009: 691), the assessment should not be focused only on the statistical significance of the formative indicator weight, but it should include other assessments such as convergent validity, multicollinearity, and the relevance of items. Since our latent variables are formative measurement, convergent validity, as stated by Hair et al. (2019:9), is assessed by the correlation of the construct with an alternative measure of the same concept. This is also called redundancy analysis. It must be done by including a reflective single item of the same construct in the questionnaire. Using secondary data in this research, it seems difficult to find a relevant reflective measure in the dataset provided by Arab Barometer. That is why the minimum correlation of the formative construct with the single reflective item construct, we have chosen from the dataset, has not been achieved for the three formative constructs.

As suggested by Hair et al., (2019:10) should be 0,70 or higher. As we can see, the correlations of the government's economic performance and corruption with, respectively their reflective single-item construct are more than - 0.45.

Despite the moderated correlation of the formative constructs with their respective reflective single item, we have decided to keep the formative measurement even with the weak correlation of the formative measurement of Institutional Trust (IT\_F) with its reflective measurement (IT\_R). Our formative measurement is supported by the Variance Inflation Factor (VIF) which evaluates the collinearity of the items. As we can see, the VIF of all the items is far from the value of 5 which indicates critical collinearity. All values are close to 1.5 (table 2). Our test for collinearity shows VIF scores lower than 3.3 as we can see in the table 1 given by SmartPLS.4.

The third assessment of the formative measurement is the indicator's weights' statistical significance given by bootstrapping procedure. We have used the percentile method to construct a bootstrap-based confidence interval. The figure below shows that all items are statistically significant for two tailed tests at the level of 0.01 except the item Q211B (figure). All T-values for 99% confidence are more than 2.581. The Q211B question refers to the following question: "In your opinion, to what extent do you think it is necessary to bribe a civil servant (rashwa=bribe) to a civil servant to receive better education services?". This item is kept in the model because removing it does not impact the quality of our measurement model.

# 5.2. CPT's structural model

The first assessment criterion to assess the structural relationships between the latent variables of our model is the coefficient of determination R2 and the blindfolding-based, cross-validated redundancy measure Q2. But, before doing so, it seems

important to start by examining the collinearity between the latent variables by observing the VIF values. These (bold and underlined values in the table 3) are within the ideal zone close to 1. Latent variables correlations are in italic in the table 3. Then, the collinearity is not an issue in our model.

Table 3 reports the results of the correlation analysis. Government economic performance, as it is individually evaluated, and the perception of corruption in MENA countries are negatively correlated, -0.427. Moreover, the perception of corruption is also negatively correlated with trusting public institutions, -0.508. However, the coefficient is positive between performance and institutional trust, 0.513. Although correlation values are so high, there is no worry about the problem of collinearity.

The R2 value for Institutional Trust (IT) as an endogenous construct is 0.336. This measures the CPTs' model's (Corruption-Performance-Trust) explanatory power and the variance explained in the IT's endogenous construct which is 36.6%. Despite its moderate value, the explanatory power is substantial if we consider the limited number of predictor constructs. The greater the number of predictor constructs, the higher the R2 (Hair et al., 2019:11) and the fact that the model predicts human attitudes and perceptions.

The figure above sheds light on the structural relationships in the CPT's model. The size of path coefficients measures the impact of the exogenous variables on the endogenous ones. The figure shows an important negative impact (-0.354) of corruption on institutional trust based on people's perception. The same impact is shown in the relationship between corruption and the government's economic performance (-0.427). On the same model, we can see the positive impact of economic performance on the trust in public institutions (0.362). In terms of significance, the three structural relations are statistically significant at the level of 1%.

The direct effect of corruption on trust is significant at the level of 1% (table 5). Thus, we find support for the government's economic performance as a mediator. Moreover, the path coefficient between corruption and performance and between performance and trust are significant but they have opposite signs. Consequently, performance in this research is competitive mediation. The direct effect, H2, between corruption and trust is negative. But the indirect effect through government performance, H1.H3, is the product of -0.427 and 0.362 is negative (0.362\* -0.427 = -155, table 4). This case provides a competitive mediation, which means that another mediator may be present whose indirect effect's sign equals that of the direct effect.

As stated by Hair et al., (2017), competitive mediation acts as a suppressor variable, which substantially decreases the magnitude of the total effect. Then, the total effect of corruption on institutional trust is decreased by the government's performance as a competitive mediating construct. As result, the total effect (-0.509) is the sum of the direct effect (-0.354) and indirect effect (-0.155).

Despite its redundancy with the size of the path coefficients, the f<sup>2</sup> effect size is often used in PLS-SEM. It indicates the rank order of the constructs' relevance in

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explaining the endogenous variable. Comparing the path coefficients and the f2 effect sizes shows the same order. The three f2 values are greater than 0.15, which means that the effect sizes are medium.

# 6. Conclusion

As stated above, the relationship between corruption, government performance, and institutional trust results from an economic perspective. In other research areas, such as political studies, scholars have grappled with the relationship between corruption and trust, coming to different findings.

In this article, I have used empirical evidence from the MENA region to show the triad model, Corruption-Performance-Trust, using the SEM method. In this model, corruption is seen as the main explanatory variable which directly impacts trust in public institutions, and indirectly by mediating the government's economic performance. The former means that there is an association between performance and corruption. The latter consists of transmitting the effect of corruption on institutional trust through the government's economic performance which acts as a competitive mediator. This result is different from the one found by Wang (2016), who argues that performance and corruption have a negative interaction effect on trust. They moderate each other's effect on institutional trust. In this study, performance is seen as a mediator within a simple mediation model. This research shows that corruption directly erodes trust in public institutions and indirectly through the performance of governments in MENA countries.

The findings of the analysis clearly show that a high level of corruption reduces both institutional trust in these countries and the economic performance of their governments. All constructs have been measured by citizens' perceptions. These findings are in line with previous research which has shown the negative impact of corruption on institutional trust in other regions around the world such as Asia and Latin America, among others.

As stated by the UN department of economic and social affairs in its policy brief N°108, there is growing concern about a crisis in public trust that impacts social and economic progress. The findings of this research argue that in MENA countries, institutional trust (IT) has been significantly affected by two interrelated factors, namely the economic performance of the governments and the corruption of public institutions. As argued by the UN brief policy, the lack of government's economic performance erodes the trust in public agencies. The relationship is positive and confirms the significant impact of corruption on trust. Consequently, lacking trust in public institutions has a great impact on enhancing investment and entrepreneurship.

Since government performance is acting as competitive mediation, it is worth studying other indirect effects involved in the relationship between corruption and trust.

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# Appendix

**Table 1.** Summary of the constructs' items

Construct	Label	Item's description	Scale		
Corruption (			- Common and the comm		
Formative indicators	Q210	To what extent do you think that there is corruption within the national state agencies and institutions in your country?	(1)To a large extent, (2) To a medium extent, (3) To a small extent, and (4)Not at all.		
	Q211A	How widespread do you think corruption is in your local / municipal government. Would you say?	(1)Hardly anyone is involved, (2) Not a lot of officials are corrupt, (3) Most officials are corrupt, and (4) Almost everyone is corrupt		
	Q211B	In your opinion, to what extent do you think it is necessary to pay an unofficial fee (rashwa) to a civil servant to receive better education services?	(1)Highly necessary, (2) Somewhat necessary, (3) Somewhat unnecessary, and (4) Highly unnecessary		
Single reflective indicator	Q211	In your opinion, to what extent is the national government working to crack down on corruption?	<ol> <li>To a large extent</li> <li>To a medium extent</li> <li>To a small extent</li> <li>Not at all</li> </ol>		
Institutional 7	Trust (IT)				
Formative	Q201A_1	Government (Council of Ministers)	(1) A great deal of trust,		
indicators	Q201A_2	Courts and legal system	(2) Quite a lot of trust,		
Q201A_3		The elected council of representatives (the parliament).	(3) Not a lot of trust, and (4) No trust at all		
	Q201A_5	Local government			
	Q201_42	Police			
Single reflective indicator	Q103	Generally speaking, would you say that "Most people can be trusted" or "that you must be very careful in dealing with people"?	Most people can be trusted     I must be very careful in dealing with people		
Government's	Economic Pe	rformance (GEP)			
Formative	Q204_2	Creating employment opportunities	Very good, (2) Good, (3) Bad,		
indicators4	Q204_20	Keeping prices down	and (4) Very bad		
	Q204_3	Narrowing the gap between rich and poor			
Single reflective indicator	Q513	To what extent are you satisfied with the current government's performance?	Scale from 0-10 where 0 means completely dissatisfied with its performance and 10 means completely satisfied		

 $<sup>^4</sup>$  We have chosen only economic indicators. The items providing security and educational needs have been excluded from the model.



# Table 2.

VIF statistics

9	Q201A_	Q201A_	Q201A_4	Q204_	Q204_2	Q204_	Q21	Q211	Q211
Q201A_1	2	3	2	2	O	3	0	A	В
							1.14		
1.734	1.575	1.492	1.369	1.569	1.490	1.608	0	1.179	1.045

# Table 3.

Latent variables correlations and Collinearity VIF

	Corruption	Gov's_Eco. Performance	Institutional_ Trust
Corruption	1.000	1.000	1.224
Gov's_Eco.Performance	-0.427	1.000	1.224
Institutional_Trust	-0.508	0.513	1.000

# Table 4.

The mediator effect of government performance

	Original sample (O)	Sample mean (M)	Bias	0.5%	99.5%
Corruption -> Institutional_Trust	-0.155	-0.155	-0.000	-0.169	-0.141

# Table 5.

Significance of relationships

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (  O/STDEV )	P values
H <sub>1</sub> : Corruption -> Gov's Eco.Performance	-0.427	-0.428	0.010	44.968	0.000
H <sub>2</sub> : Corruption -> Institutional_Trust	-0.354	-0.354	0.009	37.362	0.000
H <sub>3</sub> : Gov's Eco.Perfor-	0.362	0.362	0.010	36.404	0.000
mance ->					
Institutional_Trust					

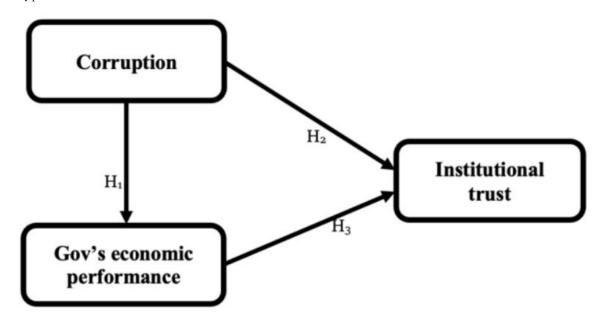
# Table 6.

Path coefficients and f<sup>2</sup> effect size

	Corruption	Gov's_Eco.	Institutional_
		Performance	Trust
Corruption	1.000	0.224	<u>0.161</u>
Gov's_Eco.Performa	-0.427	1.000	0.169
nce			
Institutional_Trust	-0.354	0.362	1.000

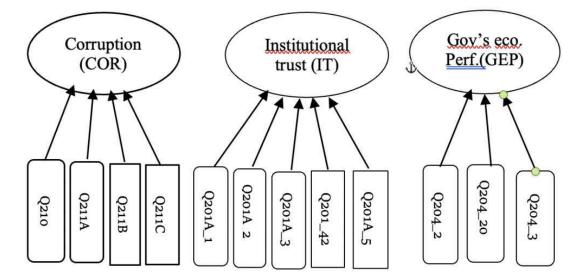
Scheme 1.

Hypotheses and research model



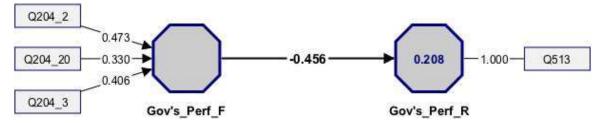
Scheme 2.

Formative measurement of latent constructs



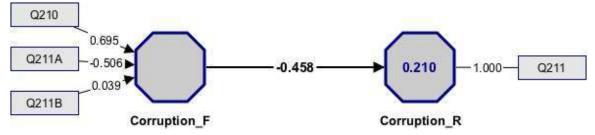
# Scheme 3.

Convergent validity of government's economic performance (where Gov's\_Perf\_F is the formative measurement and Gov's\_Perf\_R is the reflective single item construct)



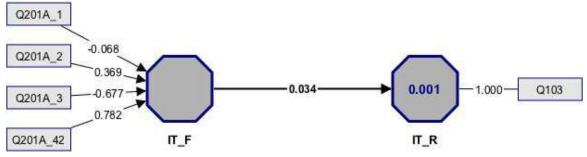
# Scheme 4.

Convergent validity of corruption (where Corruption\_F is the formative measurement and Corruption\_R is the reflective single item construct)



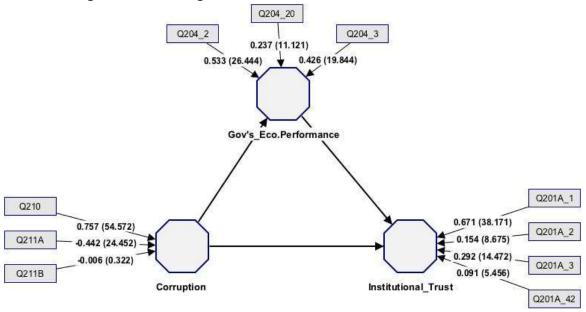
# Scheme 5.

Convergent validity of corruption (where IT\_F is the formative measurement and IT\_R is the reflective single item construct)



## Scheme 6.

The item weight's statistical significance





# **Scheme 7.** CPT's Structural model

