

Impact of Economic Transparency on Economic Growth in the Middle East countries

Hossein Amiri¹
Ali Toussi³

Mohammad Hossein Karim²
Reza Javanmard⁴

Abstract:

Economic transparency will lead to economic stability and corruption decline. Thus the shortage of transparency mechanisms, laws and procedures will raise corruption and make it tough to cutout corruption. Also, loss of transparency in financial and economic system creates to instability, inappropriate allocation of resources, the boom of injustice and inequality and as a result paves the way for all sorts of financial and economic corruption and misuse.

The greater transparency economic growth, the lower the cost of entry into economics and accordingly with rising economic competitiveness, the condition for development and economic growth will be advanced. So, considering the vital role of transparency in economics, this study first explores transparency and corruption then with the panel data, looks at the relation between economic transparency and economic growth in Middle East countries over the last 13 years (2003-2015). In other words, this paper aims to show how the transparency variable influences economic growth. The specific purpose is to find out whether there is a positive or negative connection between transparency and economic advancement in the countries under investigation.

The results of the research show that the relation between transparency and economic growth in the Middle East countries is direct and significant. Also the relation between gross capital formation and labor force participation is direct and significant with the economic growth of these countries.

Keywords: transparency, capital formation, labor force, economic growth, corruption.

JEL: C23, D73, H11, O4

1 Assistant Professor (Corresponding Author), Faculty of Economics, Kharazmi University, Iran, Tehran, Email: hossienamiri@gmail.com.

2 Associate Professor, Faculty of Economics, Kharazmi University, Iran, Tehran, karimsistani482@gmail.com.

3 Assistant Professor, Faculty of Economics, Kharazmi University, Iran, Tehran, Email: alitoussi@hotmail.com.

4 MA Student, Faculty of Economics, Kharazmi University, Iran, Tehran, rjavanmard2004@yahoo.com.

1. Introduction:

The shortage of transparency in the economic system has led, to imposing heavy charges on the economy caused by lack of sufficient information monitoring, administrative, economic and financial corruption, and on the other hand because of loss of information and transparency in the economy we see impossibility of accurate and comprehensive economic planning and continuous policy in the economic system. Loss, shortage or lack of transparency of information in the Iranian economy has constantly been referred to by experts as a factor in warding off tracking the performance of the active sectors inside the economy.

But there are some important questions in the economy that without answering them, coping with the economy and planning for it will not lead to desirable results. Planning, policy making and legislation in the economic area require, more than anything, transparent, accurate and updated data. How have economic policies been put into effect? How rapid is implementing those policies? What is the impact of policies on different economic sectors? Does implementing policies fit in with each other and bring us to the desired goals including social justice? And there are ten other questions that have not been given thorough documented answers/solutions (Samsami and salem, 2015).

Lack of transparency and therefore economic corruption has adverse effects on investment and growth and this result in a loss of attention to the goals of economic development of the countries. Lack of transparency leads to the deletion of competitive forces, which are vital for the best performance of the markets. The said relation has always been discussed in the society. Scientifically policymakers, scholars and researchers argue that there is a close relation between these two variables. But so far there has not been submitted any quantitative relation or accepted general model. Transparency affects the important aspects of economic and social life. Transparency in a hypothetical country is a part in determining the timing of economic growth projections also decisions for strategic investments and formulating international policies. According to UN experts, some African countries such as Zaire and Nigeria have lost more than \$5 billion in corruption over the past few years. In Pakistan about 30% of the total business affairs projects are paid for bribery, while corruption in Bangladesh makes up half of foreign investment (Stevenson, 2003). But corruption is not unique to the Third World. Although that is

common in less developed countries, Western countries are also not free from corruption (Ebben and Vaal, 2009). But, the link between transparency and the key parameters of economic performance is qualitative (Davoodi, 2000; Hines, 1995; Huntington, 1968; Stevenson, 2005). Transparency was gradually becoming more important with globalizing of the international economy also political interconnections between countries, which led various governmental and nongovernmental organizations to look at transparency (Kaufmann and Bellver 2005; Knack and Keefer, 1995; Stevenson, 2005). So far there has not been a clear dependency between transparency and economic performance. So, there remains an open question whether there is a general functional relation between the transparency and the key aspects of the economic performance of different countries.

The economy of the Middle East countries suffers from several problems and despite the richness of these nations because of their frequent access to oil resources, distributing wealth has not been properly addressed, and on the global stage the said countries have had weak performance in competition and attracting foreign investors. The low productivity in economic growth, dependency of the economy on oil revenues and the high role of government in production are the chronic diseases that the economy of those countries be afflicted by, and severe regulations, anti-production structures, oil revenues, rent seeking, corruption and poor management are the various different failures of those economies. According to most experts, not being free, transparent and uncompetitive economic system has sparked many problems in these countries, which comprise vast unemployment, corruption and the reluctance of many countries to invest in Middle East countries. In response to such boundaries and whether these countries are appealing to overseas investors regardless of those problems, one could say that one of the first criteria for investors to put money in any country is the existence or absence of economic transparency in any country. Normally the investor is looking for transparency around the world and when we observe the statistics we see that the Middle East countries are on the top of the list with high corruption. This is where the investor after extensive research finds that we are a high-risk country under investment indicators. Therefore, transparency and low rank in corruption is of exquisite importance internally and internationally.

The subject of this research is, the effect of economic transparency on economic rise, as we know one of the most important parts of growth is investment in the economy, no matter how much the country is able to attract more investment, if it is used properly it will rise production and so raise economic growth. Thus, because of the country's capital constraints it is not always workable to reap sustainable economic growth for the country except with the aid of attracting domestic and foreign capital, and it will not be possible to attract such funds except through economic transparency. This study looks at the connection between economic transparency and growth for 14 Middle East countries during the period of 2003-2015, through which we can apprehend whether Middle East countries should raise their transparency to be able to increase their economic growth or there may be no relation between transparency and economic growth. The objectives of this study are first: examination of any kind of relation between transparency and growth. Second if transparency and economic growth are connected together, the connection is positive or negative and later how the authorities can use this connection to steer the economy to a better situation.

In the following we can observe the theoretical foundations of the research which encompass transparency and corruption and economic growth and then we will review the researcher's studies on this regard. Then the technique of research and how to get the model of the research and its estimation and interpretation of the results are discussed.

2. Theoretical Foundations and Research Literature

A) Transparency and economic growth

Lindstedt and Naurin (2007) clarify transparency as follows:

Transparency implies the availability of information. A transparent institute is the institution that allows individuals, inside and outside the organization, to get the facts they need to shape their opinions about the measures and processes in that institution.

Kaufmann and Bellver (2005) define transparency as: Information reliable and economically, socially and politically accessible for all stakeholders.

Vishwanath and Kaufmann (1999) showed that the clarity is the opposite of secrecy (being hidden). Concealment means knowingly hiding a person's action while financial transparency is a kind of transparency that relates to financial issues with the accuracy of information, the completeness of information and the availability of it (timeliness).

The standpoint of the Organization for Economic Cooperation and Development (OECD, 2012) is wider and offers transparency as an interconnection between organizations and other stakeholder groups. The greater the exchange of information in societies, the decision making will be knowledgeable, and accountability of the private and public sector about how to reach and consume resources get better and therefore the growth of corruption is cut.

Economically, transparency means the true and comprehensive information on economics and the clarity of the mechanisms, which govern the economic relations such as production and distribution of wealth in society. Transparency and economic corruption are contradictory; therefore, the United Nations Development Program (UNDP) considers corruption to be equal to growing monopoly of individual power, cutting accountability, trust and transparency.

Lack of transparency and consequently economic corruption has detrimental effect on investment and growth and this leads to not reaching the goals of economic development of the countries. Lack of transparency will stop competitive forces, which are needed for the markets. Cut tax revenues and the quality of public infrastructure and services. Lack of transparency can lead to inefficiency in government policies. Drive investment and economy from its productive shape to rents and underground activities and broaden mafia organizations. Also, it is accompanied by a waste of national resources. Because lack of transparency diverts funding from its aim; these resources cannot contribute to the country's economic growth. The World Bank has considered lack of transparency and corruption as the biggest barrier to social and economic development. Because by distorting the legal regulations it destroys development and undermines the institutional foundations to which economic growth relies on.

In the absence of transparency, the conditions for the fulfillment of a competitive economy will not exist or will be weak. It is also not possible to monitor and track financial violations and therefore monetary, financial and commercial policies will not be carried out effectively. In addition, workable policy planning, recognizing competent people and the supervision of civil institutions are not possible.

So, in line with the presented issues, it could be concluded that there is a direct and positive link between economic transparency and economic

rise. Through rising transparency and decreasing corruption the economy will keep flourishing.

B. Corruption and Economic Growth

According to the United Nations Development Program (2008), corruption means the abuse of power entrusted to individuals for personal and private gain. Corruption may take various forms such as bribery, embezzlement, theft, extortion, misuse of others votes, exploitation of conflicting interests and inappropriate political participation.

Corruption further to the ethical aspect causes social and economic inefficiencies and might severely restrict countries by weakening national institutions, raising business costs, discouraging domestic and foreign investors and encouraging a system of corruption. In this regard many cultural, social, political, legal and economic factors are influential and comprehensive, recognizing these factors is needed for a serious struggle against economic corruption.

Most researchers such as Mauro (1998) and Aidt (2003) argue that corruption tends to weaken the growth in different ways, some of which are as follows:

- The stealing of public money by corrupt people,
- The diversion of public investments into projects that are more likely to be corrupted (regardless of the essentiality of the project).
- Corruption as a levy on investment (for example the payment of a bribe and so on) cuts profits and investment.
- Corruption causes diversion of resources, especially human capital, from an innovative to unproductive and harmful activities such as theft, renting and the like.

Causes and motives of corruption are as follows:

The lack of consistent legislation on combating corruption, the ineffectiveness of legal guidelines in the economic, financial, banking and documentary departments, the lack of transparency of laws, opportunism, jobbery, unrestrained authority of government directors, the lack of regular and accurate audits in administrative departments and ... (Abdolmaleki, 2010).

The discussion of influences of corruption has created two predominated schools of thought. Based on one of these schools, corruption is beneficial and results in expanded economic growth, but in another school, corruption is a negative and big obstacle to economic growth and modernization.

The first view: They believe that corruption causes economic growth; the views of this group are as follows:

Leff (1964) argues that corruption can help to raise the economic growth with the aid of supplying a higher rate of investment and moreover points out that corruption can enhance domestic innovation, and at higher levels lead to economic growth. He argues that new investors by inventing and introducing a brand-new product, face opposition in the marketplace, so corruption can provide the needed support for introducing new products and boosting innovation. Bayley (1966) comments that corruption both in the shape of rights and interest, and in the form of payments by means of bribes can raise distributing resources for investment. He goes on to say that the move of scarce resources by way of corruption from ordinary to experts, having background and more information on economic growth and possibility for wealth creation, can increase investment and wealth creation that would also lead to economic growth.

The second viewpoint: They believe corruption is an impediment to economic growth. They say that the forces that considered corruption to be useful for economic growth were mistrustful and skeptical. Even though corruption also has benefits; but the disadvantages and costs are so excessive that it neutralizes the advantages.

Al-Mahrubi (2000) claims that besides negative consequences of corruption on macro-economic results such as low investment and sluggish growth, corruption is partly responsible for high inflation. Lowering tariffs and other brakes to international business, uniting market-determined exchange rates and interest rates, getting rid of enterprise subsidies, cutting rules, licensing needs and other barriers to arrival for new firms and investors, demonopolizing regulations and privatizing government properties and clearly making vigilantly banking regulations and surveying and accounting standards are some of the important policy changes that will cut chances for corruption (World Bank, 1998).

Bardhan (1997) comments that corruption is a significant snag to the economic growth that occurs by several ways. Wherever corruption exists, rent-seeking is more worthwhile than productive work, and talents are badly allocated. Financial incentives can also persuade a gifted and educated person into rent seeking rather than in a productive work, which will cut economic growth in the country.

C. There are many studies on transparency and corruption and its relation with economic growth which are referred to as follows:

Taghavi et al. (2011) define and describe corruption, then with integrated data approaches for selected countries over the five years (2003-2008) look at the relation between administrative corruption and economic rise in OPEC member states. The research method is causal and the data collection method is a library. The macroeconomic data collected from the World Bank and the Corruption Perceptions Index data extracted from the Transparency International Institute. After looking at the research hypotheses, the result shows that: The link between corruption and economic advancement in OPEC countries is reversed and important and the effect of administrative corruption's coefficient on economic rise is more than other variables.

The article of Nhavira and Ocran (2013) is different from the previous ones because it surveys the Southern countries of Africa. Inflation has 5 variables, comprising real interest, trade freedom, transparency, real GDP and quasi money (near money) growth. The got coefficient for transparency shows a negative correlation with inflation. But, production and trade liberalization have a positive relation with real GDP. According to descriptive statistics, inflation has fallen by 4 percent before and after performing monetary policy. About the effect of monetary policy transparency on production performance, it is not possible to determine it. Also, the independent variable of the model has no relation to transparency. Based on the results, it can be said that if a country wants to control inflation, it is essential for the country's central bank to be transparent, open economy and controlling the growth of money are effective too.

Delangizan et al (2013) use the combined data of the Corruption Perceptions Index, an indicator of economic freedom and economic growth rate to survey the influence of financial corruption on second variable in the form of a dynamic data panel model using generalized moments in 156 samples from different countries in 2000-2011. Results on country classification indicate that in countries economically free, the connection between the indicator of financial corruption and economic growth reached positive. But in groups with moderate and low economic freedom, the relation betwixt the indicator of corruption perception and growth is estimated negative. Also results can be seen by the sustainability variable in corruption control policies, in the first groups sustainability in

corruption control policies had a positive effect on economic growth but in the second and third groups sustainability has been detrimental to economic growth and has cut it.

Isazadeh (2013) studied the relation between political transparency and economic growth among the countries of the world between 2000 and 2012. Political transparency indicators, including political risk, responsibility, political constancy, government efficiency index and rule of law index can provide an overview of the political structure of each country, and indicators of economic growth include per capita income, purchasing power parity, human development, combined development indicators, sustainable income. In this study, the researcher analyzes global data by reviewing the statistics of the countries of the world with political and economic indicators and presenting five hypotheses with the model of the five indicators of political transparency, the consequences show that the political clarity has a direct relation with economic growth in different countries in 2000 and 2012. In other words, all five hypotheses of the present research were proved; therefore, estimating economic growth along with the variable of political transparency is important in two directions. First it can be a step forward in the model of economic growth a model that includes political clarity in society. Second estimating the political transparency variable can show the status of the state or the ruling party. Therefore, governments should consider the variables when they want to design the policy packages and in this regard, should act beyond individual or group tastes.

Heydari et al (2014) examine the possible border effects of the relation between corruption control index and GDP rise at educational spending variables, administration consumption expenses, agricultural raw material exports, inflation rate and openness of the economy for the Group of Eight (D-8) members during the period 1996-2011. For this purpose, the Panel Smooth Transition Regression Model (PSTR), which is suitable for analyzing heterogeneous panel data are used. The results reject the linearity hypothesis and suggest a two-regime model with a threshold of corruption control of -0.862. In the first regime, corruption control variables, educational costs, agricultural raw materials exports and openness of the economy have a positive and significant effect and the consumption expending variables of government and inflation have a negative and big impact on GDP growth. In the second regime and after passing through the high corruption to its lower levels corruption control

variables, education expenses, agricultural raw materials exports and the freedom of the economy remain positive and big while Government consumption expenditure variables and inflation also have a reverse and big effect on GDP growth. The impact of government expenses and inflation rates has diminished, but influence of corruption control variables, education expenditures, agricultural raw materials exports and the openness of the economy has risen with transition to lesser corruption.

Hekmaty et al (2014) used panel data to look at the effects of corruption control and globalization on the economic growth of high, average and low per capita income countries, between 113 countries and during the period (2002-2010). The results of the study suggest an inverted U-relation between corruption control and economic rise. The results show that the relation between economic globalization and economic growth in countries with low per capita income is negative and significant, Also social globalization has a negative impact on the economic growth of these countries, But political globalization and indicator of globalization have a positive impact on the economic growth of these countries, Also in countries with high per capita income and middle income countries the impact of all three indicators of globalization (economic, social and political) and the indicator of globalization is positive and significant on economic growth.

Hakimi and Hamdi (2015) look at the impacts of corruption on growth and investment in 15 countries of the MENA region during the period of 1985-2013. For this purpose, the Corruption Indicator Information for the International Country Risk Guide and the Data Panel Analysis and Granger Causality Procedure are used to explore the dynamic relationships among variables. The main results from the research reveal that corruption is a major obstacle to the economic growth of the MENA countries, as it influences investment and direct foreign investment flows.

Rano et al (2016) measured the effect of corruption on economic rise in six West African countries in the period of 1995-2014 by using panel econometric analysis. So, the research questions are obtained. What are the effects of corruption on economic growth? Is there a positive or negative relation between them in the countries under investigation? To answer these questions the present study used direct and indirect methods. Indirect effects stress the role of transitional channels. The transitional channels in this study are direct foreign investment and freedom through which economic growth is affected by corruption. The results of

regression analysis showed that direct effect of 1% growth in corruption might result in a decrease of 0.143% of the growth rate. Also, indirect effects of corruption on economic growth through direct foreign investment and freedom are in a small and significant way. The reason can be caused by the lack of predictability of corruption in developing countries.

Chamseddine (2016) states corruption involves many activities, and destroys the flourishing of a country. Many scholars have discussed that the decline in economic growth is because of corruption. But, however some believe that, corruption reinforces growth and development, or do not have a considerable effect on economic performance. But, there is no lucid settlement in the economic literature on the relation between corruption and growth. One of the challenges of examining the impact of corruption on the economy is its complex and mysterious nature which makes it hard to explain and difficult to measure. The present research studies the effects of corruption on economic growth in the MENA region using the International Transparency Corruption Perceptions Index and two data panels for the countries of North Africa and the Persian Gulf between 2003 and 2013. The reason for choosing this region is the alternate possibility of its countries, although the World Bank has concentrated on corruption in developing countries, but little consideration paid to the MENA countries. The results of both samples show a negative but statistically insignificant relation between the economic growth of the countries studied and their corruption.

Linhartova and Zidova (2016) review this question that how corruption affects the country's economic growth. One point in this regard is that, corruption is like a stone in front of the economy that is an obstacle to economic transactions, because it reduces security and protecting property rights and helps to allocate resources inadequate. But, there are authors who argue that corruption is what lubricates the wheels of the economic system as it prevents bureaucratic and administrative delays. Based on theoretical research and empirical studies, the present study looks at the validity of the hypothesis of the negative impact of corruption on economic rise in OECD countries during the period 1999-2014. Based on the econometric model, the model gives a comprehensive overview of how corruption works in the studied countries and its effect on economic growth. The econometric model proved that corruption, not only directly but indirectly in the selected countries, affects economic growth

negatively. Therefore, the validity of the hypothesis in OECD countries is confirmed. Corruption observed in these countries is accompanied by less economic growth.

Yassine (2017) states Corruption is always posing heavy burden on national economies and usually no country is fully immune to corrupt acts so long as human tendency to override rules exist. When a country doesn't have sufficient measures to fight corruption, they will suffer severe implications on many fronts namely political, economic, and social and so on. The United Nations convention against corruption – UNCAC was started in 2004 and signed by around 180 nations by today; signatory countries had to undertake big steps and legal reforms to align their national regulations with the provisions of the convention. Corruption is mainly attributed to occur in government officials, high ranking employees, but previous studies showed that it can occur on various levels and sectors in an economy. Corrupt persons/networks have realized the need to hide their illicit proceedings and resorted to Money Laundering techniques to hide funds/assets away from prosecution. The aim of this paper is to shed light on the provisions of the UNCAC and identify the link between corruption and Money Laundering by analyzing case studies requested from several Anti-corruption agencies in the MENA region.

Kaplan and Akcoraoglu (2017) examine the experimental link between economic growth and an expansive group of political instability factors comprising bribery, government inconstancy, internal and external discords, religious and racial strain, democratic responsibility and red tape quality. And, one of the main goals of our study is to look at the consequences of main problems such as political inconstancy and corruption on economic growth for a panel of OECD countries by using the Generalized Method of Moments estimator in 1984-2012. Our results affirm most of the writing that political instability is reversely connected with economic growth. We found solid proof that corruption has negative effect on economic growth and government inconstancy and internal and external aversions are barriers for rapid growth. However, the conclusions of system-GMM estimation show that democratic responsibility, ethnic and religious tensions and bureaucracy quality have no statistically important influence on economic growth of OECD countries.

Ondo (2017) examines the connection between corruption and growth in the countries of the Economic and Monetary Community of Central Africa (EMCCA). As far as we know, there are no direct relationships

between the two variables in this framework. To this end, we use panel data econometrics to show that during 2005 to 2015, corruption has boosted economic rise in the EMCCA member countries by “grazing” the administrative fees that deter available basic public services (water, electricity, public hospitals and public schools), the foundation and advancement of private companies.

Mahmood et al (2017) state Iraq is one of the most corrupt countries, as since it was part of TI’s statistics occupy the last positions. The aim of the paper is to examine and understand the apprehensions of corruption in Iraq and establish a comprehensive framework for combating corruption by social tools. The education society has selected as study sample by questionnaires randomly at the University students reached (600) student and economics data from 1979 to 2015. Several regression analysis, percentages and charts are used to present the results. The findings indicate that corruption is a factor behind deteriorating the country. The regression test shows negative relation between corruption and growth then, religious powers. In added, the embezzlement and bribery are more common forms in state institutions appearances. The study value suggests answers out scope of government procedures in the fight against corruption that provide social tools relate with self-behavior for corruption problems.

Junyi (2017) studies about which factors could explain the connection between corruption and economic growth on the case of China by analyzing Mauro's theory and Jianming Ren's theory. After analyzing the data of corruption trends and economic growth, the author finds these two theories can't explain the Chinese case. Then the author discussed the other three factors, government policy, government structure and culture. These three factors could explain the said relation.

Thach et al (2017) analyze the effect of bribery on growth by using data of 19 Asian countries in the period of 2004-2015 with D-GMM data processing techniques and quantile regression. The study results show the corruption is a hindrance to economic growth of those Asian countries. Also, economic growth is impacted by different level of the corruption at different quantiles, specifically, at the quantile level from 0.1 and 0.5, corruption impacts positively on economic growth, or vice versa, from 0.75 and 0.90, it is negative. And, the result shows that institutional quality, democracy freedom and economic freedom play important roles in economic growth.

Cabaravdic and Nilsson (2017) argue that corruption as a subject of economic research is a trending topic, and in the age of technology when one has access to more information, bribes and corrupted actions are more easily detected. This thesis tries to answer the question “Does corruption show a significant effect in the growth of an economy” for Southern Europe. The method used to look at this relation is linear panel data regression model with robust standard errors specified in Methodology section. The outcomes of three different regressions with fixed effects are presented in section Results implying that corruption has a positive impact on real GDP per capita growth of the countries in question. This means in the short-term, corruption may have positive effect on economic growth in Southern Europe. Such an outcome provides evidence and confirms the hypothesis that corruption can grease the wheels of an economy by avoiding inefficient bureaucracy.

As per above dissertations all the studies were examining the relation between corruption and economic growth but in this study, we tried to establish a relation between transparency and growth that other variables like gross fixed capital formation, labor force participation and so on were involved. Also, the countries under investigation were different from other studies. And, the period used was updated and tried to reach the updated data. And finally, the estimation method in this study is pooling and the software we used was Eviews 9 which is the last version.

3. Methodology of research

In this study the relation between the corruption perception index, human capital, physical capital and labor force is discussed with economic growth. For this purpose, data from 14 Middle East countries¹ will be used during the period 2003-2015. Data on human capital, physical capital, labor and gross domestic product from the World Bank and data on the corruption index from the International Transparency Institution extracted.

Independent variables of research are economic transparency, gross fixed capital formation, labor force participation rate and human development index.

Economic Transparency: Transparency information is extracted from the Transparency International and Corruption Perception Index is used for its evaluation.

¹ Bahrain, Cyprus, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey and UAE

This index is one of the common indicators which used in corruption studies. In this index, the payment and receipt of bribes, committing embezzlement and similar crimes by political and administrative authorities are evaluated.

Countries score between zero (lowest) and 100 (highest) (in some sources scores range from 1 to 10). The higher score shows more transparency and low score is a sign of low transparency and greater corruption.

Gross fixed capital formation: is the total value of acquiring fixed assets by producers minus the sale or transfer of fixed assets during a given accounting period; also, the value of what has not been generated by the institutional units of the value of fixed assets added. Fixed assets are tangible and intangible belongings which can be derived from a production stream as output and are continuously used in the production process for a period of more than one year.

Labor Force participation rate: Economic participation is affected by factors such as population structure, gender, lifestyle change, and education, earnings without work, inflation rate, wages and economic growth rates. Gender is also considered as the determining factor in economic participation. The higher women's participation in the economy the higher economic participation of the whole country will be, and the lower the women's role will result in lower participation and the gender gap of the workforce as well.

Human Development Index: Per capita income can be considered as the main indicator for measuring the economic performance of countries, but there is many criticism about this index. One of the indicators that is sufficiently comprehensive to measure the performance of countries is the Human Development Index. It calculates the average achievements in a country in three main aspects of human development: long and healthy lives, knowledge gains and decent standards of living. Human Development Index is the mean of geometric development of normal indices that measures the success of each feature.

Dependent variable: is the economic growth which GDP growth is used for its evaluation during the period of 2003-2015.

4. Research findings

Considering the theoretical and experimental basics presented in the previous sections, the research model is as follows:

$$Y_{it} = \alpha_i + \beta' X_{it} + u_{it} \quad (1)$$

Where β' is a vector $k \times 1$ of the parameters, X_{it} is a vector $k \times 1$ of the observations on the explanatory variables, $t = 1, 2, 3, \dots, T$ denotes the time and $i = 1, 2, 3, \dots$, is number of sections. It is also assumed that the disturbance term is a white noise. First, the type of data should be determined (panel or pooled model) using the F Limer test. Thus, according to the above description, the research model can be specified as follows:

$$GDP_{it} = \beta_0 + \beta_1 GCF_{it} + \beta_2 LFP_{it} + \beta_3 CPI_{it} + \beta_4 HDI_{it} + e_{it} \quad (2)$$

In the above equation GDP represents an indicator of economic growth, GCF variable capital formation as a percentage of GDP, LFP is the labor force participation as a percentage of the total population over 15 years of age, CPI is an indicator of corruption perception as a part of lack of transparency/corruption and HDI is the Human Development Index, also e_{it} is considered as an error term.

The indices i and t show that the present study is a panel study. The index i shows the number of countries (14 countries) and the index t shows the period (2003-2015). Besides the model mentioned above two other models will be estimated in this study. In the second model, the human development index and in the third model the indicator of corruption perception index is eliminated.

The results of variables stationary are shown in Table (1):

Table1: The results of unit roots

Variable	Statistic	Prob
Gross Domestic Product	-1/70231	0/0443
Gross Capital Formation	-1/92275	0/0273
Labor Force Participation	-18/9965	0/0000
Corruption Perception Index	-2/72579	0/0032
Human Development Index	-5/00776	0/0000

Resource: research results

As shown in the table above after performing the unit roots test through Levin, Lin and Chu methods, variables are stationary so there is no need for a co-integration test.

The results of the models in the form of a pooling and panel are shown in Table (2). The results show that the calculated statistic is less than F table which this implies acceptance of the zero hypothesis at 95% level and the need for using the Pooling data method and the ordinary regression model for all three models.

Table2: results of F-Limer

F Statistic	Statistic	Prob.
First Model	1/15	0/3207
Second Model	1/26	0/2416
Third Model	1/14	0/3274

Resource: research results

Table 3 shows the estimated results of research models.

Table3: The estimation results of research models by Pooling and OLS

Variable	First Model	Second Model	Third Model
intercept	13/82778 (0/0647)	-1/170517 (0/6427)	15/57751 (0/0172)
Gross Capital Formation	0/172139 (0/0396)	0/136371 (0/0988)	0/172921 (0/0382)
Labor Force Participation	0/180216 (0/0061)	0/122437 (0/0416)	0/167085 (0/0050)
Corruption Perception Index	-0/282892 (0/6305)	-0/867049 (0/1008)	-
Human Development Index	-28/69021 (0/0338)	-	-31/69257 (0/0082)

Resource: research results (numbers in the parenthesis show the significance of the variables)

The results of the table above show that:

In the first model, gross capital formation has a positive and meaningful relation with GDP at 95% level; which suggests if gross capital formation raises one unit, economic growth will be enhanced by as much as 0/172139 unit. The higher investment in a country, the more likely it will be to raise production and consequently employment rate will be increased in that country, because rise in capital, will activate idle capacities of labor market or there will be a possibility of capacity increase, so the volume of production will be enhanced, which will eventually lead to an increase in the country's economic growth.

Labor force participation has a positive and meaningful relation with GDP at 95% level. With one-unit rise in labor participation, economic growth will be raised by about 0/180216. Economically the increase in labor force participation occurs when the labor force in the economic system are absorbed in economic activities and as a result increases the production of the community, which will have a positive impact on the country's gross domestic product.

Corruption perception index has a negative relation with GDP and is not significant at 95% level. Economically the negative relation of the

indicators of corruption perception and GDP growth means that, when the economic transparency of a country's economy is low, attracting investment by the economic sectors of the country will be more difficult and complex, therefore production, which is directly influenced by investment, is also affected and cut.

The human development index has a negative relation with GDP and is not significant at 95% level. The reason for the negative relation between the variables of the human development index and economic growth is the faulty cycle in the performance of countries, the poor performance of human development leads to low performance for growth, which leads to a deterioration of human development and continues. The interconnection between economic growth and human development declares that societies may end up in a vicious circle and a defective cycle of low economic growth and low human development or a Virtuous cycle of good economic growth and high human development. In this case the relation between economic growth and human development may lead societies to ascendency or put them at the risk of poverty and misery.

In the second model, gross capital formation has a positive and meaningful relation with GDP at 95% level; Which suggests that if gross capital formation raises one unit, economic growth will be raised 0/136371 unit. Labor force participation has a positive and meaningful relation at 95% level; which suggests that if labor force participation rises one unit, economic growth will be risen by as much as 0/122437 unit. Corruption perception index has a negative relation with GDP and is not significant at 95% level.

In the third model, gross capital formation has a positive and meaningful relation with GDP at 95% level; which suggests that if gross capital formation increases one unit, economic growth will be increased by as much as 0/172921. Labor force participation has a positive and meaningful relation at 95% level; which suggests that if labor force participation increases one unit, economic growth will be increased as much as 0/167085. The human development index has a negative relation with GDP and is not significant at 95% level.

5. Discussion, Conclusion and Recommendations

A. Discussion: Given the above results it can be concluded that there is a direct and significant relation between transparency and economic rise in the Middle East countries. Thus, our research hypothesis is accepted.

Also, according to the above results, it can be concluded that there is a direct and considerable connection between the growth of labor force participation and economic growth in selected countries; It is thus justified that the role and importance of labor in production and delivery of services in human societies is identified as the most important factor. There is no doubt that human factor is the most important part of the evolution and development of societies. Looking at the stages of human civilization, it is evident that the role of manpower has developed from simple workforce (arm strength and mechanical work) into human capital (knowledge and skills) which is the most important factor of production; because if people cannot use advanced tools and technology, in practice technological advancement will be ineffective.

Also, according to the above outcomes, it can be concluded that there is a direct and meaningful link between forming gross capital and economic growth in selected countries. Tanzi and Davoodi (1997) believes that the logic of experts in economics is that every country needs investment and enhancement in capital stock for economic growth, and more important there is a direct connection between capital expenditure and economic growth. According to this view, if a country adds to its capital expenses (investment) it leads to economic growth. Also, Bengoa and Robles (2003) entitled *Investment and Economic Growth, Evidence from Latin America*, focused on the interactions between investment, capital stock and economic growth using data panel analyzes for 18 Latin American countries during 1970 to 1999. The conclusion of this paper is that capital stock and investment are a determinant factor in the economic growth of host countries. The host country needs enough human capital, economic constancy and free markets to gain from the long-run benefits of capital streams.

B. Conclusion: lack of transparency will result in inefficiency in government policies and decrease investment returns, resulting in a decline in economic growth. Meanwhile lack of transparency can lead to investment and economic activities from its productive form to rents and underground activities and it also fosters hostile organizations such as the Mafia. Widespread corruption is one of the hallmarks of weak governance, and poor governance can directly cut economic growth and development. In this regard, we studied the impact of transparency on the economic growth of the Middle East countries; the results of the study with the integrated data approach show that:

Transparency in the Middle East countries has a direct and significant relation with their economic growth rate and this relation is also direct and meaningful in Iran.

C. Based on above-mentioned results, following policy recommendations can be submitted:

- To be able to reach to a stable economic growth, government should try to increase the transparency in all aspects of the economy from financial to administrative and so on.

- Because of direct and positive relation between economic growth and finance, government should try to make transparent investment projects through which can attract foreign direct investment.

- To be able to rise the transparency in the society, we need to encourage people to be more honest by rewarding virtuous behaviors. To increase the individual's incentives to be more moral, it is better to emphasize motivating factors and control some disincentive factors, which cause the opportunity for corruption.

- Government can raise the transparency through some explanatory variables like: human capital investment, competition, property rights and political stability.

- The quality of governance in Middle East countries is low. As a result, priority should be given to policies that will improve the regulatory quality, rule of law, government efficiency and other relevant governance features.

- The World Bank has argued that the two main conditions for the achievement of any strategy to fight corruption are succession and durability. To ensure that such requirements are met, there is a need for civil society to participate in the anti-corruption process, to form an exigent mass among the population, and to ensure that technical and financial capacities needed to put into effect this strategy are available. Following a general strategy, a comprehensive organizational framework based on corruption detection and monitoring it should be set up.

References:

- 1- Abdolmaleki H. (2010), "Explanation of Practical Solutions to the Issue of Economic Corruption in the Administrative System", the Collection of Articles on the Promotion of Administrative Health and Coping with Corruption, is in hand.
- 2- Aidt, Toke S. (2003), "Economic Analysis of Corruption: a Survey", *The Economic Journal*, Volume 113, Issue 491, pp. 632–652.
- 3- Al Marhubi, F. (2000), "Corruption and Inflation", *Economic Letters*, 66 (2000): 199-202.
- 4- Bardhan, P. (1997), "Corruption and Development: A Review of Issues", *Journal of Economic Literature*, Vol. XXXV (September 1997), pp. 1320 – 1346.
- 5- Bayley, D. H (1966) "The Effects of Corruption in a Developing Nation", *western political Quarterly*, 19 (4): pp.719-32.
- 6- Bengoa, M., Sanchez-Robles, B., (2003). "FDI, Economic Freedom, and Growth: New Evidence from Latin America", *European Journal of Political Economy* 19, 529–545
- 7- Cabaravdic A. and Nilsson M. (2017), "The Effect of Corruption on Economic Growth: Does corruption show a significant effect in the growth of an economy?", *International Economics and Policy*, Jonkoping University.
- 8- Chamseddine, Nour, (2016), "Corruption and Economic Growth in the Middle East and North Africa", *Department of Economics of Trinity College*, pp. 1-70
- 9- Davoodi H. (2000), "Corruption, Growth and Public Finances", *IMF Working Paper* 00/182.
- 10- Delangizan, S., Karimi, M. and Khalvandi, Z. (2013), "The Effect of the Indicator of Financial Corruption Perception on Economic Growth Based on the Separation of Between Countries in the Field of Economic Freedom by GMM Generalized Torque Method", *Journal of Economic Science*, Year 7, No. 24, pp. 161-186.
- 11- Ebben, W. and Vaal A. (2009), "Institutions and the Relation between Corruption and Economic Growth", *Nijmegen, NiCE Working Paper*, pp.09-104.
- 12- Hakimi, A., Hamdi, H. (2015), "How Corruption Affect Growth in MENA Region? Fresh Evidence from a Panel Cointegration Analysis", Faculty of Law, *Economics and Management of Jendouba*, Tunisia, Aix-Marseille University CERGAM (4525), France, pp. 1-21

- 13- Hekmaty F., Shourgoli, A., Ezzati, R. and Dehghani, A. (2014), "Impact of Globalization and Corruption Control on Economic Growth of Low Percentage Countries, Average Per capita Income and High Per capita Income", *Quarterly Journal of Research on Economic Growth and Development*, Vol.5, No.18, pp.95-112.
- 14- Heydari, H., Alinejad, R., Zonoozi, J. and Jahangirzadeh, J. (2014), "Investigating the Relationship between Administrative Corruption and Economic Growth: Observations of the Countries of the D-Eight Group", *Quarterly Journal of Economic Research*, Year 14, No. 55, pp. 183-157.
- 15- Hines, J. R. (1995). "Forbidden Payment: Foreign Bribery and American Business after 1977", *National Bureau of Economic Research Working Paper* No. 5266
- 16- Huntington, S. P. (1968) "*Political Order in Changing Societies*", New Haven,CT: Yale University Press.
- 17- Isazadeh, M. (2013), "A Comparative Study of the Relationship Between the Level of Political Transparency and Economic Growth Between World Countries Between 2000 and 2012", *Thesis for M.A. Degree*.
- 18- Junyi R. (2017), "Factors Could Explain the Relationship between Corruption and Economic Growth", *Peace and Development Studies*. Linnaeus University, Faculty of Social Sciences, Department of Social Studies.
- 19- Kaplan E. and Akçoraoğlu A. (2017), "Political Instability, Corruption, and Economic Growth: Evidence from a Panel of OECD Countries", *Business and Economics Research Journal*, 2017, vol. 8, issue 3, 363-377
- 20- Kaufmann, D. and Bellver, A. (2005), "Transparency: Initial Empirics and Policy Applications", *Munich Personal RePEc Archive*, Online at <http://mpra.ub.unimuenchen.de/8188/>.
- 21- Knack, S. and Keefer, P. (1995). "Institutions and Economic Performance: Cross-country tests using alternative institutional measures", *Economics and Politics* , 7 (3): 207–227.
- 22- Leff, H. (1964) "Economic Development Theory Bureaucratic Corruption ", *The American Behavioral Scientist*, VOL 8(2), PP. 8-14.
- 23- Lindstedt, C. and Naurin, D. (2007), "Transparency Against Corruption. A Cross Country Analysis", *manuscript, Goteborg University*. Available at www.qog.pol.gu.se/research/reports/Lindstedt_Naurin.pdf.

-
- 24- Linhartova, V. and Zidova, E. (2016), "The Impact Of Corruption On Economic Growth In OECD Countries", *Scientific Papers of the University of Pardubice. Series D, Faculty of Economics & Administration*, Vol. 23 Issue 37, pp83-94.
- 25- Mahmood, M., Tian, Y. and Azeez K. (2017), "How Corruption Affects Economic Growth: Perception of Religious Powers for Anti-corruption in Iraq", *ICMSEM 2017: Proceedings of the Eleventh International Conference on Management Science and Engineering Management*, pp 1466-1475
- 26- Mauro, P. (1998), "Corruption and the Composition of Government Expenditure", *Journal of Public Economics*, Vol. 69, No. 2, pp. 263-279.
- 27- Nhavira, J. and Ocran, M. (2013), "Economic Effect of Transparency on Output and Inflation", Nelson Mandela Metropolitan University, *Research in Business and Economics Journal*, pp. 6-8
- 28- OECD (2012), *New Sources of Growth - Knowledge-Based Capital Driving Investment and Productivity in the 21st Century - INTERIM PROJECT FINDINGS*. Paris: OECD.
- 29- Ondo, A. (2017), "Corruption and Economic Growth: The Case of EMCCA", *Theoretical Economics Letters*, Vol 7, PP. 1292-1305.
- 30- Rano, S., Musa, A. and idris, M. (2016), "Impact Of Corruption On Economic Growth", *Journal of Educational Policy and Entrepreneurial Research (JEPER)* Vol. 3, N0.7 Pp 188-201
- 31- Samsami, H. and Salem, A.A. (2015), "Pathology of Economic Transparency and Proposed Proposals in Resistance Economics", *presented at the Global Summit of Basij Professors*, pp. 1-3.
- 32- Stevenson, J. (2003) "Who Must Pay Bribes and How Much?", *Quarterly Journal of Economics*. 118:1, pp.207-30.
- 33- Stevenson, J. (2005). "Eight Questions about Corruption" [online], *Journal of Economic Perspectives*, 19 (3): 19-42
- 34- Taghavi, M., Nikoumaram, H., Ghafari, F. and Toutian, S. (2011), "Relationship between Corruption and Economic Growth in OPEC Member States", *Researcher Management Quarterly*, Eight, No. 21, pp. 88-103.
- 35- Tanzi, V. and Davoodi, H. (1997), "Corruption, Public Investment and Growth", *IMF Working Paper* 97/139.

- 36- *Thach, N., Duong, M. and Oanh, T. (2017), "Effects of Corruption on Economic Growth - Empirical Study of Asia Countries", Imperial Journal of Interdisciplinary Research (IJIR) Vol-3, Issue-7, 2017*
- 37- UNDP (2004) "Anti-Corruption Practice Note". <http://www.u4.no/recommended-reading/anti-corruption-practice-note/>
- 38- UNDP (2008) "Anti-Corruption Practice Note". <http://www.u4.no/recommended-reading/anti-corruption-practice-note/>
- 39- Vishwanath, T. and Kaufmann, D. (1999), "Towards Transparency in Finance and Governance", *the world bank*.
- 40- World, B. (1998). "Corruption and Development", *Prenotes, No 4. Washington: World Bank*.
- 41- Yassine, H. (2017), "Understanding How Laundering the Proceeds of Corruption is Achieved and its Scope in the Mena Region", *Journal of Economics*, Vol 1, PP. 333-336.