



Istanbul Conference of Economics and Finance, ICEF 2015, 22-23 October 2015, Istanbul, Turkey

## Institutions and Economic Performance: A Review on the Developing Countries\*

Aynur YILDIRIM<sup>a\*</sup> Mehmet Faysal GÖKALP<sup>b</sup>

<sup>a</sup>Muğla Sıtkı Koçman University, Muğla, 48770, Turkey

<sup>b</sup>Muğla Sıtkı Koçman University, Muğla, 48000, Turkey

---

### Abstract

The aim of this study is to analyze the relationship between institutions and macro-economic performance in terms of developing countries. For this purpose, for a period covering the years 2000-2011 through the use of 23 institutional structure variables in the study, the relationship between the institutional structure and macro-economic performance is investigated in sampling countries where 38 developing countries take place by using the 'Panel Data Analysis' method. The results of the analysis reveals that institutional structure indicators such as the integrity of the law system, regulations on trade barriers, restriction of foreign investments, the share of the private sector in the banking system and employment-dismissal variables have a positive effect on the macro-economic performance of the developing countries. On the other hand, according to the analysis results, variables such as judiciary independence, government expenditures, transfers and subsidies, civil freedoms, the black market exchange rate, collective bargaining and military tutelage (political stability) have been seen to have a negative impact on the macro-economic performances of developing countries.

© 2016 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Organizing Committee of ICEF 2015.

**Keywords:** Institutions, Institutional Structures, Macro-economic Performance, Developing Countries

---

---

\* Corresponding author. Tel.: +90 5327778093  
E-mail address: [aynury@mu.edu.tr](mailto:aynury@mu.edu.tr)

## **1. Introduction**

Institutions have an influence on the macro-economic performances of countries' by means of affecting transaction costs by decreasing uncertainty, directing economic activity to productive areas and by building trust and enhancing cooperation. The formation, functioning and development of institutions vary significantly among communities and those variations cause differences in economic performances of countries'; making some countries poor while making others rich.

Institutional economics relates the cause of poverty of third world countries to the lack of institutions solving low efficiency problems. Developing countries generally have low quality institutions and fail at supporting productive investments and protecting property rights. In this case, the society has to make institutional reforms and create good institutions in order to achieve economic development.

The aim of the study is to reveal the relationship between institutional structure and macro-economic performance for developing countries. For this purpose, first the relationship between institutions and macro-economic performance is tried to be explained, then by raising institutional structure features in developing countries, the relationship between the institutional structure and macro-economic performance for developing countries is studied empirically.

## **2. Institutions and Macro-Economic Performance Relationship**

Institutions can be defined as habits that bring limitations to our actions through rules and organizations settled in social life, direct us on how we should behave, and lead social life (Yildirim, 2015: 5-6). According to definitions that try to explain the concept of institution, formal and informal rules existing in a society form the institutional structure of the society. In this sense, the institutional structure expresses thought habits, behavior, social habits, traditions, rituals along with laws, constitution, contracts and property rights (North, 2010: 11-12).

The trust factor that makes up the informal aspect of corporate structure of society forms the basis of social order, individual life and economic and political development through resulting effects in the form of growing business scales, industrial structure flexibility and increased social strength to external shocks (Gokalp, 2003). Trust increases the effectiveness of the economic and social system and makes it possible to produce more goods. The economic value of trust is understood better if a world without trust is imagined. For example, a very serious time will be spent to avoid a legal gap in business relations, and this will prevent development and entrepreneurship (Fukuyama, 2005:167). Low trust discourages innovations in the society (Knack & Keefer, 1997:1252). While entrepreneurs in a low trust society spend more time to accommodate a new technology or a new product, the exact opposite applies to high trust societies. This allows more investment in high trust societies and so the economy can grow faster. Accordingly, low level of trust in a society decrease productivity and deactivate economic decisions whereas in the presence of trust, basic economic activities revive, consumption and investment levels increase. Therefore it can be said that the trust factor has important effects on economic performance.

Confidence among the members of a society will reduce the transaction costs by reducing the necessity for formal arrangements. Decrease in the transaction costs will reflect positively on the economy. However in cases where individuals have low levels of trust against each other, formal regulations such as laws, contracts will be needed to compensate this lack of trust. Thus as a result of more frequent recourse to formal regulatory, transaction costs will increase. In addition, if issues rise during the implementation of those regulations, individuals will lose confidence in formal regulations in problems they might face during economic activity, therefore their courage to invest will be broken and they will narrow their scope of action during their economic activity.

There is a very close relationship between transaction costs and property rights. The relationship between the protection of property rights and economic growth is established by means of transaction costs. Property acquisition, preservation and transfer costs are defined as transaction costs. Reduction of transaction costs requires the protection

and a good definition of property rights. Individuals trusting their property rights are protected and that law rules will cause a decrease in transaction costs (Borrmann, Buse & Neuhaus, 2006: 346; Opper, 2008: 392). A well protection of property rights will cause an efficient use of human and physical capital or factors of production, which in turn will have a positive effect on economic performance. The motivation that directs human capital to productive activities is a property rights system which protects the expected returns efficiently (Khan & Sokolof, 2001). According to him, the patent system that provides the protection of property rights will enhance innovations and technology. For this reason, protection of private ownership rights will have a positive effect on economic growth. A good definition of property rights will reduce uncertainty which in turn will ensure efficient use or allocation of resources (Furubotn & Pejovich, 1972: 1141).

As in a society where property rights are recognized and protected, individuals will make their own decisions about their ownerships, efficiency in resource allocation will be possible, and this will increase life standards and contribute to the economic growth of the country (IPRI, 2009:12). In societies where property rights are not defined clearly, individuals or firm owners will not be able to trade their products or resources in a right manner. In this case, individuals who cannot get the return they deserve on the worth they produce will be reluctant in producing new worth or developing their skills. Besides, in an environment where the worth they produce can easily be stolen by others, individuals will use their sources not for production or innovation, but for protecting their existing property. In this case, transaction costs of commercial activities will increase (Parkin, Powell & Matthews, 2000: 42-502; Stroup, 2003: 19).

Institutions may cause both an increase or a decrease in productivity. To get hold of a stable economic performance, countries need institutions which will encourage organizations in productive activities. In developing countries due to the low quality of institutions, the opportunities in front of the political and economic entrepreneurs are complicated. The institutions in those countries are mainly of a nature developing redistribution activities instead of production activities, creating monopolies instead of competitive conditions, restricting opportunities instead of developing them. These institutions rarely lead to investments that will increase productivity.

### **3. Institutional Structure Properties in Developing Countries**

The institutions developing countries have usually lack the sufficient activity in supporting productive investments and solving the low efficiency problem. In those societies, legal principles discriminate among individuals, the property rights are not valid for the majority of the population, the elite have unlimited economic and political power, only a lucky part of the citizens can benefit from the quality education, have access to credit and production opportunities. The effect of institutions on economic performance take shape according to the qualifications they have (Edison, 2003). For this reason, in developing countries, bad institutions that do not function well, affect adversely the economic growth and performance of those countries. In developing countries, the quality of bureaucratic services is low due to the weaknesses in the structure of society. The immaturity of the official institutions performing economic operations increases the cost of doing business. Governments are unstable and populist approaches are intense.

Particularly in Africa and Latin America, the basic flaw in terms of economic growth and development is the arrangements political institutions do which are generally inconsistent with the interests of citizens. This results with providing bad public services. In those countries, the reliability and the applicability of contracts are limited. The uncertainty and manipulation whitespaces in the judicial system, corruption, bribery, tax evasion, ill-defined property rights and the existence of inefficient institutions as ill-conceived arrangements cause those countries to be risky and unattractive (Luiz, 2009: 65-70; Fosu, Bates & Hoeffler, 2006:2; Baliaoune,2005; Birdsall, 2007:578-589; Charnock, 2009:77).

Venezuela, a Latin American country, has the weakest legislation authority in the world. If the legislature cannot be effective in the process of policy making (cannot serve as the guardian of the policy making process), it will be possible for the executive branch to act without control, and the political environment of the country will not be trustable (Pereira, Singh & Mueller, 2011: 78-80).

In recent years in Latin America corruption spreading in all areas of society has been seen. A serious level of corruption is found to exist in Latin American countries in a study made by using the 1997 national corruption level and the 1995-1997 data about personal opinions on corruption. This case ended up with the economy performing a low growth performance. The public data in Colombia and Venezuela as Latin America countries suggests that in both countries, democracy is in serious danger. In Latin America countries where political corruption is a major problem, nine presidents were investigated and were unseated because of corruption. Brazil's president Fernando Collor de Mello's being forced to resign after the wake of a some scandals about how he financed a luxury life through corruption during the election campaign; Ecuador President Bucaram's publication of corruption evidence in the media about the money collected for the poor in a tv program on a new year's night; the Presidency of Carlos Andres Perez being suspended during a lawsuit about embezzling money from public funds in Venezuela can all be shown as examples to this situation (Fellner, 2008:26-29).

In case of developing countries having an autocratic structure, the state trying to gain power over the society causes a competition between the state and the society, leading to the weakening and crash of production. If ethnic diversity is involved in developing countries which lack strong institutions, poor development of political rights and failing to determine and apply successful policies results in ethnic conflicts and harms the economic structure of those countries (Luiz, 2009:65-70; Fosu, Bates & Hoeffler, 2006:2-4).

In Egypt, having lived in a period of political uncertainty for many years, the government started in 1981 has continued performing for 30 years until the Egypt revolution in 2011. In contrast to the promise of a more moderate government, an authoritarian was regime strengthened, Egypt was transformed to a one-party State for the realization of all the goals. Economic and social policies that supports corruption, abuse of office and bribery strengthened the rich and the corrupt ruling elite while weakening the middle class (Owen & Pamuk, 2002: 53-172; Vaitiotis, 1991: 293-463; Pryce-Jones, 2011: 16; Saikal, 2011: 531-532; Marsot, 2010: 142). With the Egypt revolution in 2011 triggered by these factors, transition to democracy process has begun, a new president has been brought to the task through democratic ways (Pryce-Jones, 2011: 16; Saikal, 2011: 531-532; Marsot, 2010:142; Vaitiotis, 1991: 438-463). But this process was interrupted with military blows in 3 July 2013, the elected President Mursi was taken from his post with the military coup d'etat. So Egypt, where transition to democracy is terminated, continues to draw a country profile referred to with government inefficiency, corruption, political instability, public demonstrations, disturbances and unrest.

Senegal, which is just another African country, despite having a multi-party political structure and having never formally a single-party system, was governed by a single political party for forty years from 1960 when gained independence, until 2000 when a change was made (Dakar commercial Counsellor Senegal Report, 2012: 15). A Latin America country Argentina is also another country which could not achieve permanent economic growth since the 1950's because of crisis she cannot get out of caused by political unrest and political instability (Dogruel & Dogruel, 2006: 86; TMMOB, 2007: 16).

In developing countries, despite low levels of social trust, the existing institutional structure does not have a sufficient level of legal regulations and sanctions to compensate for the absence of this trust. Latin America, where developing countries are located intensely, draws attraction as society with low-confidence level. In low trust societies such as Latin America, universal programs are likely to fail due to the lack of potential support. Lack of trust made it difficult to encourage entrepreneurship in Latin America, and limited the opportunities for economic growth and innovation (Fellner, 2008: 11-24).

Developing countries' having human capital made up of mostly unskilled and untrained workers caused the emergence of the informal economy. Lack of legal arrangements such as laws and regulations also facilitates the emergence of the informal economy (Dell'Anno, 2010: 209-222). In these countries where economic freedom has been restricted, regulations about credit and labor markets remained insufficient. In terms of trade policies, a closed look was exhibited for many years, foreign capital has not been granted the necessary importance, and were left behind in terms of technological innovation. For example, in Asian economies such as China, India and Taiwan, a closed view in terms of trade policies was exhibited until the 1980's. India's serious reforms in the area of foreign trade began with the 1990's (Rodrik, 2009: 16-226). In China, economic incentives were weak, economic efficiency was low and technological innovation was slow until 1978. Foreign trade has been kept at a minimum and there has been very little foreign capital entry (Chen, 2008: 422-424; Fellner, 2008: 17-39; Kozlu, 1994: 87-105).

In Table 1, as of 2010, institutional indicators of Chile and Brazil evaluated as large economies of Latin America as well as countries chosen from Asia, Africa and Latin America economies, are summarized. Chile and Brazil attracts attention with the success of their structural reforms and with relatively high quality institutional structures compared to other Latin America countries. The 'political freedoms' and 'civil freedoms' indicators used in the evaluation of the institutional structure are obtained from the 'Freedom in the World Report'. Indices belonging to both indicators take a value between 1-7. Low index values indicate a high level of freedom whereas high values indicate a low level of freedom. For other indicators used in the evaluation of institutional structure, 'Economic Freedom of the World Annual Report' data are used. Indices about institutional structure take a value between 0-10. High index levels point to a highly efficient institutional structure whereas low index levels point to the weakness of institutional structure efficiency.

According to the data on the table; Taiwan, Botswana, China and Chile draw attraction as developing countries having the strongest institutional structure in terms of legal system and protection of property rights while Venezuela having the weakest institutional structure. According to the table, while Taiwan, Egypt, Chile, Mexico and Vietnam are at a more successful point in reducing government intervention, China and Venezuela have displayed a bad performance.

According to Table 1, there is more freedom in Taiwan, Argentina, Brazil and Chile compared to other developing countries whereas a weaker structure is displayed in terms of freedom in Vietnam, Egypt, China and Venezuela. Also, Taiwan, Botswana and Brazil have a more liberal foreign trade structure when just the opposite is valid for Venezuela.

In Botswana, Chile and Taiwan, compared to other developing countries present on the table, better quality regulations are valid in terms of credit, job and labor markets; here Venezuela is again the weakest country in terms of quality of the regulations. Finally, when it comes to preventing bribery, Taiwan, Botswana and Chile attempt to create a more efficient legal framework, in other countries on the table, the laws are insufficient at preventing bribery.

The data in Table 1 reflects the weakness of institutional structures of developing countries. However when those countries are evaluated among themselves, the striking point is, Taiwan always takes place among the better and stronger countries in terms of institutional indicators, and Venezuela is always among the countries with more bad and weak institutional indicators.

For developing countries to be able to get out of this cycle, adopting policies of their own country and making the necessary reforms in the institutional structure is a necessity facing them. The level of trust that is missing in these countries should be compensated by contracts and legal rules. Realistic regulation and efficient implementation of the contracts must be supplied, and confidence of people in these countries in the legal system, laws, property rights must be build up.

**Table 1:** Institutional Indicators in Developing Countries (2010)

COUNTRIES	ASIA ECONOMIES				AFRICA ECONOMIES			LATIN AMERICA ECONOMIES			LATIN AMERICA'S MAJOR ECONOMIES	
	China	India	Taiwan	Vietnamese	Senegal	Egypt	Botswana	Argentina	Venezuelan	Mexican	Brazil	Chile
<b>Judicial Independence</b>	4,89	5,57	6,09	4,33	2,92	6,28	7,27	2,63	1,08	3,74	4,56	<b>7,45</b>
<b>Impartial Courts</b>	5,21	4,69	5,42	4,39	3,76	4,24	6,32	2,61	1,24	3,72	4,30	<b>6,19</b>
<b>Protection of Property Rights</b>	6,74	5,49	8,08	4,52	5,17	5,21	6,86	2,92	1,25	5,05	5,69	<b>6,73</b>
<b>Political Stability</b>	5,00	6,67	6,67	5,00	3,33	4,17	10,0	7,50	0,83	7,50	6,67	<b>7,50</b>
<b>Legal Enforcement of Contracts</b>	6,73	2,59	5,55	6,51	3,39	3,41	4,05	5,02	3,97	5,39	4,00	<b>5,11</b>
<b>Government Intervention</b>	3,63	6,37	7,45	8,04	5,40	7,27	5,03	6,29	4,96	7,18	6,63	<b>7,87</b>
<b>Political Freedoms</b>	3	2	1	7	3	6	3	2	5	2	2	<b>1</b>
<b>Civil Freedoms</b>	6	3	2	5	3	5	2	2	5	3	2	<b>1</b>
<b>Freedom to Trade Internationally</b>	6,86	6,57	7,93	6,37	5,49	6,77	7,33	6,09	3,83	6,77	7,11	<b>8,36</b>
<b>Quality of Regulations</b>	6,70	6,60	7,13	6,46	5,94	5,69	7,40	5,96	4,38	6,58	5,06	<b>7,12</b>
<b>Bribery/Favoritism</b>	<b>5,11</b>	<b>3,92</b>	<b>6,67</b>	<b>3,63</b>	<b>4,04</b>	<b>4,36</b>	<b>6,44</b>	<b>3,20</b>	<b>2,98</b>	<b>4,16</b>	<b>4,69</b>	<b>7,61</b>

Source: Economic Freedom of the World Annual Report 2012; Freedom in the World 2013 and International Property Rights Report 2011

## 4. Data and Methods

### 4.1 Coverage and Data Set

In the application part of the study, the relationship between institutional structure and macro-economic performance is investigated on a country sample made up of 38 developing countries. According to this, the developing countries investigated in the study are: Chile, the Czech Republic, Greece, Hungary, Israel, Estonia, Latvia, Lithuania, Poland, Portugal, Slovakia, Slovenia, South Africa, South Korea, Argentina, Bolivia, Brazil, Bulgaria, China, Colombia, Costa Rica, Ecuador, Egypt, El Salvador, Dominic, India, Indonesia, Jordan, Malaysia, Mexico, Peru, Philippines, Russia, Taiwan, Thailand, Turkey, Ukraine, Venezuela.

In the exploration of the relationship between institutional structure and macro-economic performance empirically, data belonging to a 12 year time period between the years of 2000-2011. The data that will demonstrate the institutional structure of countries' commonly consists of indices described by international organizations. These organizations include the PRS (the International Country Risk Guide), IMD (International Management Development center), World Competitiveness Yearbook, Freedom House, Frasier Institute and Gallup International. In compiling the data, statistics from the World Bank (WGI: Worldwide Governance Indicators), International Monetary Fund (IMF) and United Nations Economic Commission for Europe (UNECE) are used. These indexes published by international organizations are mostly prepared to inform international investors. They have a subjective nature as they are prepared based on expert feedback. Accordingly, indices calculation techniques face criticism directed to the insufficiency and inconsistency of data sources they are based upon (Mansfield, 2014). However, as there is no other data, referring to those indices during academic research is emerging as a necessity.

Institutional Structure variables used in the analyses are located in Table 2 (information on variables are given in the descriptions for Table 1).

**Table 2:** Institutional Structure Variables (Independent Variables)

<b>VARIABLES</b>	
<b>The Legal System Related Indicators and Property Rights</b>	The Independence of the Judiciary The Nature of Legal Regulations Property Rights Protection Military Custody (political stability) The Integrity of the Law System
<b>Government Intervention Related Indicators</b>	Government Expenditures Transfers and Subsidies Marginal Tax Rate
<b>Accountability, Transparency Freedom of Expression Related Indicators</b>	Political Liberties Civil Liberties
<b>Freedom in Foreign Related Indicators</b>	Tariffs Trade Barriers Related Regulations Black Market Exchange Rates Restriction of Foreign Investments
<b>Market Legitimizing Institutions Credit Market Regulations Related Indicators</b>	Credit Market Regulations <ul style="list-style-type: none"> <li>• The Share of the Private Sector in Banking System</li> <li>• Private Sector Loans</li> <li>• Monetary Policy Stability</li> </ul> <hr/> Labor Market Regulations <ul style="list-style-type: none"> <li>• Recruitment and Minimum Wage</li> <li>• Hiring-Dismisal Regulations</li> <li>• Collective Bargaining</li> </ul> <hr/> Business Market Regulations <ul style="list-style-type: none"> <li>• The Cost of Bureaucracy</li> <li>• Business Start-up</li> </ul>
<b>Market Stability Providing Institutions Related Indicators</b>	Inflation

**Source:** Economic Freedom of the World (EFW): Prepared by Using Data from the Freedom House

A great number of variables are used in the literature as macro-economic performance indicators. As GDP (Gross Domestic Product) is the variable we could obtain as the healthiest statistical data for the examined countries, per capita GDP according to purchasing power parity has been used as the dependent variable in the analyses performed. Data for the dependent variable is obtained from the database of IMF's IMF Data and Statistics World Economic Outlook Databases.

In addition, labor and capital quantities of countries' are included in the analysis as the control variable. The statistical data about the related variables are obtained from the databases of World Bank's 'World Bank Data Indicator' and IMF's 'IMF Data and Statistics World Economic Outlook Databases' respectively.

## 4.2 Method

The variables used to examine the relationship between institutional structure and macro-economic performance are suitable for using Panel-data analysis method considering the investigated period. The results belonging to the

panel-data analysis are obtained with the help of Stata 11 package program. For this purpose, first of all, fixed and random effects indicators were chosen with the help of the Hausman test, and the model to be used is determined (Tatoglu, 2013). Heteroskedasticity (different variance) is a problem encountered when working with horizontal cross-section data (Tatoglu 2013: 208-210). Whether heteroskedasticity exists or not in the random effects model with respect to units is tested by using Levene, Brown and Forsythe's tests. To test the existence cross-correlation, Friedman test and Fries test are used. Whether auto-correlation exists or not in our model built upon random effects, is tested by Baltagi-Wu's LBI tests. As a result of finding heteroscedasticity, auto-correlation and cross-correlation after running tests on our model established on random effects, least squares regression pooled by Driscoll-Kraay standard errors is estimated (Tatoglu, 2013: 267). By eliminating the insignificant ones obtained over the results one by one from the analysis, the most meaningful model is tried to be achieved.

### 4.3 Analysis Results

The results of econometric analysis performed to investigate the relationship between institutional structure and macro-economic performance for developing countries are demonstrated in Table 3. According to results of analysis done for developing countries, when labor amount in these countries increase by %10' per capita GDP level increases by %4.49. A %10 increase in the investment level increases the per capita GDP level by %3.21. Turkey's per capita GDP is %18.59 higher than other developing countries.

In the analysis done for developing countries, protection of property rights and the quality of legal regulations, protection of property rights and the quality of legal regulations variables, which are legal system and property rights related indicators, are found to be statistically insignificant; whereas the judiciary independence, military tutelage (political stability) and the integrity of the law system variables have produced statistically significant results. The increase in the index values of judiciary independence variable reveals the high levels of judiciary independence; the decrease in the index value reveals the low levels of judiciary independence. According to Table 3, a one point increase in the judiciary independence variable decreases the per capita GDP level by %4.3. Although the legal system is expressed as a factor of institutional quality, the bureaucratic mechanisms network decrease the efficiency of the judiciary system, and influence economic performance negatively despite increased judiciary independence.

The increase in the index value of the integrity of the law system variable, which takes place among the legal system and property rights related indicators, reveals the neutrality and power of the legal system. According to Table 3, a one point increase in the neutrality level of the legal system increases the per capita GDP by %8.6. The integrity of the law system reflects the degree individuals trust and obey social rules. The relationship between the rule of law and economic growth is set upon the basis of protection of individual rights (property rights) and the implementation of contracts (Doyle & Zarzosof, 2011; Chen, 2008; Gani & Prasad, 2006; Dolar & Kraay, 2003; Grigorianv & Martinez, 2000; Rodrik, 1999). When the results of judiciary independence and the integrity of the law system variables are evaluated together' in affecting economic performance positively, judicial neutrality is more important than judicial independence.

A fall in the index values of military custody (political stability) variable, which gives the army's participation rate in politics, means political stability level is low; high index values indicate the political stability level is high. So, according to Table 3, a one point increase on political stability level decreases per capita GDP by %3.4 (or a one point decrease in the political stability level increases the per capita GDP). The resulting findings support the "conflict perspective" (Sirowy & Inkeles, 1990; De Hann & Siermann, 1995; Nelson & Singh, 1998) which claims that democracy prevents economic growth, or economic growth prevents democracy. Since it will be easier to repress society in a way that will improve the investment climate and make it more profitable within the framework of expectations of the business world under increased military tutelage, a rise in GDP will be pretty understandable as it will be possible to direct the savings and resources of the society to the business world.



**Table 3:** The Impact of Institutional Structure on Macro-Economic Performance in Developing Countries

<b>Dependent Variable: per capita income based on purchasing power parity</b>		
<b>Independent Variables</b>	<b>Coefficient (Standard Error)</b>	<b>t (P&gt; t )</b>
Constant	<b>2.552238</b> (0.3423622)	-
Labor	<b>0.4494267</b> (0.0890628)	5.05 (0.000)*
Investment	<b>0.321245</b> (0.1294796)	2.48 (0.018)*
Turkey	<b>0.1859042</b> (0.0796184)	2.33 (0.025)*
Judicial Independence	<b>-0.0432682</b> (0.0207066)	-2.09 (0.044)*
Military Tutelage (Political Stability)	<b>-0.336949</b> (0.0085029)	-3.96 (0.000)*
The Integrity of the Law System	<b>0.0857172</b> (0.0280988)	3.05 (0.004)*
Government Expenditures	<b>-0.0886779</b> (0.0110747)	-8.01 (0.000)*
Transfers and Subsidies	<b>-0.051889</b> (0.0198883)	-2.61 (0.013)*
Civil Freedoms	<b>0.01786859</b> (0.0187176)	9.55 (0.000)*
Trade Barriers Related Regulations	<b>0.1405506</b> (0.0325659)	4.32 (0.000)*
Black Market Exchange Rates	<b>-0.1487935</b> (0.0359271)	-4.14 (0.000)*
Restriction of Foreign Investments	<b>0.0209807</b> (0.0110482)	1.90 (0.065)*
Private Sector Share in the Banking System	<b>0.0308285</b> (0.0109844)	2.81 (0.008)*
Hiring-Dismissal Regulations	<b>0.0555278</b> (0.0242582)	2.29 (0.028)*
Collective Agreement	<b>-0.1111944</b> (0.0146496)	-7.59 (0.000)*
Number of Observations = 455                      Group Size = 38		
F[prob]= 3071 [0.0000]		
R-squared= 0.6097		
*The Coefficient is Significant at a 0,05 Significance Level		
**The Coefficient is Significant at 0,10 Significance Level		

In the analysis, marginal tax rate, which is a variable used to measure government intervention, has been statistically insignificant whereas government expenditures and transfers and subsidies have produced statistically significant results. Decreases in the government expenditures variable related index values means there exists high levels of government expenditure; increases in the index values means government expenditures is low. In this context, according to Table 3 which demonstrates the results for the model built for a group of countries consisting of developing countries, a one point increase in the government expenditures variable decreases the per capita GDP level by %8.9. In other words, decrease in government expenditures has a negative effect on per capita GDP. On the other hand, rises in the index values of transfers and subsidies, which is another government intervention related indicator, means low levels of subsidy is applied. Therefore, according to Table 3, a one point increase in the index value of transfers and subsidies decreases the per capita GDP level by %5.2. Accordingly, a reduction in subsidies affects per capita GDP level negatively. Findings for both variables reveals that government intervention for realization of infrastructure investments to enhance economic growth in developing countries has positive impact on economic performance.

According to Table 3, in the model established for developing countries, the political freedoms variable has been statistically insignificant whereas civil freedoms variable has produced significant results. A fall in the index values of civil freedoms variable means increased level of civil freedoms. In this context, according to Table 3, as civil freedoms decrease, per capita GDP level increases by %1.8. Individuals having strong individual rights such as freedom of association and rule of law makes sure they perform economic activities safely. On the other hand, behind this power they gain, the possibility of decreases in productivity levels during economic activities might have caused this outcome.

Increase in the index values of foreign investment restrictions variable means restrictions about foreign investment are low, and there is a high level of foreign investment. A decrease in the index values means foreign investment is restricted. According to Table 3, there is a positive and significant foreign investment variable will increase the per capita GDP by %2.1. To increase the positive effects of foreign investment entries on economic performance, which is highly important for developing countries, foreign capital must be targeted directly because of its contribution to the country's production.

Decreases in the index values of regulations on trade barriers, which is a variable used for measuring freedom in foreign trade, means foreign trade restrictions are at a high level; increases in the index values mean either there are no foreign trade restricting regulations or they are implemented at a low level. Therefore, according to Table 3, a one point increase in the regulations about trade barriers variable will increase the per capita GDP by %1.4. In other words, per capita GDP levels will be affected positively when trade restricting policies are reduced.

According to Table 3, a negative and statistically significant relation is present between black market exchange rate and per capita GDP. Decreases in index values of black market exchange rate variable shows the presence of a black market, and the low convertibility of national currency; increases in the index value means there is no black market present and that national currency is fully convertible. According to Table 3, a one point increase in the black market exchange rate variable lowers the per capita GDP by %1.5. In other words, when there is no black market and national currency is fully convertible, per capita GDP decreases. Free foreign trade policies may result in wasting limited foreign exchange reserves by directing underdeveloped countries to importing luxury goods for high income groups, instead of investment goods necessary for economic development. Therefore, extreme exchange control implementations where national currency loses convertibility can be a foreign trade policy tool used to have foreign exchange savings through restricting imports, ban capital export and prevent external deficits.

An increase in the index values of private sector share in the banking system, which is a credit sector indicator, shows the share of private savings are high in the banking system. Therefore, according to Table 3, a one point increase in the private sector share in the banking system increases per capita GDP by %3.1. Accordingly, we can say that credit market regulation, financial freedom, freedom of individuals and firms during economic activities affect macro-economic performance positively (Alzer & Dadasov, 2013; Gwartney, Hall & Lawson, 2010; Charnock, 2009: 87; Cheptea, 2007: 226; Powell, 2003; Ayal & Karras, 1998).

Increases in index values of hiring-dismissal regulations, which are among the labor market indicators, means a labor market where short-term contracts can be made and flexible applications exist. According to Table 3, a one point increase in the hiring-dismissal variable increases the per capita GDP level by %5.6. In other words, in a flexible applications environment, there are increases in the per capita GDP levels. Workers who are given strong rights by improvements in the labor market, such as making dismissals difficult by laws, providing employment security can lower productivity levels by using those rights for their own benefit. Accordingly, employers having to increase auditing to increase productivity, forming new rules including punishing or rewarding applications, will increase transaction costs and have negative impacts on economic performance. Short term working regulations are employed generally in times of global, regional or sectoral crisis because of challenging reasons (Cin, 2013: 35-36). Increases in the production costs during economic instability caused by crisis may lead to decisions like reducing production or giving it a break. Making long-term employment contracts in such periods may increase employer's liabilities, such as wages and amends. While trying to lower labor costs by short-term working arrangements instead

of decreasing production or number of workers, preventing unemployment is enabled by continuing employment opportunities. During the 2000-2011 period covered in the study, along with the national crisis faced in Turkey, regional and global crisis have made short-term working arrangements a solution possibility; and we can say they have positive contribution on the economic performance.

Decreases in the index values of collective agreements, which is another indicator of labor market, means there exists a centralized collective agreements; increases in the index values mean firms can make collective agreements by themselves. According to Table 3, a one point increase in the collective agreement variable will decrease the per capita GDP level by %1.1. In other words, firms making collective agreements flexibly on their own have a negative impact on per capita GDP. Where agreements are done flexibly by firms, firms will be insufficient in suppressing wages, compared to a structure where collective agreement is applied, and this will lead to indirect disadvantage in costs and price increases during competition process.

## 5. Conclusion

As a result of investigating the institutional structure of developing countries, it is concluded that the institutions these countries have generally lack sufficient effectiveness. Accordingly, in developing countries, the quality of bureaucratic services is poor, cost of doing business is high due to weaknesses in the social structure. Governments are instable and populist approaches are common. Even though social trust level is low, the existing institutional structure does not have a sufficient level of legal regulations and sanctions to compensate for the absence of trust. The reliability and the applicability of contracts is limited. In addition, in developing countries, there exists inefficient agencies in the form of uncertainty and whitespaces leading to manipulation in the judicial system, corruption, bribery, tax evasion, ill-designed property rights and ill-designed regulations. Developing countries' having human capital mainly consisting of unskilled and untrained workers causes emergence of informal economy. In these countries where economic freedom has been restricted, regulations on credit and labor market remained insufficient. For many years, a closed look is exhibited in terms of trade policies, foreign capital has not been granted enough importance, and was left behind in terms of technological innovation.

The results of the analysis done to reveal the relation between institutional structure and macro-economic performance in developing countries shows institutional structure related indicators such as the integrity of the law system, regulations on trade barriers, foreign investment restriction, private sector share in the banking system and hiring-dismissal variables have a positive effect on macro-economic performance in developing countries. In addition, according to the analysis results, judiciary independence, government expenditures, transfers and subsidies, civil freedoms, black market exchange rate, collective agreement, military tutelage (political stability) variables have a negative impact on macro-economic performance in developing countries. On the other hand, institutional structure indicators such as the quality of legal arrangements, property rights protection, marginal tax rate, political freedoms, tariffs, net negative interest, hiring-minimum wage and inflation variables have produced insignificant results.

In the institutionalist understanding, a discrimination has not been made between developed and developing countries in terms of good or weak institutions having an impact on economic performance. But institutional regulations necessary to increase economic performance may differ in developed and developing countries, just as countries belonging to the same group may differ among themselves. Regulations presented as good set of institutions can cause the opposite of the expected effect when combined with the unique local conditions of these countries. For this reason, institutional structure reforms done with the motivation to increase competitiveness (the pressure of competition) caused by globalization phenomenon may not reach its purpose, and legal regulations issued to this end may just stay as decisions made on paper. Even if societies form similar institutions, differences in the functioning of institutions and in the development of societies can be seen as time goes.

Therefore, to the degree the infrastructure institutions and superstructure institutions a country has are in harmony with each other, institutional reforms will contribute positively to a country's economic performance.

Trying to implement a policy that is contrary to social values will cause new problems rather than a solution, by causing unrest in the society. In societies that cannot line institutions with each other, institutions will lose operability and effectiveness; and the economic performance the country will show will be affected negatively.

As a result, it can be argued that there is not an institutional regulation set, which is valid in every country, called good institutions. What is meant by good institutions is factors expanding, enhancing, enlarging the economy and increasing competitiveness; and if institutions are described as the current rules of the game played in the society, rules being different in games played in every society will cause the differentiation of set of good institutions from one society to another.

## References

- Alzer, M. & Dadasov, R. (2013). Financial Liberalization and Institutional Development. *Economics & Politics*, 25(3), 424-451.
- Ayal, E. B. & Karras, G. (1998). Components of Economic Freedom and Growth: An Empirical Study. *Journal of Developing Areas*, 32(3), 327-338.
- Baliamoune, L.M. (2005). Institutions, Social Capital, and Economic Development in Africa: An Empirical Study. ICER Working Paper, International Centre for Economic Research, 18/2005, <http://www.icer.it/docs/wp2005/ICERwp18-05.pdf>, (12.06.2009).
- Birdsall, N. (2007). Do No Harm: Aid, Weak Institutions and the Missing Middle in Africa. *Development Policy Review*, 25 (5), 575-598.
- Borrmann, A., Buse, M., & Neuhaus, S. (2006). Institutional Quality and the Gains from Trade. *Kyklos*, 59(3).
- Charnock, G. (2009). Why do Institutions Matter? Global Competitiveness and the Politics of Policies in Latin America. *Capital ve Class*, 33(2), 67-99.
- Cheptea, A. (2007). Trade Liberalization and Institutional Reforms. *Economics of Transition*, 15(2), 211–255.
- Chen, Yu. (2008). Opening-up or Institutional Development? Evidence from China. *International Economic Journal*, 22(4), 419–430.
- Commons, J. R. (1931). Institutional Economics. *American Economic Review*, 21 (4), 648-657.
- Desai, M. (2011). Marx'ın İntikamı. G. Özgür (Trans.), Ankara: Eflatun Printing Distribution Publishing Consulting and Investment Co.Ltd.
- De Haan, J. & Siermann Clemens L.J. (1995). New Evidence on the Relationship between Democracy and Economic Growth. *Public Choice*, 86, 175-198.
- Dell'Anno, R. (2010). Institutions and Human Development in the Latin American Informal Economy. *Const Polit Econ*, 21, 207–230.
- Dollar, D. & Kraay, A. (2003). Institutions, Trade and Growth. *Journal of Monetary Economics*, 50, 133–162.
- Doğruel, F. & Doğruel, S. (2006). Bıçak Sırtında Büyüme ve İstikrar Arjantin, Brezilya, Meksika, İsrail, Türkiye. İstanbul: İstanbul Bilgi University Publishings
- Doyle, E. & Martinez-Zarzoso, I. (2011). Productivity, Trade and Institutional Quality: A Panel Analysis. *Southern Economic Journal*, 77(3), 726-752.
- Edison, H. (2003). How Strong Are The Links Between Institutional Quality and Economic Performance. *Finance & Development*, 40(2).
- Fellner, A. (2008). Role of Culture in Economic Development: Case study of China and Latin America. Theses and Dissertations. Paper 236. University of South Florida Scholar Commons @USF, <http://scholarcommons.usf.edu/etd/236>
- Fosu, A., Bates, R. & Hoeffler, A. (2006). Institutions, Governance and Economic Development in Africa: An Overview. *Journal of African Economies*, 15 (1), 1–9.
- Fukuyama, F. (2005). Güven, Sosyal Erdemler ve Refahın Yaratılması, A. Buğdaycı (Trans.), İstanbul: İsbank , Culture Publishings, 370
- Furubotn, E.G. & Pejovich, S. (1972). Property Rights and Economic Theory: A Survey of Recent Literature. *Journal of Economic Literature*, 10(4), 1137-1162.
- Gani, A. & Prasad, B.C. (2006). Institutional Quality and Trade in Pacific Island Countries. *Asia-Pacific Research and Training Network on Trade Working Paper Series*, 20, (rev. 2/09)
- Gökalp, N. (2003). Ekonomide Güven Faktörü. *Journal of Management and Economics*, 10(2).
- Grigorian, D.A. T & Martinez, A. (2000). Industrial Growth and the Quality of Institutions. Policy Research Working Paper, WPN: 2475, [http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2000/12/15/000094946\\_00111605302949/Rendered/PDF/multi\\_page.pdf](http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2000/12/15/000094946_00111605302949/Rendered/PDF/multi_page.pdf), (08.12.2010)
- Grossman, G.M. & Helpman, E. (2002). *Special Interest Politics*. Cambridge: MIT Pres.
- Gwartney, J. D., Hall, J.C. & Lawson, R. (2010). *Economic Freedom of the World: 2010 Annual Report*. Vancouver, BC: The Fraser Institute. Data retrieved from [www.freetheworld.com](http://www.freetheworld.com).
- Hamilton, W.H. (1932). Institutions. Edwin R., Seligman A. and A. Johnson (Ed.), *Encyclopaedia of the Social Sciences*. vol.8, 84-89. Macmillian.
- Hodgson, G.M. (1998). The Approach of Institutional Economics. *Journal of Economic Literature*. 36(1), 166-192.
- Keizer, P. (2007). The Concept of Institution in Economics and Sociology, A Methodological Exposition. Utrecht School of Economics Tjalling C. Koopmans Research Institute, Discussion Paper Series, 07(25).
- Khan, Z.B. & Sokolof, K.L. (2001). The Early Development of Intellectual Property Institutions in the United States. *Journal of Economic Perspectives*, 15(3), 233-246.
- Knack, S. & Keefer, P. (1997). Does social capital have an economic pay off? *Quarterly Journal of Economics*, 112(4).
- Kozlu, C. (1994). *Türkiye Mucizesi İçin Vizyon Arayışları ve Asya Modelleri*. Ankara: İşbank Culture Publishings

- Luiz, J. M. (2009). Institutions and Economic Performance: Implications for African Development. *Journal of International Development*, J. Int. Dev. (21).
- Mansfield, Z. (2014). Küresel Sistemde Endeksler Tuzağı. <http://www.turcomoney.com/yazar/kuresel-sistemde-endeksler-tuzagi.html>. (01.12.2014).
- Marsot, A.L.A. (2010). Mısır Tarihi Araçların Fethinden Bugüne. G.Ç. Güven (Trans.), İstanbul: Tarih Vakfı Yurt Publishings.
- Nelson, R.R. (2007). Institutions and Economic Growth: Sharpening the Research Agenda. *Journal of Economic Issues*, XLI (2).
- Nelson, M.A. & Singh, R.D. (1998). Democracy, Economic Freedom, Fiscal Policy and Growth in LDCs: A Fresh Look. *Economic. Development and Cultural Change*. (pp. 677-696). Chicago: The University of Chicago.
- North, D.C. (2010). Kurumlar, Kurumsal Değişim ve Ekonomik Performans. (2.ed.), G.Ç. Güven (Trans.), İstanbul: Sabancı University.
- Opper, S. (2008). New Institutional Economics and Its Application on Transition and Developing Economies. E. Brousseau & J.M. Glachant (Eds.) *New Institutional Economics*. (pp. 389-405). New York: Cambridge University Pres.
- Owen, R. & Pamuk, Ş. (2002). 20. Yüzyılda Ortadoğu Ekonomileri Tarihi. A. Edirne (Trans.), İstanbul: Sabancı University Publishings.
- Parkin, M., Powell, M. & Matthews, K. (2000). *Economics* (4th edition). England: Addison Wesley, Pearson Education Limited.
- Pereira, C., Singh, S.P. & Mueller, B. (2011). Political Institutions, Policymaking and Policy Stability in Latin America. *Latin American Politics and Society*. 53(1), 59-89.
- Powell, B. (2003). Economic Freedom and Growth: The Case of The Celtic Tiger. *Cato Journal*, 22(3), 431-448.
- Pryce-Jones, D. (2011). Arab Agony. *National Review*, 63(3), 16-18.
- Rodrik, D. (2009). Tek Ekonomi Çok Reçete: Küreselleşme, Kurumlar ve Ekonomik Büyüme. N. Domanıç (Trans.), Ankara: Eflatun Publishing.
- Rodrik, D. (1999). Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses. *Journal of Economic Growth*, 4(4), 385-412
- Saikal, A. (2011). Authoritarianism, revolution and democracy: Egypt and beyond. *Australian Journal of International Affairs*, 65(5), 530-544.
- Sirowy, L. Inkeles, A. (1990). The Effects of Democracy on Economic Growth and Inequality: A Review. *Studies in Comparative International Development*, 25(1), 126-157.
- Stroup, R. L. (2003). Eco-nomics, What Everyone Should Know About Economics and the Environment. Cato Institute, Washington, D.C.
- Tatoğlu, F.Y. (2013). Panel Veri Ekonometrisi Stata Uygulamalı. İstanbul: Beta Printing Publishing Distributing Co.Ltd.
- TMMOB. (2007). TMMOB Industry Congress Room Report.
- Veblen, T.(1919). *The Place of Science in Modern Civilisation and Other Essay*. New York, Huebsch.
- Yıldırım, A. (2015). Institutional Structure and International Competitiveness: a Review on Turkey, Unpublished PhD Thesis, Muğla: Muğla Sıtkı Koçman University, Institute of Social Sciences.
- Williamson, O. E. (2000). The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economics Literature*, (38), 595-613.