

The Impact of Governance on Economic Growth and Human Development During Crisis in Middle East and North Africa

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Abstract

The aim of this paper is to determine the impact of governance on economic growth and human development in MENA countries. And whether the financial crisis affects the relationship between governance and Economic growth.

So, this paper is based on data of 20 countries during the period (1996-2017) we used panel data (longitudinal data) which combines cross sectional data and time series data by applying the three longitudinal data model: pooled regression model, fixed effect model and random effect model.

This paper found that there is no relationship between governance and economic growth in MENA countries and no impact of the global financial crisis in 2008 on the relationship between governance and economic growth.

Also, the paper found that there is a significant relationship between governance and human development.

Keywords: governance, Economic growth, human development, MENA

1. Introduction

Since the end of 1980s, good governance has become an important topic in development, as it can be applied to a wide range of issues and relationships. In 2003, the World Bank issued a report entitled "Better governance for development in the Middle East and North Africa" stating (the issue of good governance is not political issue but a development issue because good governance has a main role in promoting economic development and in offering essential social services).

Good governance (credible voice & accountability, political stability, an effective government, an efficient regulatory system, the rule of law and fighting corruption) can help in achieving a high level of economic growth through providing an attractive environment for investment and savings. Also, good governance can reduce the challenges that face international trade.

According to the World Bank's World Governance indicator, if we compare the governance of MENA region to other regions in the world, it ranks below the average. MENA scores average refers to that the region does not rank above the 50th percentile in any of the 6 indicators of governance.

Poor governance can hinder economic growth and human development through political instability, ineffective rule of law and corruption.

The objectives of this paper are, first, we illustrate the main governance indicators in MENA and determine the main challenges facing good governance in MENA.

Second, investigate to what extent governance affect economic growth in MENA and whether financial crisis affect the relationship between governance and economic growth.

Third, investigate to what extent governance affect human development in MENA

2. Literature Review

There are a lot of studies that concentrates on the effect of governance on economic growth, but there are few studies that analyse the impact of economic crisis in this effect.

There is a common agreement in most studies about the existing of the relationship between governance and

economic growth.

(Bichaka & Christian, 2010) study that analyzes this effect by using time series data for the period (1995-2005) for 28 African countries. It found that there is a significant and positive relationship between good governance and economic growth.

(Mahmoud, 2012) this paper used panel data analysis to show to what extent MENA countries governance can be related to its economic growth and what is the impact on GDP growth to governance indicators.

The study showed the main dimensions of governance that the policymaker should concentrates on, as it has more effect on enhancing growth. This study found that government effectiveness and rule of law are affected per capita GDP growth more than other governance indicators.

(Engjell, 2015) study that analyzes the impact of good governance on the economic growth by using a panel data for western Balkan countries for the period (1996-2012).

The study found that some of the dimensions of good governance have the faster impact on economic growth than others, as political stability, absence of violence and the strengthening of law enforcement has the effect on economic growth at the same period, while governance accountability affects economic growth in future periods.

There are different thoughts about the impacts of crisis on the relationship between governance and Economic growth.

(Bassam, 2013), this paper examined the relationship between governance and growth during economic crisis and during non-crisis periods. The paper found that the existing of the relationships between economic growth and governance during crisis and non-crisis periods. The study found that the relationship are significant whether before or after the economic crisis in 2008.

It concluded that the level of development in a country is concerned with the effect of governance on economic growth during economic crisis.

This paper also concluded that the level of country development has an effect on the relationship between governance and growth during crisis. A country's level of development affects the shaping of the relationship between governance and growth during crisis.

(Hasan & Erdogan, 2017) study that examines the effect of governance on economic growth during economic crisis through changing in institutional quality. It found that the economic crisis has an effect on the level of institutional quality and this has a positive impact on economic growth.

Countries that changed their bureaucratic organization, made better socioeconomic and investment environment after their economic crisis and that had a positive impact on enhancing economic growth.

The aim of this paper is to determine the impact of governance on economic growth and human development in MENA countries. And determine whether the financial crisis affect this relationship.

This paper is organized as follows, Section 3 illustrate the definition of governance. Section 4 discuss the relationship between Economic growth and the 6 components of governance also, discuss whether the crisis will affect this relationship. Section5 analyse governance status in MENA. Section 6 determines the main challenges facing governance improvement in MENA. Finally section 7 estimates the impact of governance on economic growth & human development in MENA countries.

The methodology used in this paper to test the relationship between governance, Economic growth and human development based on panel data for 20 countries during the period (1996-2017) using Eviews 10 by applying the three longitudinal data models: pooled regression model, fixed effect model and random effect model.

And in order to determine the impact of the 2008 financial crisis on the relationship between governance, economic growth and human development the study period was divided into two periods (1996-2007) and (2008-2017).

3. Governance and Good Governance

Governance is a concept that includes all fields of the authority exercises by formal and informal institutions in the management of the available resources of the government. Governance quality is affected by the power exercise effect on the quality of life enjoyed by its citizens (Jeff Huther & Anwar shah, 1998, p. 2).

Governance is the group of traditions and institutions that the authority in a country did. It consists of a) the governments' selection, monitoring and replacement process, b) the government ability of policies formulation and implementation and c) people and country respect to the institutions that is the governor of economic and

social relations among them (Daniel, Aart, & Massimo, 2010, p. 4).

Good governance is the development policies management and orientation that affect economic performance positively. Good governance according to World Bank defined as the management and institutional reforms that state did and develop coordination and important public services delivery, political responsible accountability and roles of citizens in the development policies (Rachid & Ahmed, 2017, p. 109).

For the World Bank, good governance is assessed by the government elements capacity of a country application and putting a framework for market progress and economic development (Rachid & Ahmed, 2017, p. 108).

World Governance Indicators are the most effective indicators in measuring governance that policy makers, international organizations and donors and agencies and investors used. World Governance Indicators contains 6 aspects: Voice and Accountability, political stability and violence absence, government effectiveness, regulatory quality, Rule of law and control of corruption.

The aggregate WGI has two measures: the standard normal units of the governance indicator which range from -2.5 to 2.5 (higher levels indicating greater improvement for good governance), and the percentile rank which range from 0 and 1 and if it becomes near 1, it means there are a lot of efforts for higher governance.

These indicators aims at measuring good governance evolution for a country and a policy application to enhance these indicators to ensure that enhancing good governance could lower the government failure.

4. Governance and Economic Growth

Effective governance in a country leads to achieving a high level of economic growth by having an attractive environment for investment and savings and by lowering the obstacles facing international trade (Adnen & Mohamed, 2015, p. 28).

Good governance is an important prerequisite to enhance economic growth and development. Through enhancing environment for investment and facilitate the market to be efficiently. Good governance improves the development of private sector and market to reach higher growth.

4.1 Economic Growth & Voice and Accountability

Voice and accountability measure the ability of country's citizens to become a part of government selection as well as expression, association and free media freedoms (Thomas, 2010, p. 32).

Voice and accountability is important dimension of governance. Voice indicates to the capacity to express opinions and interests and to the implementation of this, in order to affect government priorities and governance processes.

Accountability refers to that people who apply and implement the rules are answerable to citizens who lives are affected by those rules.

So, Voice and accountability is important indicator to determine the nature of the relationship between government and its citizens (Tammie, Marta, & Alan, 2007, p. 1).

Voice and accountability concern with the progress of two causes; first, lack of power and accountability are the reasons of poverty. As, voice and accountability can lead to reduction in poverty by itself. Second, voice and accountability can cause other advantages as higher ownership and pro poor policies which can in turn reduce poverty rates (Tammie, Marta, & Alan, 2007, p. 9).

4.2 Economic Growth & Political Stability

Political instability affects economic growth negatively as political instability motivated violence and terrorism. (United Nation, 2007, p. 16).

The relationship between political stability and growth has two effects. First, uncertainty that caused from an unstable political system may lower private investment and so economic growth. Second, uncertainty may alter the sort of investment undertaken, or change the public spending composition and other factor demands and so affect economic growth directly (Dimirios & Simon, 2001, p. 383).

In addition, poor economic performance may lead to government failure and political instability (Alesina, Alberto, Sule, Nouriel, & Phillip, 1996, p. 190).

Internal and external conflicts can seriously lower growth by decreasing physical and human capital. Political conflicts lead to increasing defence expenditures significantly and so decreases spending on human capital (education & health). Also, defence expenditures increasing can lower domestic investments which can decrease the economic growth of the economy (Emin & Alpaslan, 2017, p. 366).

4.3 Economic growth & Government Effectiveness

It indicates to perception capturing of public services quality, civil service quality and its independence degree from political pressures, the quality of policy formulation and implementation, and the commitment of the government to such policies (Daniel, Aart, & Massimo, 2010, p. 4).

Good governance causes higher economic growth, by enhancing more efficient labour divisions and faster social and economic policies implementation.

An efficient government can promote market and then leads to increasing private investment and economic growth, by increasing capital accumulation, putting resources in good sectors and learning new technologies to achieve economic growth (Md Rafayat, Erick, & Bizuayehu, 2017, p. 223).

4.4 Economic Growth & Regulatory Quality

It is a necessity for economic growth by making markets doing their jobs in an efficient way, so it provides a sound environment for private investment, and then enhancing economic growth.

It refers to the government ability to formulate and implement good policies and regulations that enhances private sector investment (Daniel, Aart, & Massimo, 2010, p. 4).

Regulatory quality is necessary for economic growth by making market works in an efficient way, so it provides a sound environment for private investment, and then enhancing economic growth (Colin, 2014, p. 162).

4.5 Economic Growth & Rule of Law

It refers to a society success in enhancing an environment in which sound rules and procedures from economic and social interactions are protected. It is a necessity for consolidating a fair market economy that increases economic growth.

The Rule of law consists of perceptions of the crime, the effectiveness of the Judiciary and the enforceability of contracts (Christiane & Charles, 2006, p. 6).

Rule of law is an important condition for consolidating an accessible, fairer market economy that enhances economic growth and development.

A set of factors as the protection of individual property rights, putting labour laws, facilitating market creation and access for the poor and marginalized groups enhances economic growth (Louis & Deval, 2013, p. 9).

4.6 Economic Growth & Control of Corruption

Control of corruption refers to the control of which public power is used for private gains, which includes petty and grand sorts of corruption, and capturing the country by elites and private interest (Xuehul, Haider, & Juzhong, 2014, p. 4).

Corruption affects a set of transmission channels, as investment (which includes FDI), entrepreneurship, competition, government efficiency. Besides that, corruption has an effect on other important indicators of economic growth as the environment quality, income distribution and personal health and safety status, which have a significant effect on economic welfare. (OECD, 2013, p. 1).

Corruption leads to decreasing FDI flows by lowering its profitability. Corruption causes a tax revenues decrease, as it becomes an obstacle on the governments' ability to make sufficient level of public services for private sector investment. Corruption may negatively direct resources from human capital formation and more productive investments to less productive investments and thus decreasing the economic growth of countries (Emin & Alpaslan, 2017, p. 365).

Corruption has a negative effect on competition by putting different restrictions on competition to keep the established firms privileges, corruption can restrict effective competition and so technological development. (Emin & Alpaslan, 2017, p. 365).

4.7 Which Comes First Economic Growth or Governance?

It concerns with economic growth impact on good governance or good governance impact on economic growth. The question is which comes first in economic development good governance or economic growth?

- a) Some studies found the differences in long run economic growth performance are due to differences in institutional quality. Also,
- b) Some studies found that richer countries are capable of affording the costs that related to providing a competent government bureaucracy, good rules of law and environment in which corruption aren't not

concerned (Daniel & Aart, 2003, p. 10).

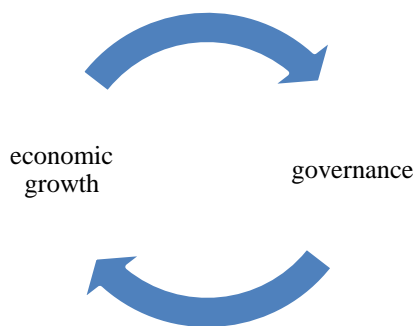


Figure 1. Economic growth & governance

The direction of economic growth and governance causation is a debated issue; some authors suggest that growth comes first then governance comes as (Glaeser et al., 2004) found that human capital is a cause of economic growth than are the institutions factors.

Also, Rodrik (2008) found that there are many countries that have a high economic growth although they suffer from poor governance. So, he suggests that governance is generally not a necessity for higher economic growth.

Rodrik study suggests that governance doesn't always need economic growth except in rare cases where weak governance is considered as an obstacle for economic growth.

While other studies suggest that governance comes first then growth comes because governance is an necessity for achieving economic growth as (Kaufman & Kraay, 2002) they found a) better governance has a positive and significant impact on higher economic growth. b) a negative and insignificant effect of economic growth on governance.

This refers to the importance of good governance for economic development and not vice versa.

Also, Paitoon (2018) study found that good governance has an effect on economic growth especially in developing countries. As good governance improve country's competitiveness by enhance efficient use of the country's resources.

4.8 Does the Relationship between Governance and Economic Growth Differ According the Level of Development?

The relationship between governance and economic growth differ according to the level of development is a debated issue. The first argument is that there is a positive effect of governance on economic growth and this effect is the same for developing and developed countries.

The result refers to that the only difference between this effect on developing and developed countries are the size of the effect, not in the direction of it. The size differences can often be analysed by factors of development status.

For example (Marie, 2010) analysed the effect of governance on economic growth and the degree of differing this effect according to development country status. It found that good governance affects economic growth positively.

The result refers to that the only difference between this effect on developing and developed countries are the size of the effect, not in the direction of it.

Also the study concluded that these differences in size can be due to factors other than development status.

(Elisa & Sara, 2011), study examined the effect of good governance on economic growth over sixty years among countries at different development stages. It found that governance affects economic growth positively. The effect is the same for developing and developed countries.

The other point of view suggests that the effect of governance on economic growth is depended on the development level. For example, (Bssam, 2013) study found that countries' levels of development have an impact on the effect of governance on economic growth. In high developed countries, the effect of governance on economic growth was significant after the onset of the global economic crisis except for the effect of voice

and accountability on economic growth, but in medium developed countries, there was insignificant effect of governance indicators on economic growth after the beginning of the global economic crisis. In low developed countries, control of corruption was the only indicator that had a significant impact on economic growth after the onset of the global economic crisis.

4.9 Does Crisis Affect the Relationship between Governance and Economic Growth

(Hasan & Eridgan, 2017) study found that governance has a positive effect on economic growth. Economic crisis changes governance of countries which in turn has a positive impact on economic growth of countries.

(Bassam, 2013) study analysed whether the effect of governance on economic growth happens during economic crisis or only during non-crisis periods.

It found no changes in this relationship during crisis and during non crisis: effect of governance on economic growth is significant in both periods (before and after the global economic crisis 2008).

5. Governance in MENA

If we compare the governance of MENA region to other regions in the world, it ranks below the global average. MENA scores average refers to that the region does not rank above the 50th percentile in any of the 6 indicators of governance (voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, Rule of law and control of corruption)

5.1 Voice and Accountability

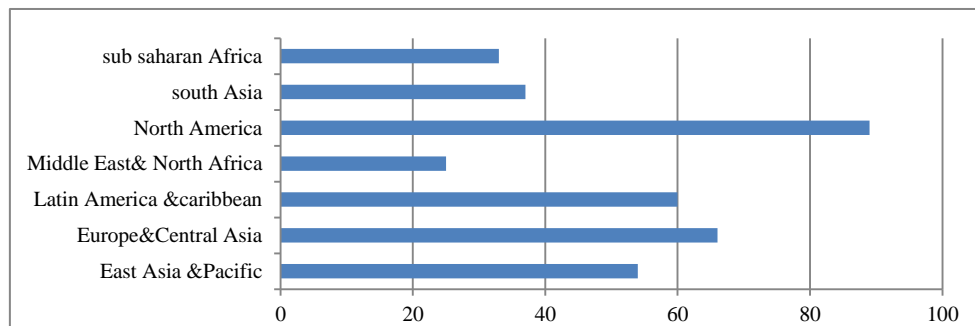


Figure 2. Voice and accountability- 2017

Source: world governance database.

For voice and accountability indicator, in 2017. If compared to the rest of the world, MENA region was the worst rank than the other regions.

Within MENA region, there is wide variation in voice and accountability indicator. In 2017, 18 out of 20 MENA countries ranked below the 50th percentile, 14 of which ranked below the 25th percentile.

Only two countries ranked above the 50th percentile, Israel and Tunisia. So, voice and accountability consider the main problem in MENA.

5.2 Political Stability and Absence of Violence

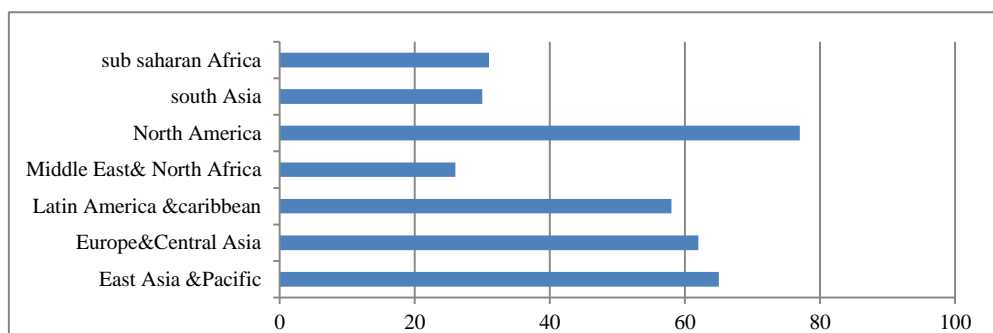


Figure 3. Political stability and absence of violence -2017

Source: World governance database.

In 2017 and for political stability, MENA region was the worst rank than the other regions.

In 2017, 17 out of 20 MENA countries ranked below the 50th percentile, 14 of which ranked below the 25th percentile.

Only three countries ranked above the 50th percentile, United Arab Emirates, Qatar and Oman.

5.3 Government Effectiveness

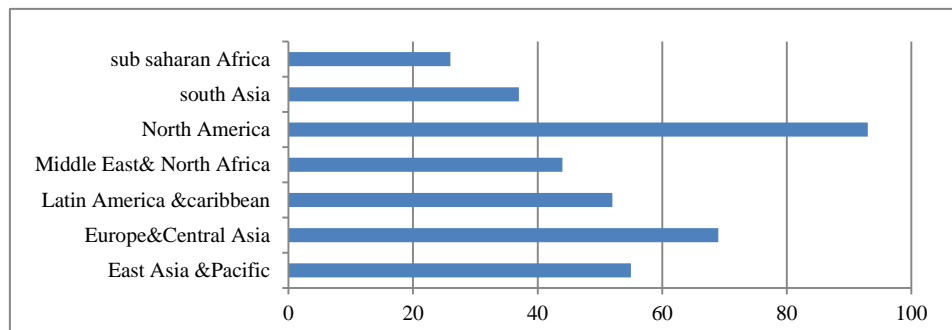


Figure 4. Government effectiveness- 2017

Source: World governance database.

For government effectiveness, if we compare MENA region to other regions in the world, they rank below the global average.

MENA countries lower than East Asia &Pacific, European and central Asia, latin America and Caribbean and North America. There is only two regions rank lower than MENA: sub Saharan Africa and South Asia.

In 2017, 12 out of 20 MENA countries ranked below the 50th percentile, 5 of which ranked below the 25th percentile.

8 countries ranked above the 50th percentile 2 of which ranked above the 75th percentile, United Arab Emirates and Israel. So, MENA countries made improvement in government effectiveness indicator.

5.4 Regulatory Quality

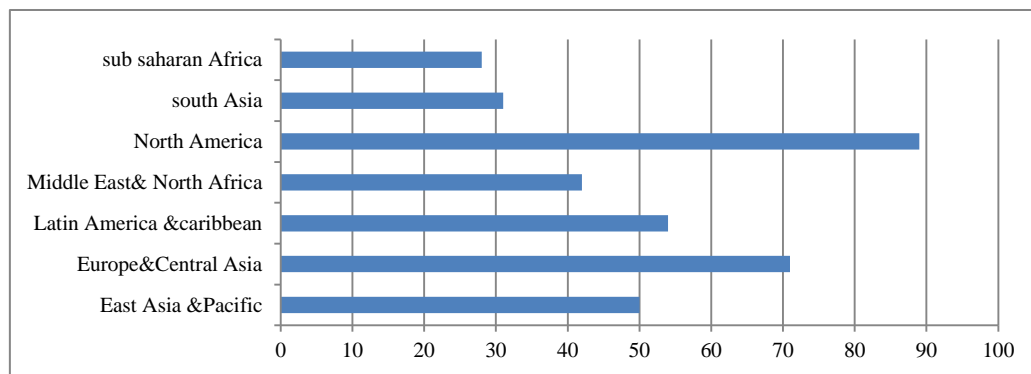


Figure 5. Regulatory quality- 2017

Source: World governance database.

For Regulatory Quality, in comparison with the other regions in the world. MENA ranked below North America, latin America and Caribbean, European and central Asia and East Asia and pacific. And ranked above sub Saharan Africa and south Asia.

In 2017, 12 out of 20 MENA countries ranked below the 50th percentile, 8 of which ranked below the 25th percentile.

8 countries ranked above the 50th percentile, only 2 of them ranked above the 75th percentile: united Arab Emirates and Israel.

5.5 Rule of Law

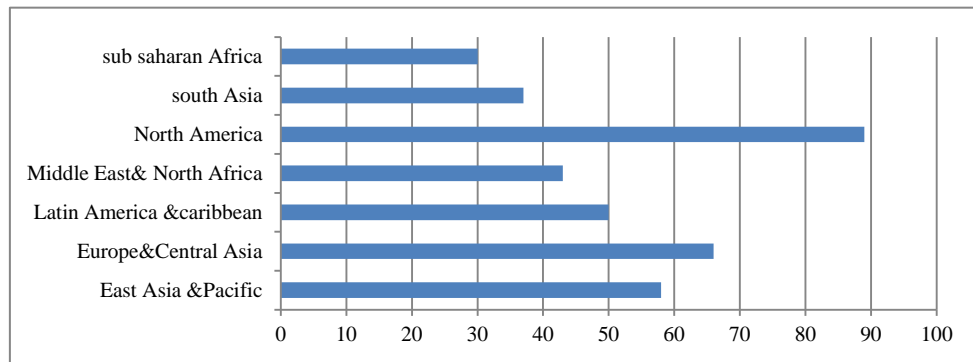


Figure 6. Rule of law- 2017

Source: World governance database.

For Rule of law, MENA ranked below North America, latin America and Caribbean, European and central Asia and East Asia and pacific and ranked above sub Saharan Africa and south Asia.

In 2017, 12 out of 20 MENA countries ranked below the 50th percentile, 8 of which ranked below the 25th percentile.

8 countries ranked above the 50th percentile, only 3 countries ranked above the 75th percentile Qatar, United Arab Emirates and Israel.

5.6 Control of Corruption

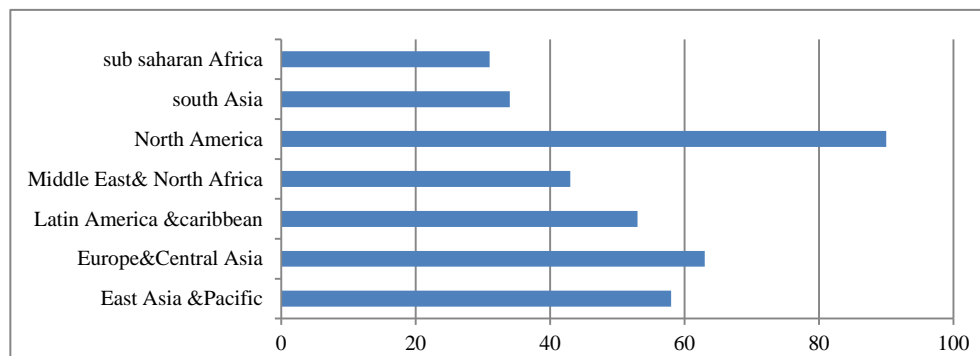


Figure 7. Control of corruption-2017

Source: World governance database.

For control of corruption, MENA ranked below North America, Latin America and Caribbean, European and central Asia and East Asia and pacific and ranked above Sub Saharan Africa and South Asia.

In 2017, 11 out of 20 MENA countries ranked below the 50th percentile, 7 of which ranked below the 25th percentile.

9 countries ranked above the 50th percentile. 3 countries ranked above the 75th percentile: United Arab Emirates, Qatar and Israel. These 9 countries are classified as very high and high human Development.

6. Governance Challenges in MENA

6.1 Challenges Related to Voice and Accountability

Table 1. Democracy index in MENA- 2017

country	Rank	Overall score	Electoral process & Pluralism	Functioning of government	Political Participation	Political culture	Civil liberties
Israel	30	7.79	9.17	7.50	8.89	7.50	5.88
Tunisia	69	6.32	6.0	5.71	7.78	6.25	5.88
Morocco	101	4.87	5.25	4.64	4.44	5.63	4.41
Lebanon	104	4.72	3.50	2.57	7.22	5.63	4.71
Iraq	112	4.09	4.33	0.07	7.22	5.00	3.82
Jordan	117	3.87	3.58	4.29	3.89	4.38	3.24
Kuwait	119	3.85	3.17	4.29	3.89	4.38	3.53
Algeria	128	3.56	2.58	2.21	3.89	5.00	4.12
Egypt	130	3.36	3.58	3.21	3.33	3.75	2.94
Qatar	133	3.19	0.0	4.29	2.22	5.63	3.82
Oman	143	3.04	0.0	3.93	2.78	4.38	4.12
Djibouti	145	2.76	0.42	1.79	3.33	5.63	3.53
Bahrain	146	2.71	0.83	3.21	2.78	4.38	2.35
United Arab Emirates	147	2.69	0.0	3.57	2.22	5.00	2.65
Iran	150	2.45	0.0	3.21	4.44	3.13	1.47
Libya	154	2.32	1.00	0.36	1.67	5.63	2.94
Sudan	155	2.15	0.0	1.79	2.78	5.00	1.18
Yemen	156	2.07	0.0	0.0	4.44	5.00	0.88
Saudi Arabia	159	1.93	0.0	2.86	2.22	3.13	1.47
Syria	166	1.43	0.0	0.0	2.78	4.38	0.0

Source: The Economist Intelligence Unit.

According to the Democracy Index 2017, Israel (Rank 30 out of 167 countries) and Tunisia (Rank 69) are the only 2 countries in MENA categorized in flawed democracies.

Three countries in MENA region classified as Hybrid regime: Morocco, Lebanon and Iraq. The remaining countries of the MENA are categorized as Authoritarian regimes with the lowest scores in Yemen (Rank 156), Saudi Arabia (Rank 159) and Syria (Rank 166).

The main challenges concerned to voice and accountability in MENA region are:

- Civil society continues to perform under a range of restrictions in MENA region such as restrictions on their ability to work. There are also tight restrictions on funding sources, especially if funds origin is from abroad. (UNDP, 2010, p. 24).
- Citizens' trust in the government is very low and thus their belief that the accountability of government is also very low. Also, A lack of awareness among citizens of the legislation that exists in the country. (UNDP, 2010, p. 25).
- A decrease in women participation, ethnic and religious minorities. In most MENA countries, the political arena is always dominated by men from certain ruling group parties (IFES, 2017, p. 17).
- Democracy does not necessarily guarantee an accountable democratic transition. In many countries in the MENA region, governments used the legitimacy conferred by elections, which often contains repressive laws on human rights, civil society, press freedom and political party formation (IFES, 2017, p. 18).

6.2 Challenges Related to Political Stability

Political instability is one of the most important challenges to access good governance in MENA region

The Arab spring led to a set of changes in political regime and political domestic instability and insecurity in this region. (Laura, Bassam, & Richard, 2014, p. 4).

Some of the political causes of political instability in MENA region:

- Governments have been overthrown in four countries: Tunisia, Egypt, Libya and Yemen
Tunisia was the first country in Arab spring, its president Zien El Abidine fled in January 2011, In Egypt, President Hosni Mubarak resigned in February 2011 after the protests in Tahrir Square which end his years of presidency.

Libyan leader Mummar Gaddafi was overthrown after international military intervention and was killed in October 2011, Yemen president Ali Abdullah Saleh resigned and his successor Abdal Rabah Mansour AL Hadi formally was instead of him in February 2012. (Erzsebet et al., 2012, p. 1).

- Syria protests wanted resigning of President Bashar El Assad in 2011. The demonstrations led to a violent conflict (civil War) between Assad loyalist and opposition forces. (Erzsebet et al., 2012, p. 6).
- Iran's nuclear programme would have very negative effect on the MENA region, especially on the region's security.

6.3 Challenges Related to Government Effectiveness

The MENA region is characterized by large public sectors, centralized governments and a complex regulatory structure and regulations.

The MENA public sector represents 6 percent of the total population or 18 percent of the total labour force. While those ratios are within middle income countries' range countries, the evidence refers to representing public sector wage bill in the MENA region 11.1 percent of GDP compared to 8.5 percent for Middle income countries. (Nasser & Hala, 2003, p. 14).

The MENA region public employee wage bill is one of the highest wage bills in the world. So, administrative reforms like facilitate and implement e government could have a great impact on saving resources through reduction in the cost of government.

Despite that, E- Government can have some advantages in MENA countries in different ways, first enhancing government agencies efficiency. Second, sharing information and ideas among all government agencies and departments to construct one mega database. Third, building confidence among governments and citizens which is an important factor for good governance. Fourth, enhancing transparency, accuracy and facilitating information transformation among government and citizens. Finally, saving resources and efforts.

On the other side, there are various challenges that can delay development of e government application in MENA region:

- Weakness of ICT infrastructure is one of the important barriers for e-government application in MENA region. Also, privacy and security are important barriers in application of e-government.
- Lack of cooperation between all partners is one of the important obstacles in the process of e government application to have a successful e-government system.
- Lack of qualified personnel is an important obstacle to an e- government application.
- Lack of financial resources is a significant barrier to the application of e-government in MENA region. (Alshehri & Drew, 2010, pp. 83-86).

6.4 Challenges Related to Rule of Law

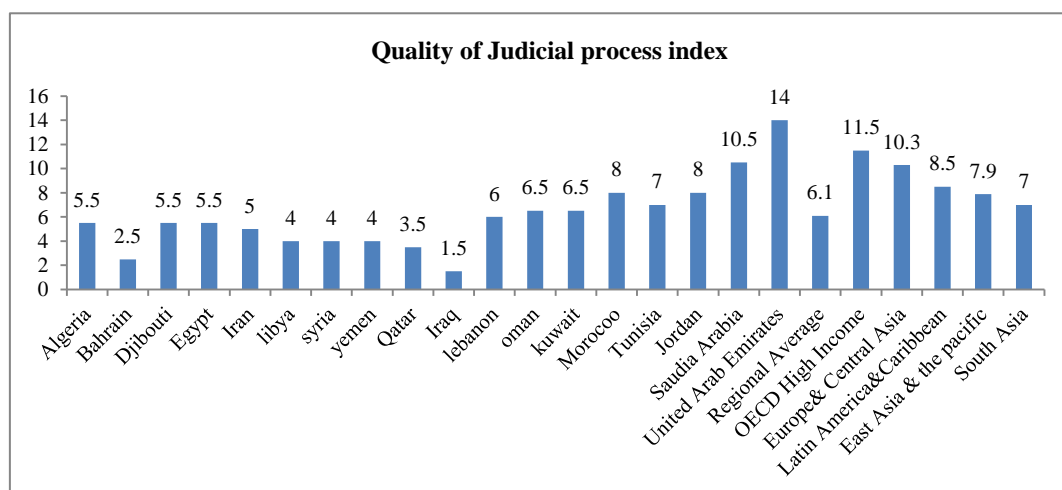


Figure 8. Quality of judicial process

Source: Doing Business database.

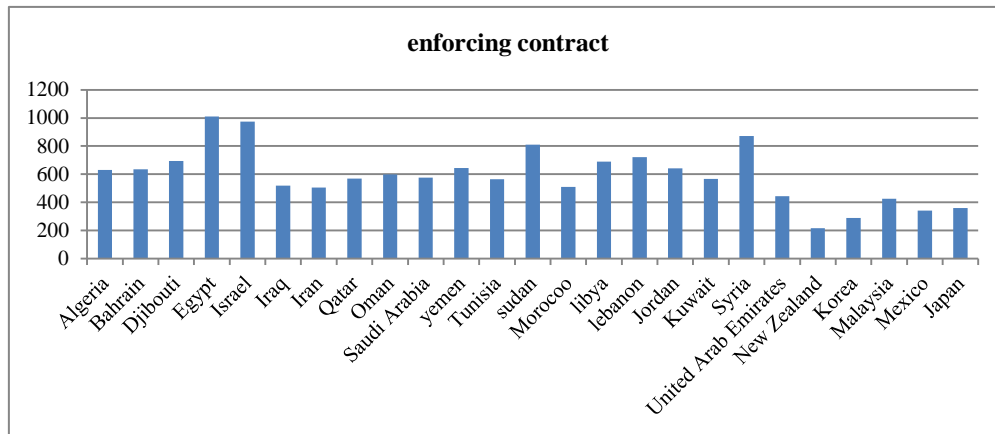


Figure 9. Enforcing contract in MENA region

Source: Doing Business database.

In this context, The United Arab Emirates made reforms to facilitate contract enforcement by the implementation of electronic services, introduction of a new case management office with the complete court and the development of the services that allowing litigants to file and tract motions in an online way.

Iran achieved electronic filing of documents, text message notification and electronic case management systems and these developments in Iran enhance Iran's rank.

Saudi Arabia developed its courts computerisation and introduced electronic filing of documents.

6.5 Challenges Related to Regulatory Quality

The main obstacle that faces MENA region concerning regulatory quality is overregulation that can decreases investment by increasing the start-up and operation business costs. There are a lot of cumbersome procedures that represent costs for actual and potential investors.

In MENA region, customs processing is an important obstacle on the competitiveness of international firms. MENA entrepreneurs find that a business registration is a long procedure that imposes a lot of times and is often very costly. (World Bank, 2010, pp. 94-95).

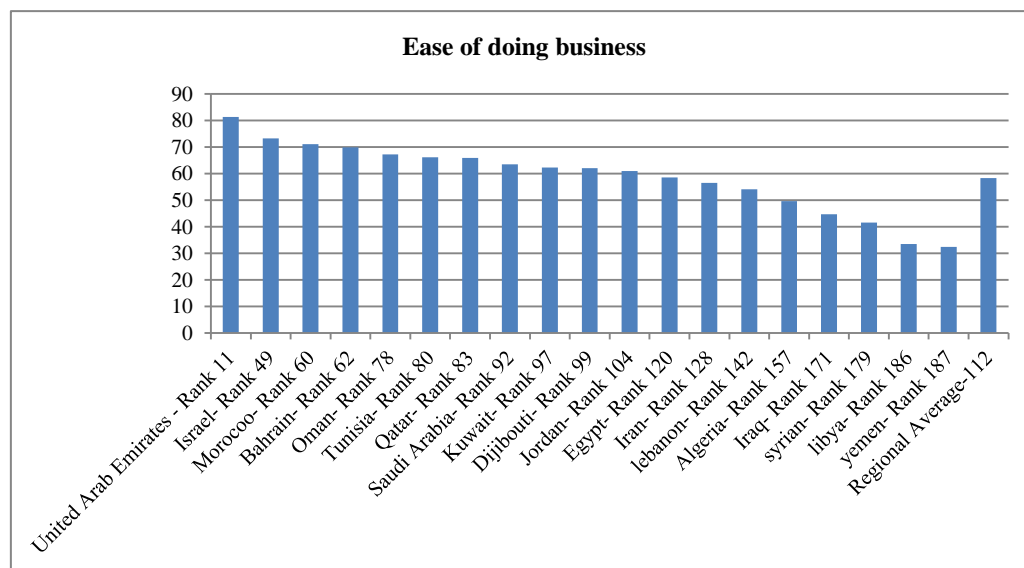


Figure 10. Ease of doing business- 2019

Source: Doing Business database.

Comparing to other regions, MENA is one of the lowest region with average score (58.3) while Europe & Central Asia score is (72.34) and East Asia & Pacific score is (63.41).

MENA countries rank 112 in terms of ease of doing business indicator. These areas are ranking in starting a business indicator (Rank 113), enforcing contracts indicator (Rank 105), getting credit indicator (Rank 126) and trading across borders indicator (Rank 121).

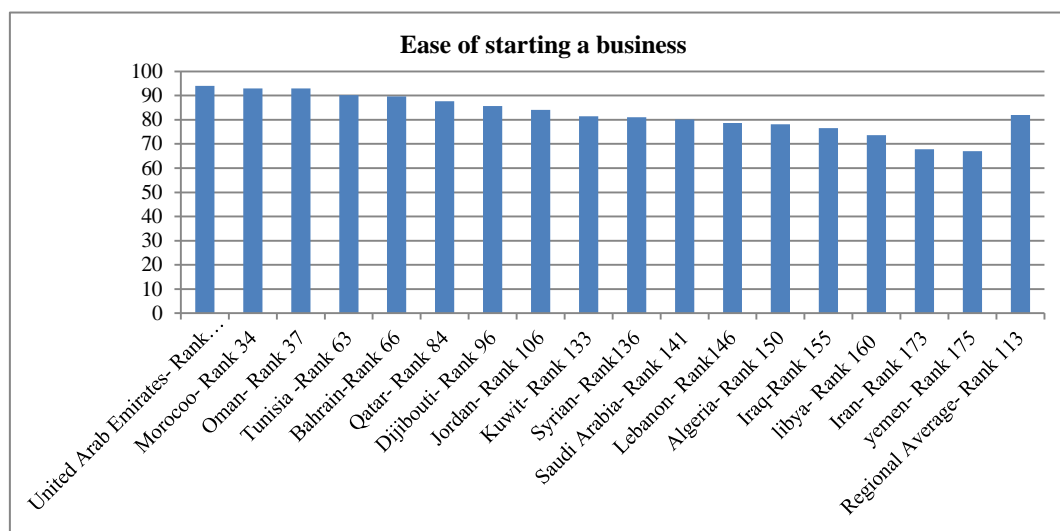


Figure 11. Ease of starting a business- 2019

Source: Doing Business database.

For starting a business indicator (2019) MENA score is 82 which is relatively low compared to other regions like East Asia & Pacific score (83.29), South Asia score (85.44) and Europe & Central Asia score (90.02).

Although a number of MENA economies adopted reforms for starting a business, the 2019 doing business report only ranks United Arab Emirates, Oman & Morocco in the top 50 countries.

We find that a great number of MENA economies ranks above 100 like: Jordan, Kuwait, Syrian, Saudi Arabia, Lebanon, Algeria, Iraq, Libya, Iran and Yemen.

6.6 Challenges Related to Control of Corruption

Table 2. CPI (Corruption Perception Index) in MENA (2012-2017)

CPI	2012	2013	2014	2015	2016	2017
United Arab Emirates	68	69	70	70	66	71
Israel	60	61	60	61	64	62
Qatar	68	68	69	71	61	63
Jordan	48	45	49	53	48	48
Oman	47	47	45	45	45	44
Bahrain	51	48	49	51	43	36
Kuwait	44	43	44	49	41	39
Tunisia	41	41	40	38	41	42
Algeria	34	36	36	36	34	33
Egypt	32	32	37	36	34	32
Iran	28	25	27	27	29	30
Lebanon	30	28	27	28	28	28
Iraq	18	16	16	16	17	18
Libya	21	15	18	16	14	17
Morocco	37	37	39	36	37	40
Yemen	23	18	19	18	14	16
Syria	26	17	20	18	13	14
Saudia Arabia	44	46	49	52	46	49
Sudan	13	11	11	12	14	16
Djibouti	36	36	34	34	30	31
Average	38.45	36.95	37.95	38.35	35.95	36.45

Source: Transparency International.

Corruption has raised during the period (2012-2017) in MENA region.as CPI decreased from 38.45 in 2012 to 36.45 in 2017. Countries like Syria, Djibouti, Yemen, Lebanon, Kuwait, Qatar and Bahrain failed in decreasing corruption during the period (2012-2017), while other countries like Egypt, Tunisia, Jordan and Algeria stabilized corruption during the period 2012-2017.

There are two classes of corruption in the public sector: high level corruption which called grand corruption, where top level policymakers use the governance process for financial gains(failure of policy environment) and the second type is low level corruption or bureaucratic corruption. A failure in accountability structures can leads to both of them (World Bank, 2003, p. 97).

There are many reasons that are obstacles to the efforts of ending corruption in MENA region:

1) Political factors: political instability results in raising corruption. In Syria, corruption increases during the period (2012-2017). CPI decreased from 26 in 2012 to 14 in 2016. Also, In Yemen, Consumer Price index decreased from 23 in 2012 to 16 in 2016.

2) Economic factors: a decrease in income level can lead to corruption by directing the work ethics of individuals or organizations to illegal works in order to ensure income increment that make an important effect on the living conditions of individuals. (Salih & Ali, 2016, p. 121).

Also, Inflation lead to unequal distribution of the national income and the diminishment of the real income level of a large part of the Society. Inflation could lead to reduction in real income for individuals and decrease in their purchasing power . So they may tend towards illegal activities such as bribery, fraud in order to satisfy their basic needs and ensure certain financial level. (Salih & Ali, 2016, p. 121).

7. Estimating the Impact of Governance on Economic Growth and Human Development

This section deals with the analysis, measurement and identification of the impact of governance on economic growth and human development in 20 countries during the period (1996-2017) using E views 10.

Table 3. Variable specification

Variables Nature		Variables	Symbol
Independent Variable	Governance	Voice and accountability	X ₁
		Political stability	X ₂
		Government effectiveness	X ₃
		Regulatory Quality	X ₄
		Rule of law	X ₅
		Control of corruption	X ₆
Dependent Variable	Economic growth	GDP growth	Y ₁
	Human Development	Human Development Index	Y ₂

Since our study is based on data of 20 countries during the period (1996-2017) we used panel data (longitudinal data) which combines cross sectional data and time series data by applying the three longitudinal data models.

- Pooled Regression Model
- Fixed effect Model
- Random effect Model

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + u_{it} \quad (1)$$

$$Y_{it} = \beta_{0i} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + u_{it} \quad (2)$$

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \varepsilon_i + u_{it} \quad (3)$$

Where:

Y_{it} : GDP growth/ Human development for country i during the period t;

X_{1it} : Voice and accountability for country i during the period t;

X_{2it} : Political stability for country i during the period t;

X_{3it} : Government effectiveness for country i during the period t;

X_{4it} : Regulatory Quality for country i during the period t;

X_{5it} : Rule of law for country i during the period t ;

X_{6it} : control of corruption for country i during the period t ;

ε_i : the random error for each country;

u_{it} : the random error from the regression model.

Table 4. Variable descriptive analysis

Variables	Sample Size	Descriptive Statistics				
		Min Value	Max Value	Mean	Median	Standard Deviation
Voice and accountability (X_1)	440	-2.100	0.800	-0.996	-1.000	0.597
Political stability (X_2)	440	-3.200	1.200	-0.657	-0.525	1.050
Government effectiveness (X_3)	440	-2.100	1.500	-0.278	-0.235	0.778
Regulatory Quality (X_4)	440	-2.930	1.300	-0.367	-0.200	0.855
Rule of law (X_5)	440	-2.690	1.300	-0.331	-0.215	0.794
Control of corruption (X_6)	440	-2.390	1.600	-0.307	-0.400	0.773
Economic growth (Y_1)	440	-62.080	123.14	4.275	4.085	9.227
Human Development (Y_2)	440	0.353	0.932	0.688	0.719	0.132

From the table above we found that the value of the standard deviation is greater than the mean for all the variables and the difference between the maximum and minimum (range) is too large which indicates that the data suffers from the existence of some extreme values outliers. This may be due to the difference in characteristics of the countries over time periods. This gives initial indication that the appropriate model would be fixed effects model or Random effect model.

Table 5. Correlation matrix

Variables	Correlation	X_1	X_2	X_3	X_4	X_5	X_6	Y_1	Y_2
Voice and accountability (X_1)	r p-value	1							
Political stability (X_2)	r p-value	0.171 0.000	1						
Government effectiveness (X_3)	r p-value	0.574 0.000	0.590 0.000	1					
Regulatory Quality (X_4)	r p-value	0.565 0.000	0.553 0.000	0.829 0.000	1				
Rule of law (X_5)	r p-value	0.556 0.000	0.640 0.000	0.856 0.000	0.813 0.000	1			
Control of corruption (X_6)	r p-value	0.534 0.000	0.629 0.000	0.860 0.000	0.803 0.000	0.861 0.000	1		
Economic growth (Y_1)	r p-value	-0.001 0.989	-0.002 0.970	-0.004 0.928	-0.011 0.811	0.008 0.870	0.011 0.810	1	
Human Development (Y_2)	r p-value	0.398 0.000	0.448 0.000	0.702 0.000	0.596 0.000	0.708 0.000	0.667 0.000	0.016 0.733	1

This table shows that there is no statistically significant relation between governance and economic growth at significant level 5%. As the correlation coefficient exceed the absolute value ($p - \text{value} < \alpha = 0.05$).

Also, there is a positive statistically significant relation between governance and human development (Y_2) at significant level of 5% as the correlation coefficient less than the absolute value ($p - \text{value} = 0.000 < \alpha = 0.05$).

Table 6. Unit root tests

Variables	Diff.	Levin, Lin & Chu t test		ADF - Fisher Chi-square test		PP - Fisher Chi-square test	
		Value	p-value	Value	p-value	Value	p-value
Voice and accountability	Level	-3.73179	0.0001	136.752	0.0000	213.058	0.0000
(X ₁)	1 st Diff.	-33.6472	0.0000	409.386	0.0000	531.426	0.0000
Political stability	Level	-4.57434	0.0000	120.051	0.0000	168.964	0.0000
(X ₂)	1 st Diff.	-29.2283	0.0000	449.855	0.0000	493.107	0.0000
Government effectiveness	Level	-1.35814	0.0072	107.859	0.0000	219.988	0.0000
(X ₃)	1 st Diff.	-50.093	0.0000	412.524	0.0000	486.582	0.0000
Regulatory Quality	Level	-4.93221	0.0000	102.05	0.0000	172.566	0.0000
(X ₄)	1 st Diff.	-33.5447	0.0000	401.95	0.0000	505.398	0.0000
Rule of law	Level	-5.0908	0.0000	148.03	0.0000	198.349	0.0000
(X ₅)	1 st Diff.	-37.6344	0.0000	456.284	0.0000	481.814	0.0000
Control of corruption	Level	-5.4761	0.0000	134.808	0.0000	250.93	0.0000
(X ₆)	1 st Diff.	-37.7547	0.0000	456.88	0.0000	523.052	0.0000
Economic growth	Level	-9.42809	0.0000	193.138	0.0000	447.815	0.0000
(Y ₁)	1 st Diff.	-25.4809	0.0000	463.206	0.0000	464.991	0.0000
Human Development	Level	-8.34516	0.0000	76.468	0.0005	101.009	0.0000
(Y ₂)	1 st Diff.	-7.42637	0.0000	188.422	0.0000	199.488	0.0000

This table shows the stability of all the variables of the study in their original level and are stable when take the first differences as the value is less than the absolute value ($p\text{-value} < \alpha = 0.05$).

So the time series of the variables integrated at the same level i.e from I(0) which mean it is accepted to apply multiple regression model using OLS to determine the relation between dependent and independent variables.

7.1 Determine the Impact of Governance on Economic Growth

Table 7. Pooled, fixed and Random Models summary

Variables	Pooled Regression Model				Fixed Effect Model				Random Effect Model			
	Coefficients		t-test		Coefficients		t-test		Coefficients		t-test	
	Value	Std. Error	t	p-value	Value	Std. Error	t	p-value	Value	Std. Error	t	p-value
Constant	4.2127	1.0481	4.0194	0.0001	5.8763	1.5334	3.8324	0.0001	4.2127	1.0579	3.9819	0.0001
X ₁	-0.0253	0.9852	-0.0257	0.9795	0.9537	1.4342	0.6650	0.5064	-0.0253	0.9944	-0.0254	0.9797
X ₂	-0.1281	0.5950	-0.2152	0.8297	-0.0425	0.7944	-0.0534	0.9574	-0.1281	0.6006	-0.2132	0.8313
X ₃	-0.4901	1.3388	-0.3661	0.7145	-0.5071	1.4929	-0.3397	0.7343	-0.4901	1.3514	-0.3627	0.7170
X ₄	-0.5823	1.0204	-0.5706	0.5685	0.4071	1.2674	0.3212	0.7482	-0.5823	1.0300	-0.5653	0.5722
X ₅	0.4888	1.3109	0.3729	0.7094	1.0996	1.5908	0.6912	0.4898	0.4888	1.3233	0.3694	0.7120
X ₆	0.7669	1.3171	0.5822	0.5607	0.9986	1.4399	0.6935	0.4884	0.7669	1.3295	0.5768	0.5644
Model Summary												
R ²	0.001888				0.027623				0.001888			
Adjusted R ²	-0.011943				-0.031095				-0.011943			
Std. Error	9.281491				9.368912				9.281491			
F	0.136497				0.470433				0.136497			
p-value	0.991471				0.987227				0.991471			

To determine the appropriate panel model we used:

- Wald test (Restricted F test)
- Breusch pagan LM (lagrange Multiplier test)
- Hausman test

Table 8. Wald, LM and Hausman tests

Wald test		LM (Lagrange Multiplier) test		Hausman test		Co-integration test (Kao test)	
F	p-value	Breusch-Pagan	p-value	χ^2	p-value	t	p-value
0.576687	0.9226	4.013655	0.0451	3.737952	0.7121	2.54976	0.0054

Determining the appropriate panel model:

a) Wald test (f test):

p-value = 0.9226 > $\alpha = 0.05$ which indicate that pooled OLS model is better than the fixed effect model.

b) Breusch pagan test statistic:

p-value = 0.0451 < $\alpha = 0.05$ which indicate that Random effect model is better than pooled OLS model.

c) Hausman test statistic:

p-value = 0.7121 < $\alpha = 0.05$ which indicate that random effects model is better than fixed effect model.

Therefore, the best estimating model for panel regression to determine the relation between governance and Economic growth is Random effect model.

According to Random effect model, no significant impact of governance on economic growth.

7.2 Determining the Impact of the Financial Crisis on the Relationship between Governance and Economic Growth

In order to determine the impact of the 2008 global financial crisis on the relationship between governance (independent variables) and the economic growth (dependent variables), the study period was divided into two periods (1996-2007) and (2008-2017) the results were as follows: the correlation between the indicators of the governance and the economic growth was insignificant at a significant level of 0.05 during the two study periods (1996-2007) and (2008-2017) indicating that financial crisis didn't affect the relationship between governance and economic growth.

7.3 Determine the Impact of Governance on Human Development

Table 9. Pooled, fixed and random models summary

Variables	Pooled Regression Model				Fixed Effect Model				Random Effect Model			
	Coefficients		t-test		Coefficients		t-test		Coefficients		t-test	
	Value	Std. Error	t	p-value	Value	Std. Error	t	p-value	Value	Std. Error	t	p-value
Constant	0.7122	0.0102	70.1709	0.0000	0.6764	0.0057	119.310	0.0000	0.6794	0.0185	36.7232	0.0000
X ₁	-0.0128	0.0095	-1.3405	0.1808	-0.0195	0.0053	-3.6803	0.0003	-0.0185	0.0053	-3.5125	0.0005
X ₂	-0.0080	0.0058	-1.3818	0.1678	-0.0084	0.0029	-2.8679	0.0043	-0.0085	0.0029	-2.8935	0.0040
X ₃	0.0660	0.0130	5.0895	0.0000	0.0160	0.0055	2.9022	0.0039	0.0173	0.0055	3.1350	0.0018
X ₄	-0.0157	0.0099	-1.5856	0.1136	0.0086	0.0047	1.8454	0.0657	0.0098	0.0047	2.1022	0.0361
X ₅	0.0725	0.0127	5.7088	0.0000	0.0278	0.0059	4.7321	0.0000	0.0302	0.0059	5.1613	0.0000
X ₆	0.0189	0.0128	1.4785	0.1400	-0.0105	0.0053	-1.9729	0.0492	-0.0090	0.0053	-1.6906	0.0916
Model Summary												
R ²	0.543179				0.935123				0.128963			
Adjusted R ²	0.536849				0.931205				0.116893			
Std. Error	0.089883				0.034641				0.035467			
F	85.80900				238.6928				10.68478			
p-value	0.000000				0.000000				0.000000			

Determining the appropriate panel model:

Table 10. Wald, LM and Hausman tests

Wald test		LM (Lagrange Multiplier) test		Hausman test		Co-integration test (Kao test)	
F	p-value	Breusch-Pagan	p-value	χ^2	p-value	t	p-value
131.6381	0.0000	2324.982	0.0000	26.894410	0.0002	-3.006787	0.0013

d) Wald test (f test):

p-value = 0.000 < $\alpha = 0.05$ which indicate that fixed effect model is better than the pooled OLS model.

e) Breusch pagan test statistic:

p-value = 0.000 < $\alpha = 0.05$ which indicate that Random effect model is better than pooled OLS model.

f) Hausman test statistic:

p-value = 0.0002 < $\alpha = 0.05$ which indicate that fixed effects model is better than random effect model.

Therefore, the best estimating model for panel regression to determine the relation between governance and human development is fixed effect model.

According to fixed effect model, the governance has a positive significant impact on human development.

Moreover, it found that these variables combined interpreted 93.5% of the changes in human development, while the remaining 6.5% can be attributed to other factors (not included in our study).

The value of adjusted R^2 (0.931205) is the same as R^2 (0.935123) which indicates that the high R^2 is not due to the increase in the number of independent variables but because of the importance of each variable in the model.

We can rely on the model in predicting the changes in human development as p-value = 0.000 < $\alpha = 0.05$. Also, the value of the standard error of the estimate is very low (0.034641) which indicate the goodness of the model. There is no collinearity between the independent variables in the model as variance inflation factor (VIF) for each variable is less than 10. Which indicate that the correlation between the variables didn't affect the regression model.

Main findings in determining the impact of governance on Economic growth and Human Development:

- 1) There is no relationship between governance and economic growth in MENA countries.
- 2) Only 5 countries out of 20 countries show little relationship in one or more indicators of governance (Algeria, Sudan, Iraq, Djibouti and Syria).
- 3) The indicator of governance that affect economic growth in Algeria is political stability.
- 4) The indicators of governance that affect the economic growth in Sudan is government effectiveness.
- 5) The indicators of governance that affect the economic growth in Iraq is the Government Effectiveness, Regulatory Quality and Rule of Law.
- 6) The indicators of governance that affect economic growth in Djibouti is voice and accountability.
- 7) The indicator of governance that affect economic growth in Syria is government effectiveness.
- 8) No impact of the global financial crisis in 2008 on the relationship between governance and economic growth in all study countries except the United Arab Emirates, Iraq.
- 9) The most countries (3 out of 5 countries) that have a relationship between the indicators of governance and economic growth are countries that are at the low level of human development.
- 10) There is significant relationship between governance and human development.

8. Conclusion

This paper attempts to answer four questions: - to what extent governance affect economic growth in MENA – whether the financial crisis affects the relationship between governance and economic growth – does the relationship between governance and economic growth vary from country to country based on each country's level of development – to what extent governance affect human development in MENA countries.

To examine these questions, we used data of 20 countries during the period (1996-2017) we used panel data (longitudinal data) by applying the three longitudinal models: pooled regression model, fixed effect model and Random effect model.

The results illustrates that there is no relationship between governance and economic growth in MENA countries and no impact of the financial crisis on the relationship between governance and economic growth.

Also, the results illustrate that there is a significant relationship between governance and human development in MENA.

These results may be due to that most of MENA countries have achieved fragile levels of economic growth that doesn't depend on good governance. Which consider unsustainable economic growth that depends mainly on abundance of natural resources.

While in order to achieve better quality of life through enhance human development this will depend on existence of good governance.

Also, this paper found that most countries (3 out of 5 countries) that have a relationship between one or more indicators of governance and economic growth are countries that are at the low level of human development.

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