The Factors Determined To The Improvement In The Least Developed And Developing Countries: Testing A Model

Gözde Ergin, Adil Oğuzhan

Trakya University, Department of Econometrics

Abstract

Finding the different ways of the improvement as a multidimensional process causes different improvement ways in all countries in the world. The economic improvement that cause a structural changing is very important in all economies all over the world and it is necessary for the least developed countries at the same time. These countries have solved the phenomena of poverty, unemployment, low life standards and unimproved. The differentiation in the socio-cultural structures of the least developed and developing countries effect the improvement in a positive way.

In the study, the socio-economic factors of improvement and a classification according to the gross national product levels per person in the least developed and developing countries have been done by taking the definition accepted by World Bank into consideration. There are fifteen countries in the classification of the least developed and developing countries. The data of thirty-three factors in the comparison of these countries have been obtained from the data source of World Bank, OECD, EUROSTAT and UN (2000 – 2009).

The Statistical and Casual Models in the kinds of econometric models have been estimated with ''Panel Model Method''. For choosing the suitable model, the test for choosing model ''Hausman'' has been used. As a result, the factors determined to the improvement of the countries in a different improvement levels have been discussed and the comments related to them have been made.

1.INTRODUCTION

The concept of economic development could be defined as the process of increasing of material wellbeing, abolishing the poverty, the input in production and the usage of these outputs as a result and besides, as an activity of the protections of the level of the socio-economical standards of the society in order to use them more actively and with different methods for the production process.

The problems of individuals and the world increase gradually because of the increase of the world population and the globalization. In todays world, where the incomes of the individuals raise, the distribution of income gets worse and the poverty increases, the importance of the development problematic dramatically increased. In a world which gets smaller with the expansion of communication tools due to globalization, the level of information acquisition of both countries and individuals has risen. Therefore, solutions are sought through development policies for the alternating lifestyles, economies and the differentiation in countries' and individuals' socio-cultural structures.

Development, having multiple aspects, has various angles and these bring about different development periods in each country. For that reason, development is defined in different ways by various people and thinkers.

Economic Development is very important in every economies and it nearly becomes compulsory for the low-level of development countries. Because, these countries can only find a solution for poverty, low-living standarts and backwardness entity with economic development. But on the other hand when examining for advanced tecnology, development shows necessity for maintaining current growth rate in advanced tecnologies (Jain & Ohri, 2007:2)

Development carries meaning of recovering economy and in any case of negativities for underdeveloped countries. As known,it should be tried to be developed and handled with all defects in this issue and origins of these defects for achive successing in a weak issue. The biggest step of developing should be provided the process of developing with handle by looking cause and effects of deficincies in economy. Development not only develop in terms of economy, but also known as social and politically changes and positive contributions of these changes.

2.Development Theories

After from 1950s, a lot of development theories suggested to the world.(boyacıoğlu, 200:27-28). The major ones of these theories are known as The Development Theory of Rostow, The Balanced Development Theory and Unbalanced Development Theories. According to Rostow's development theory in 1960, the development countries are the countries surpassed the stage of traditional society,transition,rising,maturity, and the mass consumption.

In the countries which is in the stage of traditional society occur an intense agricultural sector and the functions of the limited production and modern scientific-technical practices. Education and infrastructure investment in the transition stage society have a dramatically increasing and bring about new initiatives.   .In rising stage the composed profit returns to investment and technology is started to use successfully at all sectors. Anymore, the societies in the maturity stage use their sources in the areas having modern technology. While their production and exportation are increasing, parallelly the requiremenst for new import goods are increasing, as well. As for in the stage of mass consumption, the per capita income arise and the society starts concentrating on consumption rather than production.Impetus between these stages is the expediting economic growth as returning internal and external austerity to enough amount investment. (Dolun ve Atik, 2006: 8).

Balanced development aims a condition of equilibrium in the economy.The economic events occured in the underdeveloped society rely on the complementarity link.In terms of thought, complementarity is the important factor of the balanced development and it is not an instrument to realize the balance situation but it is an directive item.The balanced development model rests on the mutual dependence.As a first, it is the mutual dependence in production.On one hand, every economic group have to find income and look for the market for its outcome .As a second, it is that every income growth create an enhancement in demand.

The balanced development with balance, food products with clothing, agricultural feedstock with industrial products, public enterprises with other investments and such as production for the export and domestic demand   are asked to arised for many other ecomomic situations .

According to Rosentein-Roden respected the pioneer of balanced development in order to increase income and demand are needed benefical and healthy investments.Concerted investments are going to increase income and demand.Thus, investment in parts is not enough both increasing demand and income.Overall, coordinated investments in Rosentein-Roden model supplies with the external savings.

With the aim of comparing economic development and economic growth, an organized schedule is given below.

612

	Economic Development	Economic Growth
Content	Economic Development refers to either mutations savings and national (mutations betwen institutional and tecnologic) frame or progressive mutations of economic structure.	Economic Growth is an increase in capacity of an ecenomy to produce goods and services like investment, savings and revenues.
Use	Economic Development refers to benefit from unused resources in underdevelop countries.	Economic Growth is related with development of low-used sources from developed contries to use in optimum way.
Boost (büyüme)	Development, equilibrium rate is connected with the raising of high steady state.	.Growth is connected with general steady and graduaded raise at the rate of investment and outcome.
Definition	Economic Development implies the problems of underdevelopment countries.	Economic Growth implies the problem of developed countries.
Action	Creates both qualitative and quantitative mutations in economy.	Creates only quantitative mutations economy.
Scope	Connected with all mutations in economy.	Connected with small motations in economy.

3. Panel Data Analysis

When T numbered observations of N numbered econometric units are dealed together establish panel data model. Assets belonging to any year establish the cross section of the panel; the assets the economic units take by years establish the time sector. In other words, across every econometric unit there is a time series. Panel data analysis model is the model where economic relations are presumed using time sector cross. (Powel, 2010: 1).

4. A Model Test Regarding Development Factors Affecting Development at Underdeveloped and Developing Countries

Taking into consideration the development factors affecting the development of developing and underdeveloped countries with the condition of benefiting from panel data, the Socio-Economic variables of countries taking place at the panel model are defined as below.

X_1 : Research- Development Cost GDP %	X_2 : GDP Per Capita(Year)
X_3 : Rural Population's % Among Total Population	X_4: The Rate of Urban Poplation in the Overall Population
X_5 : Death Rate (1000 Person)	X_6 : Tax Revenue GDP %

613

X_7 : İnfant Death Rate (1000 İnfant)	X_8 : Agricultural Rate % in GDP
X_9 : Service Sector % in GDP	X_{10} : Industrial Sector % in GDP
X_{11} : Import of Good and Service % in GDP %	X_{27} :FDI %in Net Capital Inflow
X_{12} : Export of Good and Service % in GDP %	X_{13} : GDP Rate
X_{14} : Real Inflation Rate	X_{15} : Unemployment Rate
X_{17} : The Number of Scientfic Article	X_{19} : Expectancy of Life (Year)
X_{18} : Electrical Consumption Per Capita	X_{20} : Inflation Rate
X_{22} : Cultiroted Land (Hek.)	X_{23} : The Rate of Employed In Industrial Sector
X_{24} : The Rate of Employed In Service Sector	X_{25} : Dependency Rate
X_{28} : Comminication Revenue	X_{29} : Energy Import % in GDP
X_{30} : The Rate of Big Urban in Over Population	X_{31} : Women at the Parliament
X_{32} : The Rate of Population (Year)	X_{33} : GDP per Capita($)

4.1. Approximation Results According to Panel Model of Underdeveloped Countries

Under this chapter underdeveloped countries are Uzbekistan; Kyrgyzstan; Ethiopia; Kenya, Nepal, Bangladesh and Afghanistan. These countries are considered as underdeveloped ones according World Bank's definitions. For these countries different approximation models of social and economic sector will be tested.

Table 1: Approximation Results of Underdeveloped Countries Social Sector According to Panel Model

	Model I		Model II	Model III	Model IV	Model V
	Constant Effective Model		**Random Effective Model**	**Pooled Least (LSDV)Model**	**Fit Panel Data Model using GLS, removing Autocorrelation and homoscedasticity**	**Robust Score**
Variables	Coefficients		Coefficients	Coefficients	Coefficients	Coefficients
C	-6.672591 (0.2953)		-1.786856 (0.7641)	-	8.353807 (0.000)	-1.516349 (0.897)
X19?	3.505694 (0.0047)		2.428435 (0.0139)	3.505694 (0.0047)	.5925234 (0.000)	2.367225 (0.166)
X25?	-1.995913 (0.0007)		-1.605449 (0.0037)	-1.995913 (0.0007)	-1.352025 (0.000)	-1.583195 (0.014)
X30?	1.940735 (0.0044)		1.279782 (0.0045)	1.940735 (0.0044)	.1943402 (0.000)	1.244267 (0.195)
X31?	0.103846 (0.0518)		0.132759 (0.0077)	0.103846 (0.0518)	.05734 (0.000)	.1343365 (0.015)
Fixed Effects (Cross)			**Random Effects (Cross**			
_UZB--C	0.099859		0.136976	-6.572731	-	-

	Model I	Model II	Model III	Model IV	Model V
_KIR--C	-1.402104	-0.869378	-8.074695	-	-
_ETOP--C	0.571702	0.178319	-6.100889	-	-
_KEN--C	0.641290	0.633556	-6.031301	-	-
_NEPAL--C	0.470263	0.270047	-6.202328	-	-
_BANG--C	-0.696803	-0.483477	-7.369394	-	-
_AFG--C	0.315794	0.133956	-6.356797	-	-
R^2	0.847275	0.506778	0.847275	-	-
$\bar{R}^2$	0.821389	0.476426	0.821389	-	-
S_e	0.215075	0.220746	0.215075	-	-
$\sum e_i^2$	2.729168	3.167381	2.729168	-	-
Log likelihood	14.23175	-	14.23175	62.08698	-
F-statistic	32.73143	16.69666	32.731	-	-
Prob(F-statistic)	0.000000	0.000000	0.000000	-	-
Akaike info criterion	-0.092336	-	-0.092336	-	-
Schwarz criterion	0.260999	-	0.260999	-	-
Hannan-Quinn criter.	0.048013	-	0.048013	-	-
Durbin-Watson stat	1.167119	1.009085	1.167119	-	-
Wald-ist.	-	66.79	-	399.78	-
LM	-	108.83	-	-	-
corr(u_i,Xb)	-0.8864	0 (assumed)	-	-	-
F u_i=0	25.72	-	-	-	-
sigma_u	.76597963	.48702719	-	-	-
sigma_e	.21507476	.21507476	-	-	-
Rho	.92692184	.83680818	-	-	-

Table2: Panel Model of Approximation Results Economic Development Sector of Underdeveloped Countries'

	Model I	Model II	Model III	Model IV	Model V
	Constant Effective Model	**Random Effective Model**	**Pooled Least (LSDV)Model**	**Fit Panel Data Model using GLS,removing Autocorrelation and homoscedasticity**	**Robust Score**
Variables	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
C	-21.94974 (0.0544)	8.061894 (0.0137)	-	10.48043 (0.000)	8.83934 (0.000)

615

		Random Effects (Cross			
X22?	1.808341 (0.0157)	-0.144044 (0.4889)	1.808341	-.3189611 (0.000)	-.1946205 (0.025)
Fixed Effects (Cross)					
_UZB--C	0.570444	0.416194	-21.37930	-	-
_KIR—C	2.574761	0.075481	-19.37498	-	-
_ETOP—C	-2.399361	-0.598519	-24.34911	-	-
_KEN--C	0.266447	0.407666	-21.68330	-	-
_NEPAL—C	1.172460	-0.181637	-20.77728	-	-
_BANG--C	-0.874519	0.137800	-22.82426	-	-
_AFG--C	-1.310231	-0.256984	-23.25998	-	-
R^2	0.684503	0.006429	0.684503	-	-
$\bar{R}^2$	0.648883	-0.008183	0.648883	-	-
S_e	0.301551	0.316311	0.301551	-	-
$\sum e_i^2$	5.637852	6.803588	5.637852	-	-
Log likelihood	-11.16097	-	-11.16097	50.3867	-
F-statistic	19.21651	0.439978	19.21651	-	-
Prob(F-statistic)	0.000000	0.509375	0.00000	-	-
Akaike info criterion	0.547456	-	0.547456	-	-
Schwarz criterion	0.804427	-	0.804427	-	-
Hannan-Quinn criter.	0.649528	-	0.649528	-	-
Durbin-Watson stat	0.663113	0.459701	0.663113	-	-
Wald-ist.	-	0.44	-	256.57	5.04
LM	-	82.60		-	-
corr(u_i, Xb)	-0.9727	0 (assumed)	-	-	-
F u_i=0	16.40	-	-	-	-
sigma_u	1.6653277	.39296918	-	-	-
sigma_e	.30155042	.30155042	-	-	-
Rho	.96825253	.62938698	-	-	-

4.2. A Model Test According to the Economic Development of Underdeveloped Countries

When the economic factors dimension of improvement models of underdeveloped countries is seen as a panel model, Constant Effective Model has been estimated as a first model. In the estimation of this model all economic variables has been added to the model as explanatory variables.

616

The Hausman Test was applied to understand which model is more coherent at the above approximated Fixed Effect Cross Model and Random Effects. The results are below.

Table 3: Hausman Determination Model Test Results

Correlated Random Effects - Hausman Test
Pool: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.819711	1	0.0052

Because the test result is p<0.05 the hypothesis is denied and FEM is preferred. In addition the α_i of the countries statistic meaning test is approximated at LSDV model III.

4.3. Panel Model Approximation Results of Developing Countries

Under this chapter as developing countries; Azerbaijan, Argentina, Brazil, Bulgaria, China, Mexico, Turkey and Kazakhstan are taken. These countries are considered as developing ones according World Bank's definitions. For these countries different approximation models of social and economic sector will be tested.

Table 4: Panel Model of Approximation Results Economic Development Sector of Developing Countries

Model I		Model II	Model III	Model IV	Model V
Constant Effective Model		**Random Effective Model**	**Pooled Least (LSDV)Model**	**Fit Panel Data Model using GLS, removing Autocorrelation and homoscedasticity**	**Robust Score**
Variables	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
C	1.205352 (0.5830)	3.536970 (0.0721)	-	8.461126 (0.000)	2.974038 (0.332)
X8?	-1.417998 (0.0000)	-1.449383 (0.0000)	-1.417998 (0.0000)	-1.315091 (0.000)	-1.443142 (0.000)
X18?	1.281596 (0.0000)	0.988897 (0.0001)	1.281596 (0.0000)	.3027834 (0.010)	1.059926 (0.004)
Fixed Effects (Cross)		**Random Effects (Cross**			
_AZER—C	-0.481379	-0.460849	0.723973	-	-
_ARJ--C	0.479222	0.464491	1.684574	-	-
_BRE--C	0.072678	0.013988	1.278031	-	-
_BULG—C	-0.609218	-0.427305	0.596134	-	-
_CHN--C	0.386770	0.265768	1.592122	-	-

_MEK--C	0.019974	-0.059541	1.225326	-	-
_TC--C	1.092678	0.996506	2.298030	-	-
_KAZ--C	-0.960724	-0.793057	0.244628	-	-
R^2	0.868931	0.679488	0.883863	-	-
$\bar{R}^2$	0.260507	0.671163	0.868931	-	-
S_e	4.750457	0.268295	0.260507	-	-
$\sum e_i^2$	-0.563648	5.542612	4.750457	-	-
Log likelihood	59.19276	-	-0.563648	9.971518	
F-statistic	0.000000	81.62015	59.19276	-	-
Prob(F-statistic)	-	0.000000	0.000000	-	-
Akaike info criterion	0.264091	-	0.264091	-	-
Schwarz criterion	0.561845	-	0.561845	-	-
Hannan-Quinn criter.	0.383469	-	0.383469	-	-
Durbin-Watson stat	1.472890	1.202092	1.472890	-	-
Wald-ist.	-	163.24	-	174.48	76.11
LM	-	129.86	-	-	-
corr(u_i, Xb)	-0.5420	0 (assumed)	-	-	-
F u_i=0	29.98	-	-	-	-
sigma_u	.66598321	.4772026	-	-	-
sigma_e	.26050657	.26050657	-	-	-
Rho	.86729755	.77040971	-	-	-

Table 5. Hausman Determination Model Test Results

Correlated Random Effects - Hausman Test
Pool: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.672753	2	0.0356

Because the test result is p<0.05 the hypothesis is denied and FEM is preferred. In addition the α_i of the countries statistic meaning test is approximated at LSDV model III.

618

Table 6: Panel Model of Approximation Results Social Sector of Developing Countries

	Model I		Model II	Model III	Model IV	Model V
	Sabit Etkili Model		**Tesadüfi Etkili Model**	**Pooled Least (LSDV)Model**	**Fit Panel Data Model using GLS, removing Autocorrelation and homoscedasticity**	**Robust Score**
Değişkenler	Katsayılar		Katsayılar	Katsayılar	Katsayılar	Katsayılar
C	11.25996 (0.0407)		30.32038 (0.0000)	-	7.424574 (0.000)	31.62741 (0.000)
X25?	-7.450049 (0.0000)		-6.270002 (0.0000)	-7.450049 (0.0000)	.0323962 (0.868)	-6.833261 (0.000)
X30?	9.174063 (0.0000)		0.856127 (0.0001)	9.174063 (0.0000)	.2843438 (0.000)	1.173124 (0.009)
Fixed Effects (Cross)			**Random Effects (Cross**			
_AZER--C	-9.249312		-1.556559	2.010649	-	-
_ARJ--C	-5.165218		0.628508	6.094744	-	-
_BRE--C	3.671319		0.593179	14.93128	-	-
_BULG--C	-2.847708		-0.949942	8.412254	-	-
_CHN--C	14.45671		-0.236747	25.71667	-	-
_MEK--C	-1.194810		1.310704	10.06515	-	-
_TC--C	-0.779853		0.497350	10.48011	-	-
_KAZ--C	1.108873		-0.286492	12.36884	-	-
R^2	0.886835		0.527576	0.886835	-	-
$\overline{R}^2$	0.872286		0.515305	0.872286	-	-
S_e	0.257151		0.326793	0.257151	-	-

$\sum e_i^2$	4.628865	8.223100	4.628865	-	-
Log-Lik.	0.473513	-	0.473513	-100.2685	
F -Statistic		42.994	60.95	-	-
Prob(F-statistic)	0.000000	0.000000	0.000000	-	-
Akaike info criterion	0.238162	-	0.238162	-	-
Schwarz criterion	0.535916	-	0.535916	-	-
Hannan-Quinn criter.	0.357540	-	0.357540	-	-
Durbin-Watson stat	1.493082	0.852996	1.493082	-	-
Wald-ist.	-	85.99	-	311.09	72.20
LM	-	58.48	-	-	-
corr(u_i, Xb)	-0.9951	0 (assumed)	-	-	-
F u_i=0	71.25	-	-	-	-
sigma_u	7.0313029	.43614757	-	-	-
sigma_e	.25715142	.25715142	-	-	-
rho	.99866425	.74204622	-	-	-

5.CONCLUSION

The development of economies is possible trough achieving a better position of the accepted criteria and indicators of development. Societies and countries can be categorized among developed countries when they manage to realize the necessary conditions of development. The variation among development factors and socio-economic levels of countries has led to the establishment of categories of developed, under developed and developing countries.

Development is a well-rounded process, thus because of its well rounded face the difference of development processes in each country is dissimilar. Economic development brings also structural change which is very important for every economy but in countries where the development level is rather low, is almost compulsory. Because these countries can bring solution to their poverty, unemployment, low level of living standard and underdevelopment trough economic development. The diversification of socio-cultural structure of underdeveloped countries affects positively the development. In these countries culture has limited effect upon economic actions and brings a slow development process.

In developed countries development is a necessity to prolong existent growth rate. In these countries it is aimed to upgrade the living standards of people trough economic development. In developing countries the first target of development which is the skewness of the economy and inequality brings also poor level of living. In these countries the socio-cultural development criteria are in low levels and the existence of a traditional cultural approach hinders development.

According to the evaluations of social criteria of underdeveloped countries in this essay, life expectations, the rise number of women at the parliament and the increase of life percentages in metropole together with the decrease of dependence rate, affects positively the development. These factors have shown that they are an important step towards development level of the underdeveloped countries. It is arrived to conclusion that in undeveloped countries the decrease of rural population and exports has positive effects upon development.

When we look to the suggestive variations of the social criteria model of developing countries, we see that while the increase of life percentages in metropole increases development, the increase of dependence rate has negative effects upon development. According to economic criteria, the increase of the agricultural sector at GDP affects negatively the development. The increase of per capita electric consumption is an important indicator of development for the developing countries.

Therefore the increases in prosperity and positive economic activities are only possible trough economic development. In conclusion via development policies is possible to create more modern societies.

REFERENCE

Balgati, H. Badi, ''Forecasting With Panel Data'', Journal of Forecasting, Wiley İnterScience, January, 2008, s.155-156

Balgati, H. Badi, Econometric Analysis of Panel Data, Third Edition, John Wiley & Sons Ltd, England, 2005, s.7-99

Balgati, H. Badi; Bresson, Georges; Pirotte Alain, ''Joint LM Test for Homoskedasticity in a One-Way Error Component Model'', Syracuse University, Department of Economics and Center for Policy Rearch, New York, October, 2005, s.4-6

Berber Metin, İktisadi Büyüme ve Kalkınma, 3. Baskı, Derya Kitabevi, Trabzon, 2006, s.2-217

Boyacıoğlu, Ebru, ''Gelişmiş ve Gelişmekte Olan Ülkelerin Kalkınma Kriterleri Açısından Karşılaştırılması ve Türkiye İçin Öneriler'', Doktora Tezi, 2007, s.68

Cypher, James M., Dietz, James L., The Process of Economic Development, Published by Routlegde, Oxon, 2009, s.147-148

Dinler, Zeynel, İktisada Giriş, Ekin Dağıtım, Bursa, 2009, s. 587

Dolun, Leyla; Atik, A.Hakan, ''Kalkınma Teorileri ve Modern Kalkınma Bankacılığı Uygulamaları'', Ekonomik ve Sosyal Araştırmalar Müdürlüğü, Ekim, 2006, Ankara, s.6-8

Dülgeroğlu Ercan, Kalkınma Ekonomisi, Uludağ Üniversitesi Basımevi, Bursa, 2000, s.42

Gasper, D., Developments Ethics: An Emergent Field?, eds: R. Prendergast & F. Stewart, St. Martin's Press, 1994, New York.

Ghatak, Subrata, İntroduction to Development Economics, New York, 2003, s. 113

Hsiao, Cheng, Analysis of Panel Data, Cambrıdge University Press, Second Edition, New York, 2003(8-11-12-14-15-33).

Jain, T.R.; Ohri, V.K., Indian Economy, Issues in Economic Development & Planning in India and Sectoral Aspects of Indian Economy, V.K. Publication, New Delhi, 2007, s.2

Jain, T.R. ; Bajaj, Balbir Kaur; Gupta, Ashok; Sandhu, AS, Development Economics, Star Offset, Delhi, 2007, s.160-161

Jain T.R., Malhotra Anil, Development Economics, V.K. Publication, New Delhi, 2009, s.167

Pazarlıoğlu, M.V., Kilen Gürler, Özlem, ''Telekominikasyon Yatırımları ve Ekonomik Büyüme: Panel Veri Yaklaşımı'', Finans Politik & Ekonomik Yorumlar, Cilt:44, Sayı: 508, 2007, s.39

Powel, James L., Panel Data Models, Departmant of Econometrics University of California workingnotes, Berkeley, 2010, s:1

İlkin, Akın, Kalkınma ve Sanayi Ekonomisi, İstanbul Üniversitesi Yayını, İstanbul, 1988, s.13-221

Kızılgöl, Özlem; Üçdoğruk, Şenay, '' 2002-2006 Yılları Arasında Türkiye'de Yaşam Standartları ve Yoksulluğa İlişkin Mikro Ekonometrik Analizler'' ,2009, s.6

Thomas, Clive Y., The Rise of the Authoritarian State in Peripheral Societies, Monthly Review Press, New York, 1984, s.51-50

Tüylüoğlu, Şevket; Çeştepe, Hamza, Kalkınma Ekonomisi, ''Kalkınma Teorilerinin Temelleri ve Gelişimi'' Editörler: Sami Taban- Muhsin Kar, Ekin kitapevi, Bursa, 2004, s.44-45

Yaffee, A. Robert, ''A Primer of Panel Data Analysis'', Social Sciences, Statistics & Mapping, Connet İnformation Tecnology at New York, September, 2003, s.1-2

Yavilioğlu Cengiz, ''Geri Kalmışlık Olgusu ve Ekonomistik Kalkınma Teorileri (Eleştirisel Bir Yaklaşım)'', C.Ü. İktisadi ve İdari Bilimler Dergisi, Cilt:3, Sayı:2, Sivas, 2002, s.7-60

http://www.diffen.com/difference/Economic_Development_vs_Economic_Growth

http://econ.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20420458~isCURL:Y~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html (01.10.2010)

http://data.worldbank.org/indicator/SP.POP.GROW (27.09.2010)

http://data.worldbank.org/indicator/SL.AGR.EMPL.FE.ZS(27.09.2010)