RULE OF LAW AND CONTROL OF CORRUPTION IN THE MIDDLE EAST ARABIC COUNTRIES

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Abstract

The main objective of the research is to configure Arabic countries of the Middle East from the standpoint of governance with a focus on the rule of law and control of corruption. We are interested in differences between countries of the region, as well as where the sample fits in the world spectrum. Conclusions are based on analysis of distribution of composite indexes provided by the World Bank, World Justice Project and Transparency International. We also debate how rule of law and control of corruption promote economic growth.

Key words: *corruption, diversity, governance indicators, growth, Middle East, rule of law*

INTRODUCTION

This paper is a part of a series of papers, an objective of which is to configure the region of Western Asia in different political economy categories such as population, capital income, human development (Alhanaqtah 2016a), economic globalization, trade, foreign direct investment (Alhanaqtah 2016), trust (Alhanaqtah 2016b), ethnicity, language, religion, democracy (upcoming publication) and other categories. At this research stage we analyze the diversity of the Arabic Middle East countries in terms of governance. For this purpose we use governance indicators, in particular, composite indexes for the rule of law and corruption perception. Through a comparative analysis technique we analyze the diversity within a target region and show where it fits in the world spectrum. Besides, we consider how the rule of law and control of corruption fits into our expectations on economic growth.

We are interested in the government indicators because nowadays the largest foreign aid providers (the International Monetary Fund, the World Bank and developed donor-countries) give a priority to funding development programs in countries with good governance. This shift in a foreign aid distribution paradigm occurred after Washington Consensus in 1989. Thus, in order to measure the progress there is the need to quantify differences in governments among nations. Governance indicators are supposed to help policy-makers and business leaders to act with confidence when making strategic decisions.

Units of analysis. The Western Asian region significantly overlaps with the Middle East. The Middle East is a transcontinental region centered in Western Asia and Egypt. We sampled only Arabic Middle East countries out of the Western Asian region (13): Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestinian Territories (West Bank and Gaza), Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen. Thus, five countries of Western Asia were excluded from the sample (Armenia, Azerbaijan, Georgia, Israel and Turkey) and one Middle East country (Egypt) - was added.

Variables. We use composite indexes on the Rule of Law by the World Bank (WB, 2015) and by the World Justice Project (WJP, 2016), and composite indexes on the Control of Corruption by the World Bank (WB, 2015) and Corruption Perception Index by the Transparency International.

The *Rule of Law Index (WB)* captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Definition and sources for management 2017).

The Rule of Law Index (WJP) is a quantitative assessment which offers a picture of the extent to which countries adhere to the rule of law in practice (World Justice Project Rule of Law Index 2016). The

2016 edition expands coverage to 113 countries and jurisdictions (from 102 in 2015), relying on more than 100000 household and expert surveys. Performance is measured using 44 indicators across eight primary rule of law factors, each of which is scored and ranked globally and against regional and income peers: constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice and criminal justice (World Justice Project 2017).

Control of Corruption Index (WB) captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests (World Bank 2017).

Methodology. Comparative analysis technique as a methodology of the research has been used. We begin with ranking the data of all the world economies in ascending order. This way we may see how countries are located in the world on a chosen criterion. Then we place our target region - Arabic Middle East countries - along the world spectrum. Then we describe whether the countries of the target region are at the top, middle, bottom or scattered randomly; whether they are similar or clustered, or diverge radically. Finally, we comment on findings.

Current research contributes to the literature by conducting the study on diversity of the Arabic part of Western Asian region plus Egypt in terms of governance with the special focus on the rule of law and control of corruption. We report first results and encourage further investigation of the region from the standpoint of other political economy categories.

WHY DO WE NEED GOVERNANCE INDICATORS?

In the paper of Alhanaqtah (2017) it was discussed why the issue of measuring governance remains sensitive. Here a brief explanation will be provided.

The origin of the concept of governance came from the debates on foreign aid after the Second World War. The United Nation began an aid and relief program (called 'Marshall Plan', 1948) to recover war damaged economies. The paradigm of the foreign aid provision, inherent for those years, was to direct funds towards promoting industrial development. It was considered that by the time the benefits would trickle down to the rest of the population. However, after the series of financial crises in 1970s-1980s it had become obvious that the foreign aid was failing to promote growth and to tackle underdevelopment. For this reason the foreign aid provision paradigm has changed towards a criterion 'progress in governance'. The aid providers has started to pay a particular attention to the progress in government reforms, social conditions at the local level and efficiency (value for money) and effectiveness (competitiveness in the world markets) at the national level. To be more precise, the new paradigm of the foreign aid represented and advocated a set of policy measures such as control of the size of government spending, the phasing out of subsidies to inefficient sectors, the freeing of controls over trade and foreign investment, the introduction of pro market reforms and the protection of property rights (World Bank 1989). This new emphasis reflected a major change in the world economy - acceleration of globalization that was being held responsible for the promotion of economic growth in the world (Arndt and Oman 2006).

Since Washington Consensus the World Bank funds countries' development programs. In order to measure international differences and the quality of governance the World Bank team, headed by D. Kaufman (Kaufman 2008), created the world governance indicators (WGI). The first annual World Bank Governance Indicators were published in 1996. Though the WGI are openly criticized for its methodological drawbacks, they are widely used in policy-making and academic exercise because they come from a recognized international institution (Knoll and Zloczysti 2012).

There are six governance indicators which follow the political process from the formulation of policy to its execution and implementation. It is a three step process with two indicators for each step (Figure 1).

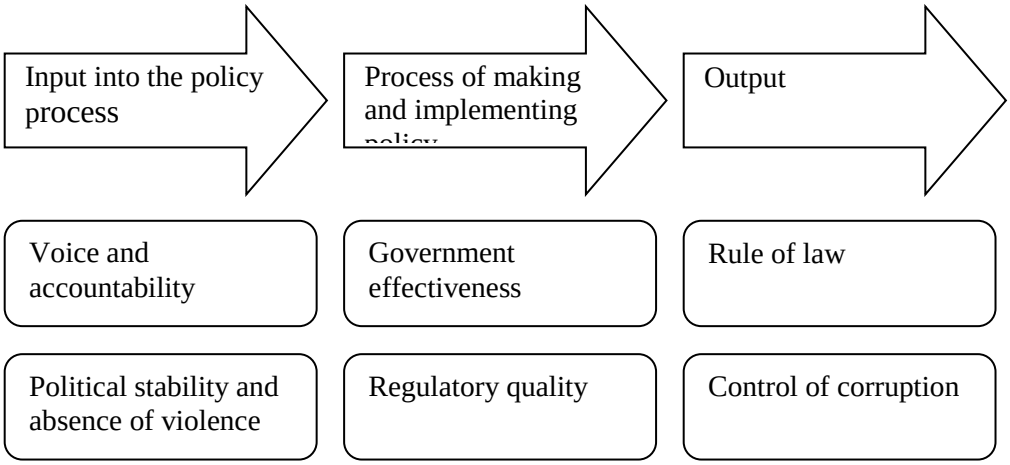


Figure 1. The World Bank governance indicators and the policy process

Source: Griffiths 2016

The methodology of WGI is as follows. It begins with calculation the average for all observations, produces the world average and then awards that a value of zero. Then, the individual country results are awarded a 'plus' if they are above the world average, and a 'minus' if they are below. The index is scored from +2.5 (the best) to -2.5 (the worst) (Kaufmann et al. 2011).

Even though the WGI are widely recognized and used as a guide for aid allocation, we share some *criticism* on data collection and measurement:

- *WGI are composite indices*. Different rather complex dimensions are summarized down to a single number. Besides, allocation of these dimensions among the six components has been accomplished without any formalized theoretical or empirical underpinning (Glaeser et al. 2004; Langbein and Knack 2010; Thomas 2010).
- *Problem of weighting of components of each index*. Extra weights were given to those observations that clustered close together and, therefore, less to outsiders. Thus, if the results are tending to cluster around a central point, this will have the effect of reinforcing the central tendency and artificially narrowing the room for error, i.e. the range of a statistical error becomes very large. D. Kaufmann himself warned: 'Margins of error are not trivial, and caution in interpreting the results is warranted – one should not precisely rank countries' (Griffiths 2016).
- *WGI are centered on a different global average every year*. It makes the comparison over time very difficult (Arndt and Oman 2006). Though the World Bank responds that it is still possible to see countries' performances relative to the average and to each other (Kaufmann et al. 2007).
- *An element of subjectivity in coded rank numbers presents* (Kurtz and Schrank 2007; Erkkilä and Piironen 2014).
- *The World Bank is biased towards business and market oriented policies*. The market capitalism is considered as being the best route for development (alternatively to, for example, state-led industrialization) (Kurtz and Schrank 2007).

To sum up, although the World Bank indices are important as a focus of debate and in the articulation policy, it does take a limited pro-growth and pro-market approach.

RULE OF LAW AND ECONOMIC GROWTH

The question of interest is how the rule of law could be expected to influence economic growth?

First we should mention that the Rule of Law Index by the World Bank suffers the same type of problem as other WGI. Interestingly, the Rule of Law Index is not actually about the rule of law. Importantly that it does not measure the human rights. Moreover, it does not have a focus on the independence of the judiciary, the principle of equality before the law, the absence of discrimination, and the rights to a fair trial and to appropriate sanctions. Instead, the indicator is loaded with an extra dimension in favor of business contract and property (Thomas 2010). We have to recognize that the World Bank is not an institution for the protection of human rights, and it makes no secret of the direction of its interest in its documentation. The indicator has an economic bias, although it does also concern itself with the incidence of crime, the protection of property, the enforcement of contracts and the confidence in the entire judicial apparatus (Griffiths 2016).

If we want an index for the rule of law as we understand it, there is a better alternative - the Rule of Law Index by the *World Justice Project* (WJP). The WJP is an independent group of lawyers founded in the USA in 2006 which publishes its own annual Rule of Law Index. The WJP uses a working definition of the rule of law based on four universal principles, derived from internationally accepted standards. The rule of law is a system in which the following four universal principles are upheld (World Justice Project Rule of Law Index 2016):

1) The government and its officials and agents as well as individuals and private entities are accountable under the law.
2) The laws are clear, publicized, stable and just; are applied evenly; and protect fundamental rights, including the security of persons and property.
3) The process by which the laws are enacted, administered, and enforced is accessible, fair, and efficient.
4) Justice is delivered timely by competent, ethical, and independent representatives and neutrals who are of sufficient number, have adequate resources and reflect the makeup of the communities they serve.

This Rule of Law Index by the WJP is comprised of 9 factors further disaggregated into 47 specific sub-factors.

One part of the Index includes what we would understand under the 'rule of law' - constraints on government powers, fundamental rights, access to civil justice and effective criminal justice. Another part of the Index lumps together items considered separately by the WGI - order and security, open government, absence of corruption and effective regulation. Since recently, a factor of informal justice (traditional, tribal and religious courts and community-based systems) was added up. Unfortunately, too many countries of Africa and the Middle East are not covered by the Index, which makes difficult to obtain a global picture of performance. Otherwise, the Index could be a good alternative for the Rule of Law Index by the World Bank.

How might the rule of law promote economic growth? Prof. Griffiths (2016) explains well the linkages in his book 'Configuring the world: a critical political economy approach'. The logic is as follows. First, one of the most difficult points is independent judiciary. The appointment of judges should be transparent and not too biased by political preference. Second, the independent judiciary ensures that the legal institutions function efficiently and effectively. This also applies to the economic sector. So it explains all the benefits to flow that arise from the protection of property rights and contracts. Third, foreign investors prefer transparent and predictable judicial systems. As long as sources of uncertainty are removed, it encourages them to invest more that they would, otherwise, have done. Finally, constantly observing the efficient management of judicial affairs socializes people into more trusting models of behavior.

Then, it is logically to wonder, *whether social scientists have actually established any links between rule of law and economic growth?* Dam (2007) restricts his analysis of the impact of the rule of law to

a narrowly economic interpretation that focuses exclusively on property rights and security of contract. On the contrary, Barro (2000) has a wider perspective, suggesting that business risk can also be reduced by factors such as helping to provide peace and stability. He considers that this wider interpretation may have more explanatory power than the narrow formulation. In the study of Butkiewicz and Yanikaya (2006) one test found that the narrow definition of the rule of law was significant for developing countries, whilst the wider definition was more important for developed countries. However, this study also observed that the results were extremely sensitive to the time periods and the countries chosen. Griffiths (2016) suggests that it is possible to take the analysis one step further back and observe that a just and effective legal system may help prevent the death and destruction that accompanies state failures and civil wars. But this is rarely tested (Haggard et al. 2007). All in all, the support for any link between formal judicial independence and economic growth is weak (Glaeser and Shleifer 2002) or nonexistent.

Why do the answer to the question above is a 'yes-no' answer? On one hand, the difficulty in establishing any relationship between the rule of law and economic growth is that law is used in different ways, at different levels and with different results which are difficult to capture with a single number summary. On the other hand, pushed to an extreme, a complete absence of the rule of law will almost inevitably end in chaos and, possibly, economic decline, even if we cannot capture this statistically along the full spectrum of experience.

CONFIGURING ARABIC COUNTRIES OF THE MIDDLE EAST IN TERMS OF RULE OF LAW

In this section we examine the diversity of Arabic countries of the Middle East in terms of the rule of law. For this purpose we use data on the Rule of Law Index provided by the World Bank (Table with Index values is in Appendix 1). The index is expressed in a range of minus 2.5 to plus 2.5, the best performances being positive, the worst negative. Zero represents the world average. Data is available for 209 countries, so the deciles have 21 each, except for the tenth, which has 20 (Table 1). The outcomes are as follows.

Table 1. Distribution of countries across the world spectrum in terms of the rule of law

Decile	Index values	Countries
1	≥1.6	
2	[0.95; 1.6)	
3	[0.5; 0.95)	Qatar, UAE
4	[0.07; 0.5)	Oman, Jordan, Bahrain, Saudi Arabia
5	[-0.19; 0.07)	Kuwait
6	[-0.41;-0.19)	
7	[-0.62; -0.41)	Egypt, Palestine
8	[-0.86; -0.62)	Lebanon
9	[-1.16; -0.86)	
10	<-1.16	Yemen, Syria, Iraq

Source: author's computations based on data from the World Development Indicators (2015-2016)

In the *regional context* our countries diverge radically. The bar chart in Figure 2 and computations in R-Studio (R-script is in Appendix 2) show that the distribution of countries has a small negative skew (minus 0.26[1]), thus, Index values slightly gravitate to the top. The median value is 0, the mean is minus 0.2. Kurtosis is large and negative (platycurtic) with the value minus 1.26, i.e. the probability mass is concentrated in the tails of the distribution and there is not a core (cluster) in the data sample. It approves of the fact that our countries diverge radically within the region. The leader in the region by the rule of law criteria is Qatar, while Iraq has the worst index value. The Index value for Kuwait corresponds to the world average.

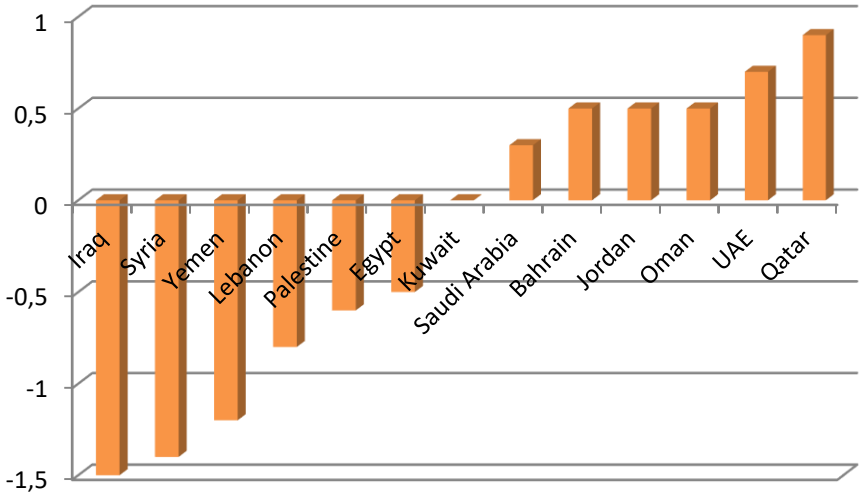


Figure 2. Bar chart for the Rule of Law Index (World Bank)

Source: constructed by the author based on data from the World Development Indicators (2015-2016)

In the *world context* Arabic Middle East countries scatter randomly along the world spectrum of the rule of law (Table 1). In the top we observe Qatar and UAE in the 3rd decile, followed by Oman, Jordan, Bahrain and Saudi Arabia in the 4th decile, Kuwait in the 5th decile, Egypt and Palestine in the 7th decile, Lebanon in the 8th decile, Yemen, Syria and Iraq in the 10th decile in the bottom of the world spectrum. There are oil-rich countries in the top. The high position could be explained by the fact that the WGI focus on economic and business rights. Interestingly, these rich countries are countries with authoritarian regimes from the standpoint of Democracy Index (Economist Intelligence Unit 2017). That might mean that richer countries could afford better governance and the rule of law, irrespectively of the political regime. There are economically, politically and socially unstable countries in the bottom. These countries are convulsed with wars (Yemen, Syria) or still haven't recovered from wars and recent severe social conflicts (Iraq, Lebanon, Palestine, Egypt). Unsustainability adversely affects provision of public goods, such as, for example, good governance, rule of law, control of corruption.

Since the data provided by the World Justice Project does not cover the majority of countries from the target region, so, as an example, we will have a glance at the Rule of Law Index (WJP) components in some countries using available data (Figure 3). The range of Index values is from 0 (the worst) to 1 (the best).

[1] Skewness less than 0.25 is considered insignificant.

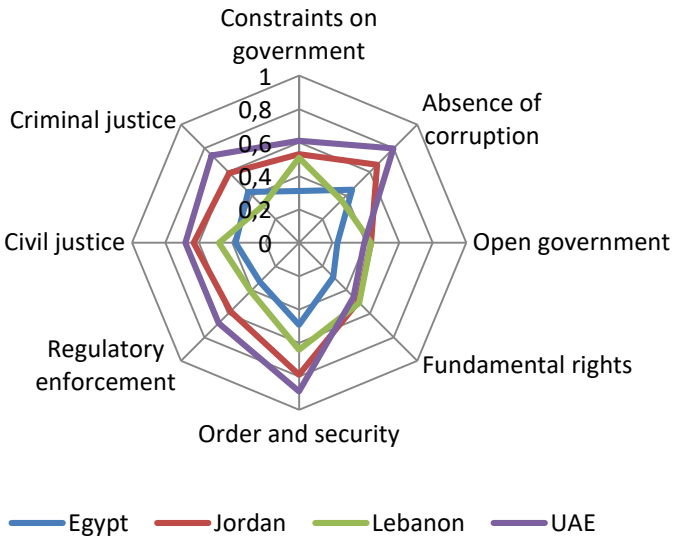


Figure 3. Radar diagram for the Rule of Law Index (World Justice Project)

Note: no data on Bahrain, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, Syria, Yemen, Palestine

Source: constructed based on data from World Justice Project Rule of Law Index (2016)

Radar diagram (Figure 2) shows that UAE performs the best and Egypt performs the worst in terms of achieving eight target indicators of the Rule of Law.

CONTROL OF CORRUPTION AND ECONOMIC GROWTH

The question of interest is how the control of corruption could be expected to influence economic growth?

To start with, we should mention that measuring corruption is very difficult because it involves the takings of bribes and favors. The issue is extremely sensitive, illegal and is always conducted in secrecy. The standard approach to measure corruption is via business opinion surveys. However, the first question is how much is a business willing to admit to? The second and eternal question is how to compare responses across countries? (Galtung 2006). Additionally, we have to take into account that the question, in general, is politically highly sensitive.

The World Bank Institute uses these sources of data to compile its own indicator 'Control of Corruption', that suffers the same type of problem as other WGI. There is also an authoritative alternative which the World Bank itself uses - Transparency International's 'Corruption Perception Index'. Transparency International is an independent organization which was founded in Germany. Through chapters in more than 100 countries they are leading the fight against corruption (Transparency International).

Both indicators share the same criticism (Griffiths 2016). First, both focus on business corruption (payment of bribes for contracts, small regular extortions) but ignore political corruption such as better jobs for party members, secret funding of candidates in return for support for gainful contracts or favorable legislation, etc. Second, the Corruption Perception Index focuses on the bribe takers, not the bribe givers (Galtung 2006). To redress the balance the Transparency International has also constructed a Bribe Payers Index, which is published every two years since 1999. There are over 3000 senior business executives in 28 countries are asked about their perception of the likelihood to engage in bribery when doing business. Third, definition of a corruption is narrow and very Western, which might be considered abnormal elsewhere in the world. The explanation is that the Transparency

International was originally established to monitor corruption in business, and like the World Bank Institute, it too is focused on the business aspects of governance.

The corruption might influence economic growth via the following channels. First, it simply increases the cost of doing business. It acts an invisible tax which reduces profits and, therefore, incentives to invest. The problem becomes more serious when a bribe offered is less that the bribe of a competitor. In this case corruption has an unpredictably adverse effect (Kaufmann and Zoido-Lobaton 1999). Second, when significant sums are washed away from government contracts, it, logically, reduces the provision of public goods (Tanzi and Davoodi 1997). Third, continuous corruption damages the reputation of institutions which, in turn, adversely affects generalized trust in a society (Tanzi 1998).

Among all the governance indicators, corruption is the only one that produces significant results, at least when related to long-run growth. Its impact is particularly strong in low income countries which, unfortunately, is where corruption is most endemic (Griffiths 2016).

To tackle corruption on a national scale there is the need to eliminate its causes (though they might be deeply rooted in the political culture), improve detection and enforcement, increase payments in a public sector and support local reform movements.

CONFIGURING ARABIC COUNTRIES OF THE MIDDLE EAST IN TERMS OF CONTROL OF CORRUPTION

In this section we examine the diversity of Arabic countries of the Middle East in terms of control of corruption. For this purpose we use data on the Control of Corruption Index provided by the World Bank (Table with Index values is in Appendix 1). The index is expressed in a range of minus 2.5 to plus 2.5, the best performances being positive, the worst negative. Zero represents the world average. Data is available for 209 countries, so the deciles have 21 each, except for the tenth, which has 20 (Table 2). The outcomes resemble the picture with the rule of law and they are as follows.

Table 2. Distribution of countries across the world spectrum in terms of control of corruption

Decile	Index values	Countries
1	≥1.49	
2	[0.98; 1.49)	UAE, Qatar
3	[0.55; 0.98)	
4	[0.067; 0.55)	Jordan, Oman, Bahrain, Saudi Arabia[2]
5	[-0.267; 0.067)	Kuwait
6	[-0.44;-0.267)	
7	[-0.64; -0.44)	Egypt
8	[-0.839; -0.64)	Palestine
9	[-1.22; -0.839)	Lebanon
10	<-1.22	Iraq, Yemen, Syria

Source: author's computations based on data from the World Development Indicators (2015-2016)

[2] Control of Corruption Index for Saudi Arabia is 0.064, which is on the verge of the 4th and 5th deciles. Since the division of deciles could be made with a one unit shift to the bottom (20 countries in the 1st decile and 21 countries in the following deciles) we put Saudi Arabia into 4th decile instead of 5th.

In the *regional context* Arabic Middle East countries diverge radically. The bar chart in Figure 4 and computations in R-Studio (R-script is in Appendix 2) show that the distribution of countries is close to symmetric. The median value is minus 0.2, the mean is minus 0.29, skewness is 0.07 that is insignificant. Kurtosis is large and negative (platycurtic) with the value minus 1.4, i.e. the probability mass is concentrated in the tails of the distribution and there is not a core (cluster) in the data sample. It means that countries of the target region diverge radically. The leader in the region by the control of corruption is UAE, while Syria has the worst Index value. The Index values for Kuwait and Saudi Arabia gravitate to the world average.

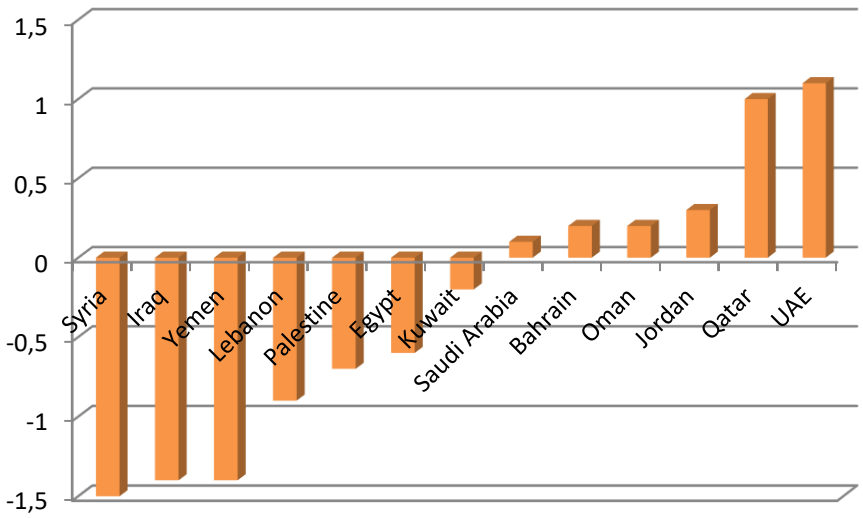


Figure 4. Bar chart for the Control of Corruption Index (World Bank)

Source: constructed by the author based on data from the World Development Indicators (2015-2016)

In the *world context* Arabic Middle East countries scatter randomly along the world spectrum of control of corruption (Table 2). In the top we observe UAE and Qatar in the 2nd decile (while these countries are in the 3rd decile by the rule of law), followed by Jordan, Oman, Bahrain and Saudi Arabia in the 4th decile (correspond to the results by the rule of law), Egypt in the 7th decile, Palestine in the 8th decile, Lebanon in the 9th decile, Iraq, Yemen and Syria in the 10th decile in the bottom of the world spectrum. In comparison with the rule of law outcomes we observe slight changes in the bottom. Though, all in all, the outcomes obtained in terms of the rule of law correspond to the outcomes obtained in terms of control of corruption for the target region. There are richer countries in the top, firstly, because the WGI focus on economic and business rights, second, richer countries could simply afford better governance, rule of law and control of corruption. There are economically, politically and socially unstable countries in the bottom. These countries either are convulsed with wars (Syria, Yemen) or still haven't recovered from recent social conflicts (Iraq, Lebanon, Palestine, Egypt). Jordan is an interesting case. It gravitates to the top of the world spectrum and, respectively, to the prosperous countries of the region (follows after UAE and Qatar), both in terms of the rule of law and control of corruption. If we explain that richer countries could afford better control of corruption and the rule of law, then Jordan is an exception, on one hand (country is poor in terms of natural resources and does not have a large diversified industrial sector). On the other hand, Jordan is one of the largest recipients of the foreign aid. The latest available data (World Bank data base, 2014) witness that Jordan received about 2.7 billion dollars as a net official development assistant (net ODA), which is 26.6 % of government expenses. It compensates for the absence of other sources of welfare, and from this perspective Jordan gravitates to the rich countries of the region. Additionally, Jordan is highly

homogeneous in terms of religion (the vast majority of the population are Sunnis) which facilitates trust creation and reduces anti-social behavior.

The alternative to the World Bank Control of Corruption Index is Corruption Perception Index by the Transparency International. Over 2/3 of the 176 countries and territories in 2016 Index fall below the midpoint of the scale of 0 (highly corrupt) to 100 (very clean). The global average score is a paltry 43, indicating endemic corruption in a country's public sector (Corruption Perception Index 2016).

The outcomes for the Corruption Perception Index for the Arabic countries of the Middle East correspond to the outcomes obtained from the analyses of the Control of Corruption (WB) for the target region (Figure 5). This is not surprising because the World Bank itself uses this indicator in its analytical work.

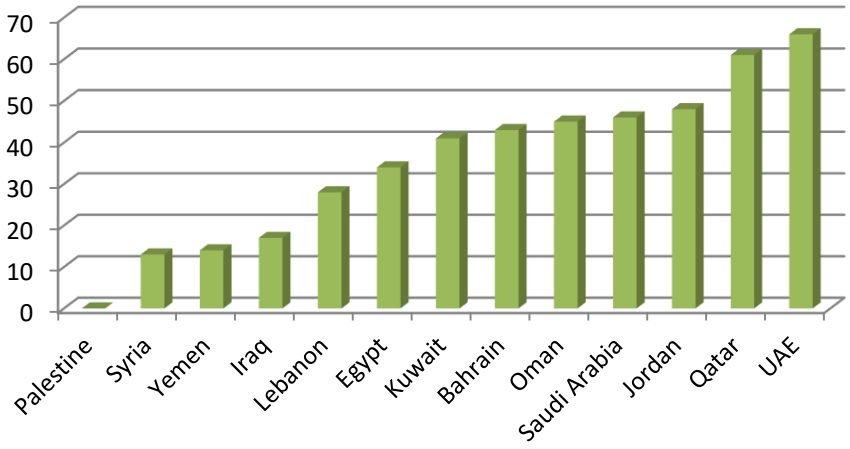


Figure 5. Corruption Perception Index, Transparency International, 2016

Note: no data for Palestine

Source: constructed by the author based on data from Transparency International

Based on the findings of the analysis, there are several fundamental recommendations to reduce corruption in the Arabic countries of the Middle East. First, governments in the region must speak out publicly about their commitment to end corruption. They must also finally deliver on their anti-corruption commitments made globally and regionally, such as under the United Nations Convention against Corruption (UNCAC) and the Arabic Convention for Combating Corruption (Transparency International Regional Analysis 2016). Second, increase in the level of welfare in a country as well as the increase of the level of salaries in a public sector contribute into tackling the corruption. Finally, and very important, strengthening the moral of the nation via the institute of religion, which is strong in the Arabic countries, enhances the level of generalized trust (trust in most people) and reduces anti-social behavior.

CONCLUSIONS

In the research we considered the premises of the governance indicators and critically reviewed those which describe the output of the political process. Then we configured Arabic countries of the Middle East in two dimensions: rule of law and control of corruption. Through a comparative analysis technique we analyzed the diversity within a target region and showed where it fits in the world spectrum. The results of analysis are largely influenced by statistical data, collection and measuring of which have some drawbacks. The research was conducted based on the latest available data. The main conclusion are as follows.

- The origin of the concept of governance came from the debates on foreign aid. After the Washington Consensus (1989) the foreign aid paradigm has shifted: nowadays provision of aid is based on the progress in government reforms. The World Bank implemented governance indicators in order to measure the progress in reforms and quality of governance from the standpoint of Western concept of a 'good' governance and to quantify differences in governments among nations.
- There is some criticism of the methodology of the governance indicators. First, the government indicators are composite indices with various dimensions, the selection of which has been accomplished without formalized theoretical or empirical grounding. Thus, there is also an element of subjectivity in coded rank numbers. Second, weighting of components of each index is a question. Third, centering the World Bank indicators on a different global average every year makes the comparison over time very difficult. Fourth, governance indicators, provided by the World Bank and other mentioned international organizations, have a bias towards business and market oriented policies.
- The Rule of Law Index and Control of Corruption Index by the World Bank suffer the same type of problem as other WGI. There are better alternatives - the Rule of Law Index by the World Justice Project and Corruption Perception Index by the Transparency International. The last is used by the World Bank itself, so the outcomes on control of corruption mostly coincide.
- The rule of law may promote economic growth via the following linkages: independent, transparent and politically unbiased judiciary; efficient and effective functioning of legal institutions; predictable judicial system for investors; efficient management of judicial affairs socializes people into more trusting models of behavior.
- The answer to the question about a statistical link between the rule of law and economic growth is a kind of 'yes-no' answer. Social scientists discovered the link between narrow business interpretation of the rule of law and economic performance in poorer countries, and the link between a wider interpretation of the rule of law and economic performance in more developed countries. The link between formal judicial independence and economic growth is weak or nonexistent.
- The difficulty in establishing any relationship between the rule of law and economic growth is that law is used in different ways, at different levels and with different results which are difficult to capture with a single number summary. At the same time, pushed to an extreme, a complete absence of the rule of law will almost inevitably end in chaos and, possibly, economic decline, even if we cannot capture this statistically along the full spectrum of experience.
- The issue of corruption is extremely sensitive, illegal and is always conducted in secrecy. Thus, measuring corruption is very difficult.
- Among all of the governance indicators corruption is the only one that produces significant results when related to long-run growth. Its impact is particularly strong in low income countries which is where corruption is most endemic. It influences economic growth via the following links: it increases the cost of doing business; it reduces the provision of public goods; continuous corruption damages the reputation of institutions which adversely affects level of generalized trust in a society.

- We examined the diversity of Arabic countries of the Middle East in terms of control of corruption. For this purpose we use data on the Control of Corruption Index provided by the World Bank and the Corruption Perception Index provided by the Transparency International. The outcomes coincide.
- In the regional context Arabic Middle East countries diverge radically; the distribution of countries is close to symmetric. The leader in the region by the control of corruption criteria is UAE, while Syria has the worst Index value. The Index values for Kuwait and Saudi Arabia gravitate to the world average. In the world context Arabic Middle East countries scatter randomly along the world spectrum of control of corruption. There are UAE and Qatar in the top, and Iraq, Yemen and Syria in the bottom.
- The outcomes obtained in terms of the rule of law correspond to the outcomes obtained in terms of control of corruption for the target region. There are richer countries in the top, firstly, because the WGI focus on economic and business rights, second, richer countries could simply afford better governance, rule of law and control of corruption. There are economically, politically and socially unstable countries in the bottom.
- Based on the findings of the analysis, there are several fundamental recommendations to reduce corruption in the Arabic countries of the Middle East. To tackle corruption on a national scale there is the need to eliminate its causes (though they might be deeply rooted in the political culture), improve detection and enforcement, increase payments in a public sector and support local reform movements. It is also important to strengthen the moral of the nation via the institute of religion, which is strong in the Arabic countries, enhances the level of generalized trust and reduces anti-social behavior.

APPENDIX 1: RULE OF LAW AND CONTROL OF CORRUPTION DATA

Table 3. Rule of Law and Control of Corruption Indexes (World Bank)

Country	Rule of Law (estimate)	Rule of Law (standard error)	Control of Corruption (estimate)	Control of Corruption (standard error)
Bahrain	0.5	0.2	0.2	0.2
Egypt	-0.5	0.1	-0.6	0.1
Iraq	-1.5	0.2	-1.4	0.2
Jordan	0.5	0.1	0.3	0.1
Kuwait	0.0	0.2	-0.2	0.2
Lebanon	-0.8	0.1	-0.9	0.1
Oman	0.5	0.2	0.2	0.2
Qatar	0.9	0.2	1.0	0.2
Saudi Arabia	0.3	0.2	0.1	0.2
Syria	-1.4	0.2	-1.5	0.2
UAE	0.7	0.2	1.1	0.1
Yemen	-1.2	0.2	-1.4	0.2
Palestine	-0.6	0.3	-0.7	0.3

Source: World Development Indicators (2015-2016)

APPENDIX 2: R-SCRIPT FOR THE RULE OF LAW AND CONTROL OF CORRUPTION DESCRIPTIVE STATISTIC

```
# Rule of Law
install.packages("psych")
library("psych")
rule_law<-c(0.5,-0.5,-1.5,0.5,0.0,-0.8,0.5,0.9,0.3,-1.4,0.7,-1.2,-0.6)
boxplot(rule_law,horizontal=TRUE,col="grey")
summary(rule_law)
describe(rule_law)
# Control of Corruption
corWB<-c(0.2,-0.6,-1.4,0.3,-0.2,-0.9,0.2,1.0,0.1,-1.5,1.1,-1.4,-0.7)
boxplot(corWB,horizontal=TRUE,col="grey")
summary(corWB)
describe(corWB)
```

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