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The Importance of Governance to a Stable and Developed Economy

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Abstract:

This paper investigates the assumption that proficient governance is essential in securing a stable economy. It studies and analyzes many relevant variables that one would find controlled by the government in its economy. My results show that these established nations all have differences in terms of debt and balance of trades but all seem to agree on the importance of maintaining a morally stable and efficient government structure that allows them to compete in the world economy.

JEL Classification: G18, G21

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1.0 INTRODUCTION

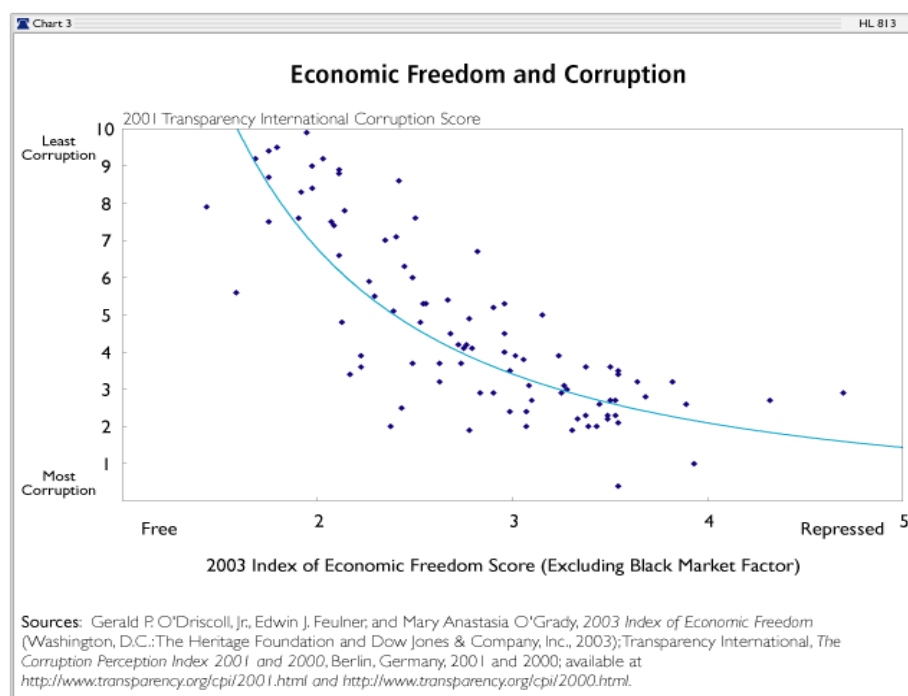
Governance is defined as “rules, processes and behavior that affect the way in which powers are exercised.... particularly regarding openness, participation, accountability, effectiveness and coherence (Durlauf and Blume, 2006). Many theoretical and empirical papers have explored the issue of what certain macroeconomic policies adopted by governments have the most profound implications for their country’s economic growth and stability. Governance expresses its theme as the study of good order and workable arrangements (Dixit, 2006). This includes the institutions and organizations that underpin economic transactions by collecting property rights, enforcing contracts, and organizing collective action to provide the infrastructure of rules, regulations, and information. All of those factors are needed to lend feasibility or workability to the interactions among different economic factors, individual and corporate (Dixit, 2006). While the rapid progress of many countries is often attributed to the freeing up of markets, governance remains an important factor for economic and social development.

Over time the topics of focus have shifted. Traditionally, academic writings have argued that democracy promotes economic growth. Economists have sought within democracy the preservation of property rights which provides the necessary causal factor for promoting economic growth (Gupta et al. 1998). Those writings further argued that non-democratic regimes are skewed in favor of the ruling elites; which hinders the free flow of capital. However, since the majority of the developed nations were themselves democratic it would have been pointless to use that variable. This research did lead to the realization that democracy’s economic strength has been said to come from its emphasis on literacy, education, and communication. That was a big reason for why the author felt it important to measure the level of provided education in my regression.

It was also noted that an exchange economy cannot be most efficient until business morality made contractual behavior sustainable and inexpensive. Effective governance has also been instrumental in driving potential entrepreneurs away from productive operations to the higher returns offered by shady deals (Lee, 2006). Figure 1 shows the recent association between corruption and economic freedom. However, the regulation of corruption needs to start from the

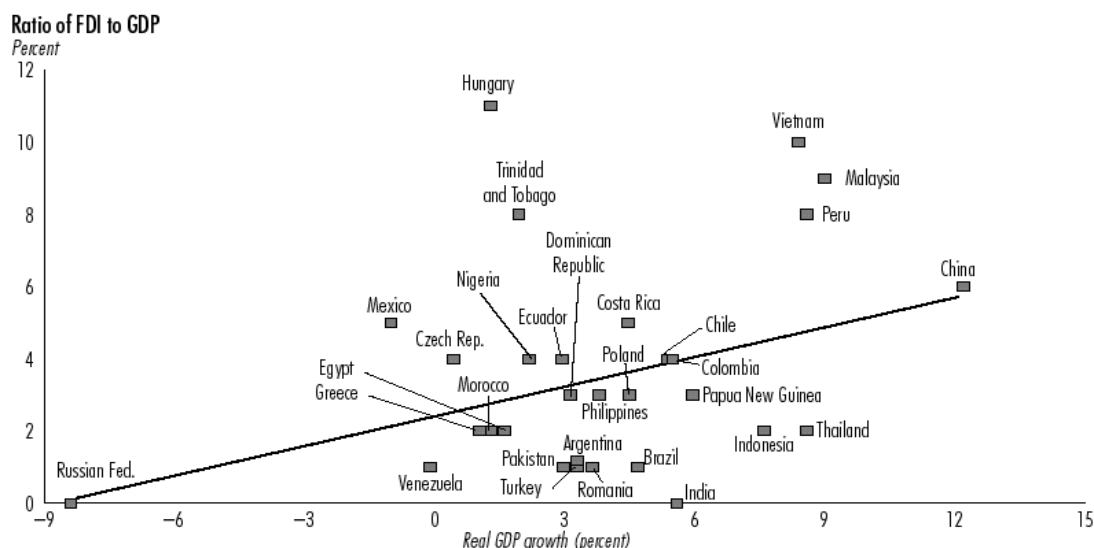
very top; from the government itself. The author used a measure of government effectiveness under the assumption that it would show to be very relevant for developed countries.

(Figure 1)



The last assumption this paper made was that increased involvement in the global marketplace as well as increased military spending all correlates with a stable economy. As businesses move to engage in more multi-national commerce it should be important to look at the amount of global economic participation by countries. Figure 2 shows how greater sums of FDI inflows parallel an increase in GDP growth. In order to quantify the level of global participation, foreign direct investment was looked at as a variable. Military spending is also taken into account with the belief that military spending helps the economy by offering opportunities to gain education and certain skills for later employment (Blume and Darlauf, 2006).

(Figure 2)

Figure 1.10 FDI inflows are positively correlated with GDP growth

Note: Calculations are based on 1993–96 averages for the top 30 recipients of FDI in 1996.

Source: World Bank Debtor Reporting System and World Bank data.

This paper should contribute significantly to the general field of governance and economics by focusing on already developed nations specifically and by collecting data samples from a time period not previously observed. This study will look at the weight of a wide range of factors in a cross sectional, multi-national, analysis. Some of these variables, such as foreign direct investment, have never been tested in this setting. The data on some of the other variables has simply just not been updated in more than 11 years.

The rest of the paper is organized as follows: Section 2 reviews issues in the literature pertinent to the debate on the role of governance in economic growth. Section 3 outlines the empirical model used and then provides a descriptive analysis of the data and estimation methodology. Finally, section 4 presents and discusses the empirical results. This is all wrapped up with a conclusion in section 6.

2.0 LITERATURE REVIEW

There have been many arguments offered and researched on the relationship between governance and a stable economy. A search on EconLit for the relevant categories shows just how much the topic has exploded through the last three decades. There were just five matches of papers completed from 1970 to 1979. The number then jumps to 112 for the 1980's, 3,825 for the 1990's, and all the way up to 7,948 today. Khan (2006) argues that if states can ensure efficient markets, by enforcing property rights, rule of law, reducing corruption and committing not to expropriate, then private investors will drive economic development. He claims that there are two types of governance: market enhancing and growth enhancing. Growth enhancing governance is to be used more for underdeveloped or developing nations. Khan did not offer much hard evidence for his theories but they were taken into account when deciding what variables to use for the research. Blume and Durlauf (2006) examine the topic on a more microeconomic level. They compare the following institutions: state politico-legal institutions, private ordering within the law, for-profit governance, and social networks and norms. They argue that private institutions are limited in size and as economic activity expands a transition towards formal institutions is usually observed. Their variables (crime, credit rating agencies) were a too specific for the research but allowed me to determine what aspects of a government had the most weight on its economic stability. Sen (2006) echoes the author's thesis that an "exchange economy could not be very efficient until business morality made contractual behavior sustainable and inexpensive." He proposed that governance is also instrumental in curbing corruption, which drives potential entrepreneurs away from productive operations to the higher returns offered by shady deals. This would later lead to the consideration of various political variables and result in the use of the variable of government effectiveness. Garrison and Lee (1995) found evidence supporting one of this studies' hypotheses yet predicted other data to come out contrary to some of the author's expected signs. They tried to prove that countries that pursue macroeconomic policies that result in high inflation, large budget deficits, and high levels of government consumption spending show no signs of suffering from low rates of growth per capita. They were able to show weak evidence for a negative effect of marginal tax rates and strong evidence for a strong economic growth due to an expansion in foreign trade. A lot of

ideas for variables were drawn from their work but the scope of this research was narrowed to just developed nations. Jalilian et al. (2006) also did a study on the impact of regulation on economic growth; however they focused on specifically developing countries. They were able to find a strong casual link between regulatory quality and economic performance. Gupta et al. (1998) provided a study focusing more on the relationship between democracy and economic growth. They did however intertwine that with political stability. Their studies supported the decision to remove the dummy variables for democracy from this study but they further justified the importance of political stability for any nation's growth. The paper had a very low R^2 which showed that the variables did not fit the model or explain the dependent variables that well. The author tried to refine their regression models to have a more accurate regression.

3.0 DATA AND EMPIRICAL METHODOLOGY

3.1 Definition of Variables

$$CGDP = \beta_0 + \beta_1 GOVEXP + \beta_2 LFDII + \beta_3 LGOVEFF + \beta_4 LEDUGOV + \beta_5 MILEXP + \beta_6 LIINF + \varepsilon$$

CGDP is the real GDP per capita; used as an endogenous variable. It is defined as the gross domestic product (GDP) at purchasing power parity (PPP) per capita, the value of all final goods and services produced within a nation in a given year divided by the average population that same year. GDP dollar estimates here are derived from purchasing power parity calculations; using the long term equilibrium exchange rate of two currencies to equalize their purchasing power. The data and definition from this paper is consistent with those given from the World Bank Group.

The independent variables will consist of seven variables obtained from the World Bank Group and the International Monetary Fund. Figure 3 provides information on the data source, acronyms, descriptions, expected signs, and justifications for using the variables. The first provided variable is government consumption expenditure as a percentage of GDP, *GOVEXP*. After that the paper shows net inflows of foreign direct investment as a logged variable, *LFDII*. The next used variable was the logged government effectiveness index, *LGOVEFF*. This was followed by *LEDUGOV*, the logged version of a variable for government public education

expenditure as a percentage of GDP. *MILEXP* was government military expenditure as a percentage of GDP. Lastly we have *LIINF*, the log for the inflation percentage since the year 2000.

(Figure 3)

Acronym	Variable Description	What it captures	Expected sign	Data source
CGDP	GDP Per Capita	Country's GDP/Population	Dependent Var.	International Monetary Fund
GOVEXP	Government Consumption + Government Investment+ Transfer of Payments as a % of GDP	Government Fiscal Policy and Management of Money	+	International Monetary Fund
LFDII	Logged value of the amount other country's invest in you	Global Participation	+	World Bank Group
LGOVEFF	Logged, Rating on management effectiveness of given government.	Efficiency, Corruption, Political Stability	+	World Bank Group
LEDUGOV	Logged, Government Spending on Public Education as % of GDP	Value of human capital	+	World Bank Group
MILEXP	Government Military spending as % of GDP	Whether necessary for economic growth and stability	+	World Bank Group
LIINF	Logged, change in inflation	Government management of money supply	-	World Bank Group

3.2 Data

The study used annual data from the years 1982 to 2000, compiled as an average. It is based on a time series cross-section data. Data was obtained from the International Monetary Fund and the World Bank Group. The countries used were those classified in the CIA World Factbook as “developed countries.” These mainly democratic, market oriented countries are generally regarded as first world, high income, and industrial and have a per capita GDP in

excess of \$10,000. After that, the author narrowed the list of used countries to those that were able to provide all of the relevant data to make an accurate study.

3.0 EMPIRICAL RESULTS

The results showed the three variables of the net inflows of foreign direct investment, the government efficiency indicator, and the government education as a percent of GDP are all highly significant for the data. They all hold 3 star ratings and have t-statistics greater than 3.5. This allows them to reject the null hypothesis on a 99% confidence level. The regression showed to have a good R^2 indicating that the author has a good proportion of data showing variability in my model. The adjusted R^2 shows a penalization for extra variables included in the model. The shown drop in this studies' adjusted R^2 is probably because of how general the variable government expenditure is and how it might relate with government spending on both education and military and even possibly with foreign investment. In the future one should probably try to subtract the impact of those variables out of the government expenditure data but the exact data for that was unavailable and the author's intentions with that variable was to broaden the scope to better view the effects that a good fiscal policy have on the dependent variable. None the less, the adjusted R^2 still showed good variability in my model. The next statistic to be looked at was the Durbin-Watson stat. The Durbin-Watson statistic is a statistic used to detect the presence of autocorrelation, with a value of 2 showing no apparent autocorrelation, the paper's value of 2.19 showed a small, but not significant, sign of negative serial correlation. The paper was able to maintain low autocorrelation by logging the variables that had positive data. A summary of the results is presented in Tables 4, 5, and 6.

Table 4: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
CGDP	39	24772.54	6969.266	13244.16	50334.58
GOVEXP	36	.3999	3.5850	-6.6128	11.94
LFDII	34	3.7576	.0865	1.3079	5.1874
LGOVEFF	38	.0539	.4069	-2	.3747
LEDUGOV	36	1.1270	.1076	.9047	29.24
MILEXP	34	6.9672	6.4907	0	29.24
LIINF	35	.0350	.2378	-.5086	.8319

Table 5: Regression Results

GOVEXP	LFDII	LGOVEFF	LEDUGOV	MILEXP	LIINF	R ² : Adjusted:	Obs.
215.95	2985.93	19619.54	9130.406	177.3183	-3318.127	.7254	29
(1.02)	(4.00***)	(3.79)***	(3.58)***	(0.92)	(-0.89)	(.6629)	

Table 6: Covariance Analysis

Covariance Analysis: Ordinary							
Covariance							
Correlation	CGDP	GOVEXP	LFDII	LGOVEFF	LIINF	LEDUGOV	MILEXP
CGDP	32274526						
	1.000000						
GOVEXP	6759.813	11.20118					
	0.355527	1.000000					

LFDII	2742.375	-0.113351	0.715665				
	0.570613	-0.040035	1.000000				
LGOVEFF	622.3335	0.190137	0.035382	0.024556			
	0.699066	0.362543	0.266902	1.000000			
LIINF	-248.3580	-0.068750	-0.017790	-0.003154	0.029574		
	-0.254210	-0.119449	-0.122280	-0.117055	1.000000		
LEDUGOV	60.46457	0.135519	-0.033717	0.002695	-0.001135	0.008245	
	0.117213	0.445934	-0.438939	0.189403	-0.072654	1.000000	
MILEXP	1048.360	-2.912573	1.049281	-0.232058	-0.055600	0.002275	16.32172
	0.045677	-0.215408	0.307011	-0.366554	-0.080027	0.006202	1.000000

This paper had predicted that government expenditure could be positively or negatively correlated depending on just how involved the government would become. Government spending is good for the economy because it would provide public goods such as infrastructure. On the other hand government could hinder economic growth by transferring additional sources from the productive sector of the economy to the government, which would use them less efficiently. The research proves that economic growth has been achieved and that governments can choose to intervene and try to improve the nations through services such as public work projects (Jalilian et al. 2007).

This paper found very high significance between the inflow of cash from foreign direct investment and economic growth and stability. Previous literature on the subject has not shown as much of a correlation. The rise in the significance indicated how the global market in itself is growing and how now it is essential to be an active competitor. The author hypothesized a positive correlation and was hoping to prove that the significance would be higher than the current literature out on the subject. That is because direct investment creates new production capacity and jobs. Foreign investment can help to transfer technology and know-how and can strengthen linkages to the global marketplace. Research has linked increases in foreign investment to higher national wages (Jalilian et al. 2007). Criticisms of foreign investment have

cited a loss of market share for competing domestic firms and flow straight back to the multinational's economy. The research shows that the pros outweigh the cons considerably.

The next variable is the government effectiveness index as given by the World Bank Group. On the group's website they state that "the authors draw 194 different measures from 17 different sources of subjective governance data constructed by 15 different organizations." The sources include international organizations, political and business risk agencies, think tanks, and non-government organizations. The index combines perceptions of the quality of public service provision, the quality of bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies into a single grouping (World Bank, 2007). The main focus of the index is on the inputs required for the government to be able to produce and implement good policies and deliver public goods. The website adds "the component indicators are aggregated using an unobserved data in each cluster as a linear function of the unobserved common component of governance, plus a disturbance term capturing perception errors and/or sampling variation in each indicator. Higher or positive values indicate government effectiveness."

The regression indicates that government effectiveness is very significant through both a three-star probability and a high t-statistic. The data also met the initial predictions of the data having a positive correlation. The author hypothesize that this is due to the fact that once a country has a developed economy that next important step is to manage it efficiently. The research has shown that countries with a troubled economy have had a correlation of a tumultuous political system as well; therefore it is fair to assume the opposite for countries with a strong economy.

The government spending on public education was the next variable and it also had a very high, three-star, significance and a high t-statistic of 3.57. The research has shown that basic education is crucial because it improves worker production. The author was correct with my prediction for a positive correlation. The ability to educate your population allows you to better train future employment and should be reflected in your economy, as it was in the sample data for my regression.

The study also enjoyed a three-star significance, along with a t-statistic of 3.57 for the variable of government expenditure on its military. It has been generally noted through observation of today's media that the developed countries of the world all hold a strong military so it was assumed that the study would find a positive correlation between the two. This follows the principles of Military Keynesianism. The theory states that increased military demand for goods and services is generated directly by government spending and that this direct spending generates a multiplier effect of general consumer spending. On the supply side maintenance of a standing army removes many workers, usually young males with less skills and education, from the work force; giving this demographic a high level of unemployment. Enlistment in the United States has even been touted as offering opportunities to gain education and certain skills for later employment (Blume and Darlauf, 2006).

The final used variable was inflation percentage. The variable was logged and was observed on the basis of growth from the year 2000. The author predicted that inflation would have a negative correlation with the GDP per capita. The variable was indeed negative but did not have a enough significance to reject the null hypothesis. The prediction was based on research which showed that inflation would take away from a country's incentive to save. A higher inflation tends to also cause investors to take more systematic risks in order to compensate for their inflations. Wages also have a hard time catching up with inflation. All of these factors will help to cause debt in the individual and corporate sectors.

5.0 CONCLUSION

In summary, Foreign Direct Investment inflows, effective governance, and increases to human capital have shown to be essential in order for a developed country to continue to prosper. High inflation hinders growth by adversely affecting the exchange mechanism and by distorting the taxation of capital (Garrison and Lee, 1995). This paper hypothesizes that high inflation and Government effectiveness both are good indicators to how well a government is managed. It is just as important for a developed economy to compete with foreign rivals in the export and investment sector. This allows you to take advantage in the economies of scale. In the future, to further improve the shown research, one should be sure to remove defense and education spending since they contribute to private sector productivity and property rights, which in turn are reflected

in private investment. This study adds to the already available information on the subjects by confirming and updating outdated studies on the said theories. It focuses the scope on just developed countries; something that has not yet been done. Lastly, the study tries to highlight the increased importance of FDI. I conclude that a regulatory regime that promotes economic growth is an important part of good governance. The ability of the state to provide effective regulatory institutions can determine how well markets and the economy will perform. The impact will depend on the efficiency of the policies and the quality of the governance.

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