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Well-Being of Society: The Role of Institutions vs. Government Expenditure

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Abstract

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In this paper we attempted to analyze the determinants of country level human development. Since the human development index is a better indicator of people's well-being than GDP per capita we argue that effectiveness of government policies should be judged in terms of their contribution to human development. By using a large panel dataset obtained from various sources we analyzed the effects of government expenditures and the level of economic freedom on human development. The results provide strong support for the hypothesis that higher level of economic freedom is positively related to higher level of human development. Economic freedoms are especially important in countries with low level of human development. On the other hand, we failed to find evidence for government expenditures' effect on human development. Overall, our results indicate that a country's institutional framework, especially those that are related to economic freedoms, have a significant effect on people's well-being and development.

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1. Introduction

In economics textbooks the goals of economic policy are generally listed as stable prices, full employment and economic growth. When we consider the fact that stable prices and full employment provide most suitable conditions for long-term economic growth, we might tend to think that the ultimate goal of economic policy is actually only economic growth. Furthermore economists in general determine countries' economic position in the world by comparing their GDP per capita figures, which are the result of their economic growth performance in the past. Although GDP per capita is still the most widely used criterion for comparing the general material welfare of people in different countries, it is not a secret that GDP per capita is not a perfect indicator for the well-being of people since it does not take into account important aspects of human development such as health and education. When we

rank countries of the world according to their GDP per capita figures we observe that countries with quite different levels of human development may have similar GDP per capita levels. It is even possible to see a country with relatively worse health and education levels to have a higher GDP per capita than quite a number of countries with better health and education levels.

Mainly because of the shortcomings of GDP per capita in measuring human development and well-being, the United Nations Development Programme (UNDP) started to offer an alternative measure, “Human Development Index” (HDI), in its *Human Development Report 1990*. Although some authors, such as Kelley (1991), McGillivray (1991), Dasgupta and Weale (1992) and Sagar and Najam (1998, 1999), expressed their doubts in the HDI’s usefulness in representing the human development levels of different countries, today it has been widely accepted as an important indicator of human well-being. Since the HDI is a composite index that measures progress in the three basic dimensions of human development, namely health, knowledge and income, it reflects the average well-being of different nations much better. Therefore, assuming that governments are ultimately for the well-being of their people, one might argue that it is better to judge economic policies according to their effects on the HDI, rather than GDP per capita. The object of this paper is to investigate the effects of government expenditures and country institutional environment on human well-being as reflected in HDI figures. Understanding which one of these factors contributes more to increases in human well-being might have important policy implications. Using this knowledge, governments might choose to concentrate their efforts either on the improvement of institutions or on government expenditures and their components.

Our assumption that human well-being or human development should be the main objective of economic policy is shared by Ranis, Stewart and Ramirez (2000). These authors view human development as the central objective of human activity and economic growth as potentially a very important instrument for advancing it. In their study, they accept that achievements in human development can make a critical contribution to economic growth. Therefore they examined two distinct casual chains, one that runs from economic growth to human development and the other from human development to economic growth. They found that countries initially favoring economic growth rather than human development lapsed into vicious cycles with bad performance on human development and economic growth reinforcing each other. Therefore they advocate that countries should give human development priority over economic growth. In a later study Suri, Boozer, Ranis and Stewart (2011) continued to explore the two-way relationship between economic growth and human development. By using panel data strategies that they developed to estimate the strength of these relationships they found that human development plays an essential role in determining growth trajectories. Their conclusion is in line with Ranis, Stewart and Ramirez (2000) paper. They suggest that successful policy requires an early focus on human development since it affects economic growth both directly and indirectly.

Another important issue regarding human development and economic growth is whether they converge or diverge. Nissan and Niroomand (2005) use per capita income and the HDI data on 100 countries classified by income (High, Middle and Low) from the year 1975 to 1998 and investigate convergence and divergence among these three income classifications. They employ a conditional

expectation model for the data on the HDI and income. Their results indicate convergence for the HDI on a small scale for poorer countries and overall divergence for income. Molina and Purser (2010) use a unique data set of the HDI on 111 countries for the years from 1970 to 2005. Aiming to describe long-run human development trends, they find that all countries except one show progress in their HDI levels over the 35 year period. Especially with respect to the life expectancy and literacy dimensions they find evidence of poorer countries catching up with rich countries.

It is also worth mentioning a couple of papers about the sustainability of human development. Neumayer (2001) argues that a country's human development is unsustainable if net depreciation of its manufactured and natural capital stock is bigger than its investment. His analysis includes 155 countries and gives a bleak conclusion that the indicated human development of 42 countries, most of which already have low HDI, is potentially unsustainable. He further argues that these countries need foreign assistance to maintain even these low levels of human development. Costantini and Monni (2007), on the other hand, try to analyze the casual relationship between economic growth, human development and sustainability. They combine the so-called Resource Curse Hypothesis and Environmental Kuznets Curve models and adopt a human development perspective. Their results corroborate the importance of quality of institutions and investments on human capital for a sustainable development path.

Although many studies, such as Rodrik, Subramanian and Trebbi (2004), Acemoglu, Johnson and Robinson (2005), Keefer and Knack (2007) and Rodrik (2008), about the determinants of economic growth show that good governmental institutions foster economic growth, there are not many studies about the determinants of human development. In a paper titled *Determinants of Human Development: Insights from State-Dependent Panel Models* Binder and Georgiadis (2010) look at economic and human development of 84 countries from 1970 to 2005. They apply a novel dynamic panel data model with state-dependant coefficients to study the effects of some economic policies on the development of HDI and GNP per capita. The macroeconomic policies whose effects on economic and human development they study are investment in physical capital, government consumption and trade openness. They find that the effects of macroeconomic policies on HDI are less and take longer time to unfold than their effects on GDP per capita. Also, cross country differences in social norms and institutions may determine the way macroeconomic policies affect long-run economic development. Particularly, whereas an expansionary fiscal policy in the form of government consumption positively affects GDP in countries with low institutional quality, it negatively affects long-run GDP in countries with high institutional quality.

In our study we focus on economic freedom as the institutional variable. Three fundamental principles of economic freedom might be listed as empowerment of the individual, non-discrimination, and open competition. Since in an economically free society individuals control the fruits of their own labor and initiative, they are empowered to pursue their own goals. In such a society the government does not discriminate either against or in favour of certain individuals according to any factor unrelated to individual merit, such as their race, religion, class, family connections, etc. Economic freedom also requires that decision-making is widely dispersed and resources in the society are allocated on the basis of free and open competition so that all participants in the market have a fair chance of success. An

economically free environment allows individuals to use their energies and abilities to pursue their own goals without unjust meddling of other individuals and the government. As a result, it is expected that in such an environment individuals and society as a whole become more productive and create better conditions for human development.

The remainder of this paper is organized as follows. In the second section we illustrate the model specification and the estimation procedure. The data used in the study is also described in this second section. In the third section, results are presented and interpreted. The fourth section concludes.

2. Data and Methodology

2.1. Sample and Data

In order to analyze the determinants of human development, we construct a dataset by merging United Nations Development Program's (UNDP) data on human development with the Heritage Foundation's data on economic freedom and World Bank's data on a variety of macroeconomic indicators. Since 1980, the UNDP constructs and publishes a country level index of human development for 186 countries. Our dataset contains 1,375 country-year observations on human development for the years 2000, 2005 and the years between 2008 and 2013. However, the index is not calculated for all countries in the dataset for every year. Our data on institutions of economic freedom comes from the Heritage Foundation. Since 1995, the Heritage Foundation calculates a country level index of economic freedom for 186 countries. The index is based on 10 quantitative and qualitative factors that are related to a country's economic, political and legal environment. Our data of economic freedoms covers the years between 2008 and 2013, though the values for some countries are missing in some years. Finally, we obtain data on several macroeconomic variables from the World Bank's database. Due to missing data on several of our dependent and independent variables, we conduct most of our analyses on an unbalanced panel dataset of 858 country-years for 159 countries. The average number of years of our panel dataset is 5.4.

2.2. Empirical Specification and Measures

In this paper, we analyze two models of the determinants of human development. Our first model is inspired by Barro's (1991) economic growth model and Binder and Georgiadis' (2010) analysis of the determinants of human development. The equation for this model, which we call human development growth model is stated as follows:

$$hdi_{grw}_i = \beta_0 + \beta_1(hdi80)_i + \beta_2(mefree)_i + \beta_3(mgex)_i + \beta_4(mtrd)_i + \beta_5(minv)_i + \beta_6(mfirt)_i + \varepsilon_i \quad (1)$$

where subscript i stands for country, and ε is the iid-normal error term. The dependent variable hdi_{grw} (*Av. Annual HDI growth*) reflects the annual average growth rate in human development index (hdi) from the year 1980 up until year 2013 and is calculated as $(hdi_{2013}/hdi_{1980})^{1/33} - 1$. *Human development index* for a country is calculated by equally weighted values of GDP, life expectancy at birth and education, where the value of education equals one third of the tertiary gross enrolment rate

plus two third of the literacy rate^{*}. We rescale *hdigrw* by multiplying it with 1000. *hdi80* (*HDI80*) is the value of the index in the year 1980.

The variable *mefree* (*Av. Economic Freedom*) reflects the mean level of economic freedom for a country. Following Heritage Foundation, we define economic freedom as the right of an individual to control his or her own labor and property. To gauge the level of economic freedom in a country, the Heritage Foundation calculates the index of economic freedom since 1995. The overall value of economic freedom for each country in the index is based on four main properties of a country's economic environment. These are rule of law, limited government, regulatory efficiency and market openness. Using various sources of information to assess these properties, the index measures ten specific components of economic freedom on a scale from 0 to 100. These specific components are property right protection, freedom from corruption, fiscal freedom government spending, business freedom, labor freedom, monetary freedom, trade freedom, investment freedom and financial freedom[†]. These components are equally weighted to obtain the overall economic freedom for a country. Our measure of the mean level of economic freedom for a country, *mefree*, is calculated by taking the average of the values of overall economic freedom for a country over non-missing years.

The variable *mgex* (*Av. Government Expenditures, % GDP*) is the mean value of government final consumption expenditures divided by GDP for a country over non-missing years. This value includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditures on national defense and security, but excludes government military expenditures that are part of government capital formation.

The variable *mtrd* (*Av. International Trade, % GDP*) is the mean value of the sum of export and imports divided by GDP for a country over non-missing years. Exports are measured as the sum of goods exports, service exports and primary income receipts. Imports are measured as the sum of goods imports, service imports and primary income payments.

The variable *minv* (*Av. Investment, % GDP*) is the mean value of gross domestic investment divided by GDP for a country over non-missing years. This investment consists of expenditures on the fixed assets, such as schools, hospitals, plant, and machinery, plus net changes in the level of inventories.

The variable *mfrt* (*Fertility Rate*) is the mean value of fertility rate for a country over non-missing years. Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

Our second model is similar to the first one (human development growth model), except, in this model we attempt to explore the panel nature of our dataset. Thus, our dependent variable, *hdi_{it}*, is the value of the human development index for country *i* in year *t*. In addition, we drop the fixed variable *hdi80* from this model. Lastly, instead of cluster-mean values of the dependent variables we use the yearly values. This approach allows us to explore not only the cross-sectional but also the time series nature of the data. Our second model is stated as follows:

* For more on the methodology of the human development index, visit <http://hdr.undp.org/en/content/human-development-index-hdi>

† For more detail on these components and how they are calculated, visit <http://www.heritage.org/index/about>

$$hdi_{it} = \beta_0 + \beta_1(efree)_{it} + \beta_2(gex)_{it} + \beta_3(trd)_{it} + \beta_4(inv)_{it} + \beta_5(frtr)_{it} + \nu_i + \varepsilon_{it} \quad (2)$$

where, i and t stand for country and year, respectively. hdi (HDI) is the value of the human development index, and $efree$ (*Economic Freedom*) represents the variable for economic freedom. In this model, we analyze the relationship between human development and the four key properties of the economic environment (*rule of law, limited government, regulatory efficiency and market openness*) along with overall economic freedom. Rule of law is calculated as the simple average of a country's score on property rights protection and freedom from corruption. Limited government is calculated as the simple average of a country's score on fiscal freedom and government spending. Regulatory efficiency is calculated as the simple average of a country's score on business freedom, labor freedom and monetary freedom. Market openness is calculated as the simple average of a country's score on trade freedom, investment freedom and financial freedom. The definitions for the other variables in this model are the same as those in our first model, except they take yearly values instead of their cluster-mean values. Finally, in this model, the Greek letter ν indicates country specific effect and ε is the idiosyncratic error term.

2.3. Estimation Technique

To estimate equation (1), we first use the method of OLS regression. As the error term may not have a constant variance, we use heteroskedasticity-robust Huber/White/sandwich estimator of the VCE (Variance-covariance estimate). While this method could answer the question whether one of our independent variables in the model, say, economic freedom, is important, it does not address the question whether economic freedom has the same effect in countries with low human development as in countries with high human development. Quantile regression allows us to analyze the effect of our independent variables on various quantiles of human development (Koenker and Hallock, 2001). For instance, using quantile regression we are able to estimate the effect of our independent variables on the median of human development and compare this result to other estimates using lower or higher quantiles as well as the OLS estimate. In this way, we are able to obtain a more comprehensive picture of the relationship between our independent and dependent variables. Thus, using quantile regression method with robust estimator of VCE, we estimate our equation (1) for the 10th, 50th, and 90th percentiles of human development index.

To estimate equation (2), we use cluster-robust fixed effect panel data estimator, allowing us to control for unobservable country specific effects in the relationships we espouse. An alternative way to model and estimate individual (country) specific effects in panel data is the random effects estimator. This estimator generates more efficient estimate, however under certain conditions the fixed effects is more preferable as it allows for a limited form of endogeneity in the regression model (Yilmaz, Tag, Ozkan and Degirmen, 2014). Moreover, Hausman test (Hausman, 1978) indicated that the fixed effects estimator is more appropriate. Nevertheless, the results from both estimators are qualitatively the same, and could be provided upon request. We also control for year specific effect in our estimates of equation (2) by including a dummy variable for each year from 2009 through 2013.

Table 1: Summary Statistics

Variable	Obs	Years of Data	Mean	Std. Dev.	Min	Max
HDI	1,375	2000, 2005, 2008-2013	0.652	0.174	0.1184	0.9440
HDI80	124	1980	0.544	0.166	0.1910	0.8410
Av. Annual HDI Growth x 1000	124	2013	8.187	4.446	0.1799	25.9196
Economic Freedom	1,051	2008-2013	59.645	11.652	1.0000	90.0000
Rule of Law	1,053	2008-2013	42.249	22.180	5.0000	95.0000
Open Markets	1,053	2008-2013	57.728	16.493	0.0000	91.6667
Regulatory Efficiency	1,054	2008-2013	66.328	12.285	0.0000	95.4667
Government Size	1,051	2008-2013	69.776	16.384	0.0000	95.9500
Government Expenditures (% GDP)	4,091	1990-2013	16.407	8.260	2.0471	156.5315
International Trade (% GDP)	4,260	1990-2013	87.192	51.703	10.7483	531.7374
Investment (% GDP)	4,123	1990-2013	23.581	11.066	-2.4244	219.0694
Fertility	4,755	1990-2013	3.255	1.728	0.8360	8.6670
Av. Government Expenditures (% GDP)	188	2013	16.811	8.678	4.885	102.609
Av. International Trade (% GDP)	191	2013	87.044	47.021	22.114	360.501
Av. Investment (% GDP)	189	2013	23.756	8.958	9.868	101.078
Av. Fertility	207	2013	3.205	1.658	1.089	7.681
Av. Economic Freedom	178	2013	59.602	11.507	1.600	89.800

Table 2: Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1															
2	0.94	1														
3	-0.48	-0.72	1													
4	0.67	0.62	-0.23	1												
5	0.71	0.74	-0.34	0.82	1											
6	0.61	0.60	-0.26	0.89	0.74	1										
7	0.60	0.56	-0.20	0.85	0.67	0.66	1									
8	-0.31	-0.47	0.38	0.14	-0.31	-0.07	0.02	1								
9	0.17	0.40	-0.36	0.03	0.23	0.11	0.14	-0.54	1							
10	0.25	0.21	-0.14	0.31	0.28	0.24	0.27	0.00	0.09	1						
11	-0.02	0.09	0.33	-0.13	-0.13	-0.22	-0.03	0.13	0.07	0.35	1					
12	-0.86	-0.79	0.37	-0.43	-0.50	-0.41	-0.39	0.20	-0.06	-0.23	-0.11	1				
13	0.14	0.45	-0.38	-0.08	0.12	-0.01	0.08	-0.52	0.90	0.09	0.06	-0.02	1			
14	0.22	0.22	-0.20	0.26	0.23	0.20	0.26	0.00	0.08	0.92	0.28	-0.22	0.11	1		
15	0.11	0.14	0.07	-0.03	0.01	-0.09	0.07	-0.04	0.07	0.32	0.78	-0.13	0.13	0.34	1	
16	-0.88	-0.82	0.43	-0.46	-0.55	-0.46	-0.41	0.26	-0.08	-0.22	-0.10	0.96	-0.03	-0.23	-0.14	1
17	0.67	0.62	-0.25	0.99	0.82	0.89	0.85	0.12	-0.04	0.24	0.00	-0.45	-0.10	0.26	-0.02	-0.47

Variables: 1. HDI; 2. HDI80; 3. Average Annual HDI Growth x 1000; 4. Economic Freedom; 5. Rule of Law; 6. Open Markets; 7. Regulatory Efficiency; 8. Limited Government; 9. Government Expenditures (percent of GDP); 10. International Trade (percent of GDP); 11. Investment (percent of GDP); 12. Fertility; 13. Average Government Expenditures (percent of GDP); 14. Average International Trade (percent of GDP); 15. Average Investment (percent of GDP); 16. Average Fertility; 17. Average Economic Freedom.

3. Results

Table 1 presents the summary statistics and the years of data for each variable. Notice that the average human development has increased from 0.54 in 1980 to 0.68 in 2013. This increase corresponds to average annual growth of about 0.008. The results in Table 1 also show that the overall economic freedom in the world is about 60 on a scale from 0 to 100. Looking at the four components of economic freedom, we notice that rule of law has the lowest average, followed by open markets. As far as government expenditures are concerned, we notice that during the period between 1990 and 2013, governments spent about as much as 16% of GDP. Table 2 presents the correlations among our variables. Notice that the correlations between human development and our measures of economic freedom are high and significant. In addition government expenditures and international trade are positively correlated with human development. On the other hand, there seems to be high and negative correlation between fertility rate and human development. While these statistics suggest that our variables are related to human development, it is more appropriate to explore these relationships in a multivariate setting.

Table 3 presents the regression estimates of equation 1. Estimate 1 in Table 3 reports the heteroskedasticity-robust OLS estimate of our human development growth model (given by equation (1)) for the year 2013. This estimate is intended to provide a comparison to the results in Binder and Georgiadis (2010). The results in Estimate 1 indicate that the higher the economic freedom in a country the higher is the average annual growth rate in the human development index. This result is significant at a p-value less than 0.001. As expected, the coefficient on average fertility is negative and statistically significant ($p < 0.001$). This result suggests that in countries where women have high fertility rate, the

human development index grows at a lower rate. Also, note that the coefficient on HDI80 is negative and statistically significant ($p < 0.001$), suggesting that human development growth in countries with relatively high level of initial human development is significantly slower than that in countries with relatively low level of initial human development. A surprising finding based on this estimate is that government expenditures and investment do not seem to be related to the average annual growth rate in human development. On the other hand, the coefficient on international trade is negative and significant ($p < 0.005$), suggesting that the higher the level of international trade the lower is the growth in human development.

Table 3: Cross-sectional analysis of the determinants of human development
(Dependent Variable: Average annual HDI growth)

	Estimate 1	Estimate 2	Estimate 3	Estimate 4
HDI80	-36.323** (4.3538)	-32.429** (5.2613)	-31.794** (2.9393)	-35.328** (4.2754)
Av. Gov. Expenditures (% GDP)	0.039 (0.0653)	0.008 (0.0769)	0.067 (0.0400)	0.071 (0.0753)
Av. International Trade (% GDP)	-0.014** (0.0047)	-0.011** (0.0039)	-0.010 (0.0049)	-0.003 (0.0071)
Av. Investment (% GDP)	0.056 (0.0739)	0.151* (0.0761)	0.106** (0.0355)	0.082 (0.0846)
Av. Fertility Rate	-1.538** (0.3826)	-1.727** (0.4389)	-1.113** (0.2699)	-0.858** (0.3930)
Av. Economic Freedom	0.138** (0.0322)	0.182** (0.0566)	0.109** (0.0334)	0.068 (0.0420)
Constant	23.722** (4.1749)	14.905** (3.6047)	19.842** (2.6612)	25.869** (4.4022)
N	119	119	119	119
R-sq (or Pseudo R-sq)	0.68	0.26	0.48	0.61
F	30.35			

Notes: The quantities in parentheses below the estimates are robust standard errors. *(**) denotes significance at 5% (1%) level.

As argued above, the OLS results do not provide a comprehensive picture of the relationship specified by equation (1). Hence, we discuss the robust quantile regression estimates that are presented in Table 3. Estimate 2, 3 and 4 present the quantile regression estimates of equation (1) for the 10th, 50th, and 90th percentiles, respectively. First, notice that in estimate 2, the coefficients on all variables other than government expenditures are significant. With the exception of international trade, whose coefficient is negative, coefficients have the expected signs. In estimate 3, international trade coefficient becomes insignificant, and thus only the level of the HDI in 1980, investments, female fertility rate and economic freedom seem to affect the growth rate of the HDI in the 50th percentile. Finally, estimate 4 indicates that government expenditures, international trade, investment and economic freedom are not statistically significant, and thus only the level of the HDI in 1980 and female fertility rate are statistically significant determinants of the 90th percentile of human development. Given these results we notice an important observation: There are considerable changes with respect to the coefficients and their significance. For instance, in estimate 2 the coefficient on

economic freedom is substantially larger than those in the other estimates, including the OLS estimate. These results suggest that economic freedom is especially important for countries with lower human development. Both the coefficients on government expenditures and investment in estimates 2 through 4 indicate that expenditures and investments are more efficient in raising human development in countries with high human development than in countries with low human development.

We now turn to panel data analyses of the determinants of human development. Estimate 1 through Estimate 5 in Table 4 report the cluster-robust fixed effects estimates of equation (2). These estimates explore the relationship between human development and rule of law, limited government, regulatory efficiency and open markets, along with the effect of overall economic freedom. As there is high correlation among the measures of these variables, we estimate a separate regression for each of these variables. Estimate 1 reports the regression results when overall economic freedom is in the model. The coefficient on economic freedom is positive and highly significant, suggesting that there is a positive relationship between economic freedom in a country and human development. In contrast to the results of the OLS estimate given in Table 3, it seems that the higher the investment in a country the higher is the human development. This result is consistent with our expectation and with quantile regression estimates presented by Table 3. On the other hand, government expenditures and international trade do not seem to be related to human development index. Finally, consistent with our expectation, there seems to be a positive and significant relationship between fertility rate and human development.

Table 4: Fixed Effect Analysis of the determinants of human development
(Dependent Variable: HDI)

	Estimate 1	Estimate 2	Estimate 3	Estimate 4	Estimate 5
Gov. Expenditures (% GDP)	0.00165 (.00216)	0.00184 (.00224)	0.00120 (.00182)	0.00179 (.00221)	0.00187 (.00224)
International Trade (% GDP)	-0.00004 (.00010)	-0.00006 (.00010)	-0.00005 (.00010)	-0.00004 (.00010)	-0.00003 (.00010)
Investment (% GDP)	0.00048* (.00023)	0.00049* (.00022)	0.00052* (.00022)	0.00048* (.00022)	0.00048* (.00023)
Fertility Rate	-0.09353** (.01899)	-0.09103** (.01919)	-0.09187** (.01933)	-0.09036** (.01887)	-0.09137** (.01909)
Year 2009	-0.00392 (.00404)	-0.00351 (.00402)	-0.00267 (.00322)	-0.00370 (.00401)	-0.00443 (.00411)
Year 2010	-0.00165 (.00371)	-0.00110 (.00361)	-0.00079 (.00318)	-0.00134 (.00390)	-0.00248 (.00369)
Year 2011	0.01817** (.00314)	0.01958** (.00290)	0.01999** (.00266)	0.01916** (.00295)	0.01745** (.00303)
Year 2012	0.03701** (.00378)	0.03784** (.00374)	0.04028** (.00332)	0.03737** (.00364)	0.03555** (.00374)
Year 2013	0.03638** (.00430)	0.03738** (.00420)	0.03880** (.00372)	0.03678** (.00431)	0.03478** (.00424)
Economic Freedom	0.00229** (.00081)				
Rule of Law		0.00091* (.00044)			
Limited Government			0.00092 (.00065)		
Regulatory Efficiency				-0.00002 (.00059)	
Open Markets					0.00080** (.00023)
Constant	0.74394**	0.83423**	0.81929**	0.87355**	0.82605**

	(.06577)	(.05116)	(.06489)	(.05823)	(.04599)
N	858	858	858	860	858
R-sq (overall)	0.81	0.80	0.72	0.75	0.78
R-sq (between)	0.81	0.80	0.72	0.76	0.79
R-sq (within)	0.65	0.64	0.65	0.63	0.64
F	51.03	49.21	46.66	49.24	51.96

Notes: The quantities in parentheses below the estimates are robust standard errors. *(**) denotes significance at 5% (1%) level.

Estimates 2 through 5 report the regression results when rule of law, government size, regulatory efficiency and open markets are in the model, respectively. According to these estimates, the coefficients on both rule of law and open markets are positive and significant. These results indicate that aspects of the economic environment that are related to rule of law and open markets are important determinants of human development. Also, note that the sign and significance of the coefficients on the other variables in the model are consistent across estimates. These results, taken together, provide strong support for the proposition that economic freedom and human development are strongly related.

4. Conclusion

This paper attempts to analyze the determinants of country level human development. We argued that, compared to GDP per capita, human development is a better indicator of people's well-being. Thus, usefulness of government policies should be judged in terms of how they contribute to human development. For instance, the value of government expenditures on services such as education and health could be assessed in relation to human development. Consistent with the literature on the determinants of human development, we argue that government expenditures, extent of international trade and total investment are related to human development. For instance, higher government expenditures are expected to increase the quantity and quality of public services, directly increasing people's well-being. On the other hand, government activities take place in an institutional framework. The aspect of the institutional environment could have a significant effect on the efficiency of and effectiveness of these activities. One of the important aspects of this institutional framework is economic freedom exercised by people in a country. In this paper, we argued that higher economic freedom enjoyed by people of a country contribute to their well-being and development.

We tested these arguments on a large panel dataset obtained from various sources. The results provide strong support for the hypothesis that higher level of economic freedom is positively related to higher level of human development. Economic freedoms are especially important in countries with low level of human development. In addition, our analyses provide partial support for the expectation that total investment in a country is positively related to human development. On the other hand, government expenditures do not seem to be related to human development. Overall, the results indicate that the institutional framework in a country have a significant effect on people's well-being and development.

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