The Relationship between the Government Governance and Economic Development in Samoa

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Abstract— Economists have come to an understanding that governance is one of the important aspect explaining the difference in performance of a country across the globe. As a developing nation such as Samoa, governance is the key issue, and this study aims at exploring relationships between government governance proxied by five dimensions of World Governance Indicators (WGI) i.e. (voice and accountability, political stability, government effectiveness, rule of law, control of corruption) and economic development is proxied by Gross Domestic Product (GDP). Moreover, it also aims at determining which of the five aforementioned variables that contributes most on the economic development. Statistical tools such as Spearman’s rho correlation and Multi linear regression were used to test the hypotheses and the model, using Statistical Package for the Social Science (SPSS). The data was collected from the World Bank related to Samoa covering the period of 1996-2014. The study concludes that out of the five dimensions of WGI, Control of Corruption contributes highly to the economy and the only variable that has a positive relation with Economic Development. The remaining four dimensions have negative relations, therefore the government should focus more on these variables on how to improve their functions in the future. It is extremely shown that this paper will help to determine the current situation of the country and to identify more professional ways to help improve the government management for the future well-being of the country.

Index Terms— Economic Development, Government Governance, Samoa, World Governance Indicators.

I. INTRODUCTION

Samoa is one of the many small developing countries in the South Pacific that became independent in 1962. The current population of Samoa is 195,127, where 51.6% are male and 48.4% are female. The country consists of two main and eight smaller islands. Its economy largely based on agriculture exports and tourism. The agriculture products include coconut oil, cocoa, taro, banana and nonu. These major exports have performed well in the development of the country and the most dominant sector accounting for nearly 90% of total exports and around 60% of the country’s total employment. The latest amount of exports in June 2016 was $12, 397 tala (Samoa currency). Tourism on the hand contributes more to the growth of Samoa. It has grown significantly over the past ten years both in terms of visitation and visitor spend. With the recent downturns in the agriculture and fisheries industries, tourism has become an exceptionally important sector for future economic development of Samoa and particularly in generating employment and foreign exchange earnings. Development has in the main, been in resorts and hotels but most are relatively small and ‘boutique’ in character. There is only a very limited number of larger resorts. The latest tallied of visitors last year 2015 was 138937 mostly for the purpose of visiting and on holiday.

This research paper focuses on the relationship between government governance and economic development in Samoa as well as determining which of WGI dimensions contribute most to the economy of the country. Governance is one major concept and is highly significant in ensuring economic development. Kaufmann and Kraay (2002) established that higher level of governance is necessary for higher per capita income.

In a broader context there is a link between governance and economic performance (Kaufman and Kraay, 2002). Indeed, improving the quality of institutions is a necessity. It aimed to achieve a level of sustainable development. Thus, several authors have shown that the difference in the rates of economic growth in different countries can be explained by the difference in the quality of the environment in which agents operate. In fact, this environment includes institutions, rules, laws, policies and government regulations of the country.

Henry et al. (1985) have explored the association between these variables. They used Correlation model to test hypothesis and concluded the moderate positive relationship between Voice and Accountability, and Economic Growth was visible statistically.

Gyimah et al. (1999) explored the association between Economic Growth and Political Instability in Less Developed Countries (LDC). Quantitative techniques were used to investigate the above relationship, in different Sub Saharan African countries. Their findings show that there is a two-way causal connection between Economic Growth and Political Instability.

Similarly, Kaufmann, Kraay, and Zoido-Lobaton (1999) found a strong positive association between government effectiveness and human development. For example, they found that countries with higher accountability, a more stable political environment, and more effective government have lower infant mortality rates and higher literacy rates. They
also found that improvements in government performance have a very large payoff in terms of human development.

Good Governance and Rule of Law are important elements of development. Governments focus on merely making laws in order to ensure good governance, but only making or drafting laws is not the solution, in fact ensuring the implementation of these laws and rules is important (Morita and Zaelke, 2007).

Control of Corruption can lead to productive economy. Mauro (1995) took the sample of 67 different countries and found out an indirect relation between the corruption index and Economic Growth indices existed. Ahlin and Pang (2008) took a sample of 71 countries and found a negative relation between level of corruption and economy. Mo (2001) used a sample of 46 countries and concluded that if there is 1% increase of level of corruption than there shall be decrease of 0.72% in the Economic Growth.

Campos and Nugent (2000) used GDP as dependent variable and developed their own measures for determining level of rule of law and political stability by using indices. They concluded that, rule of law and political stability are necessary to ensure clean systems and strong legal support to remove any hurdles in bringing foreign investment which is one of the key factors that contribute to Economic Growth (Goldsmith, 1987).

After reading various papers from many researchers related to this study, a disadvantage of less research on Samoa was discovered. To overcome the aforementioned disadvantage, this paper will make use of the five variables to find the relationship between government governance and economic development. Furthermore, this research focuses on Samoa, which can make some contribution to all the island nations in the South Pacific to find out the current situation and the overall behavior of their country by using WGI.

II. EMPIRICAL DESIGN

A. Variable Design

Governance is a very general concept that can refer to all manner of entities. Many researchers and scholars have their own definition to the concept. According to the WGI authors, they define governance as the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced: the capacity of the government to effectively formulate and implement sound policies, and the respect of citizens and the state for the institutions that govern economic and social interactions among them. However, the study define the concept as the rules

The government governance of Samoa in this study is explained and measured by the five dimensions of the World Governance Indicators (WGI).

The first dimension is Voice and Accountability (VA): This measure the extent to which citizens of a country are able to participate in the selection of governments. It also involves measuring the freedom of expression, freedom of association, and independence of the media (WGI).

The second dimension is Political Stability (PS). This index measure perceptions of the likelihood that the government in power will be overthrown by possibly violent means including terrorism. This given by the chance of twisting changes locally, which has a huge effect in the future policies and the human right of all citizens to choose and replace those in power (WGI).

The third dimension is Government Effectiveness (GE): This index is required for the government to be able to produce and implement good policies and deliver public goods (WGI).

The fourth dimension is Rule of law (RL): This measure the extent to which agents have confidence in and abide by the rules of society, property rights, the police, and the courts, as well as the likelihood of crime and violence (WGI).

And the last dimension is Control of Corruption (CC): It measures perceptions of corruption, usually defined as the exercise of public power for private gain. The presence of corruption in a government shows a failure of governance and it also leads to a bad economy (WGI).

Together, these indicators measure a society’s success in developing an environment in which fair and liable rules form the basis for economic, political and social interactions.

Moreover, Economic Development is the process and policies by which a nation improves the economic, political, and social well-being of its people. The concept, however, has been in existence for centuries (Encyclopedia). Economic development is proxied by Gross Domestic Product (GDP), the monetary value of all the finished goods and services produced within a country in a specific time period (Investopedia). Most countries aimed at increasing their GDP, the higher level of output produced is the better economy. Mentioned in Table 1 are the variables and their definitions.

<table>
<thead>
<tr>
<th>Table 1 Definitions of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Names</td>
</tr>
<tr>
<td>Voice &amp; Accountability (VA)</td>
</tr>
<tr>
<td>Political Stability (PS)</td>
</tr>
<tr>
<td>Government Effectiveness (GE)</td>
</tr>
<tr>
<td>Control of Corruption (CC)</td>
</tr>
<tr>
<td>Rule of Law (RL)</td>
</tr>
<tr>
<td>Economic Development Gross Domestic Product (GDP)</td>
</tr>
</tbody>
</table>

B. Hypotheses

The null hypotheses to be tested are as follows:

The more voice and accountability, the better the government it is. This dimension of WGI is basically refers to democracy. Samoa is a parliamentary democracy type of government. The citizens have the freedom to choose and select the government during election. According to (Sen, 1998, 199), democracy is good for development because it provides the welfare to the poor. As for (Nazmul, 2006), he states that democracies spend more on education and health systems in developing countries

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because they are accountable to a voting public. For example, democracies know for a fact that education and health are the two main issues in Samoa, therefore, they tend to spend more money on these areas because they want the vote from the public. On the other hand, (Sen, 1999) says that democracies also allow an independence of the media that allows the poor to keep up-to-date on a government’s policies.

- **H1**: There is a positive relation between Voice and Accountability and Economic Development.

Samoa General Election in March this year 2016 was conducted peacefully. This is an important sign of political stability. Political stability requires that the public interact freely and openly with legislators on a regular basis. Granting individuals a say in how a nation is run enhances the stability of the region. A stable political scene is one where the ruling government is favored by the population and does not experience strong indicators of social unrest. In particular, the political dominance of the Human Rights Protection Party (HRPP), which has ruled continuously since 1988. The HRPP has been successful in maintaining the development of Samoa in various ways.

- **H2**: There is a positive relation between Political Stability and Economic Development.

According to (North, 1991), he states that more effective governments are known to offer stronger protections on property rights that encourage greater private investment. They are also known to offer higher quality public services, attract more investment, encourage more human capital accumulation, put foreign aid resources to better use, accelerate technological innovation, and increase the productivity of government spending by creating political stability and efficient bureaucracies (Mauro, 1995; Gupta et al., 2002). In short, better quality governments usually have positive effect on development outcomes due to efficiency in the delivery of public services.

- **H3**: There is a relation between Government Effectiveness and Economic Development.

The existence of a set of formal rules and an enforcement mechanism has been viewed as the basic condition for economic development. Weber and North emphasize that the legal system’s protection of property rights and enforcement of contracts lowers the transaction costs involved in exchanges and allows resources to be transferred to those who can use them most productively (Weber 1979; North 1991). Rule and Law in Samoa is very strong, therefore, the citizens have the right and the freedom to develop their own business for their future, and so is the government.

- **H4**: There is a relation between Rule of Law and Economic Development.

Corruption is a global phenomenon which can be found everywhere at any time. It has existed in the past and it exists in our societies now. It also has huge effects on any country’s development such as how corruption undermines development and sustains poverty. It stops economic growth, drives political instability and impacts the delivery of services and undermines good governance and the rule of law.

- **H5**: There is a relation between Control of Corruption and Economic Development.

### C. Model Design

After analyzing the hypotheses, this study wants to test the relationship between the government governance and economic development in Samoa with an econometric method. Using the variable definition in table 1, mention below is the multiple linear regression model determining the relationship for each variable on how they impact on each other.

\[
GDPhat = \alpha_0 + \alpha_1VA + \alpha_2PS + \alpha_3GE + \alpha_4RL + \alpha_5CC + \epsilon
\]

Where \( \alpha_0 \) is the intercept item which is a constant, \( \alpha_1, \alpha_2, \alpha_3, \alpha_4 \) and \( \epsilon \) represent slope of governance indicators respectively, and \( \epsilon \) denotes random error term.

### III. DATA ANALYSIS AND RESULTS

This study uses data from the World Bank related to Samoa covering the period of 1996 to 2014. Statistical tools such as descriptive statistics to test the overall data of the study, normality test to check the data if its distribution is normal or not normal, Spearman’s rho correlation to determine the relations between variables and regression analysis for finding out which of the five indicators that has the highest contribution on economic development. All the variables were subjected to econometric tests using Statistical Package for Social Sciences (SPSS).

#### A. Descriptive Statistics

Table 2 is used to describe and summarize the data. It is as an exploratory method to examine the variables of interest of the study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>0.7700</td>
<td>0.5211</td>
<td>0.0000</td>
<td>0.2561</td>
</tr>
<tr>
<td>PS</td>
<td>1.2700</td>
<td>0.9232</td>
<td>0.0000</td>
<td>0.4271</td>
</tr>
<tr>
<td>GE</td>
<td>0.4500</td>
<td>0.1747</td>
<td>-0.1100</td>
<td>0.1854</td>
</tr>
<tr>
<td>RL</td>
<td>1.0800</td>
<td>0.6916</td>
<td>0.0000</td>
<td>0.3345</td>
</tr>
<tr>
<td>CC</td>
<td>0.3200</td>
<td>0.0926</td>
<td>-0.1300</td>
<td>0.1216</td>
</tr>
<tr>
<td>GDP</td>
<td>0.8000</td>
<td>0.4863</td>
<td>0.2500</td>
<td>0.2091</td>
</tr>
</tbody>
</table>

Table 2 Descriptive Statistics Analysis

#### B. Normality Test

This test is used to check the data of the research if its distribution is normal or not normal. To assume the null hypothesis for all variables to be normal distribution, the P-values column said it all very clear that the data for all the variables is normally distributed. This is due to the fact that all the p-values are greater than the significance level of 0.05, null hypothesis can be accepted and the test is significant.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>Sig (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>0.8010</td>
<td>0.0650</td>
</tr>
<tr>
<td>PS</td>
<td>0.8450</td>
<td>0.0890</td>
</tr>
<tr>
<td>GE</td>
<td>0.6530</td>
<td>0.0970</td>
</tr>
<tr>
<td>RL</td>
<td>0.7600</td>
<td>0.0580</td>
</tr>
<tr>
<td>CC</td>
<td>0.9340</td>
<td>0.5320</td>
</tr>
<tr>
<td>GDP</td>
<td>0.9780</td>
<td>0.7680</td>
</tr>
</tbody>
</table>

Table 3 Normality Test using Shapiro-Wilk
The Relationship between the Government Governance and Economic Development in Samoa

C. Correlation Test

Spearman’s rho correlation is used to find out the relationship between Economic Development and World Governance Indicators. According to the results mentioned in Table 4, VA, PS, GE and RL have negative relationships with GDP, the p-values are greater than the significance level of 0.05, and therefore null hypotheses are accepted. CC is the remaining indicator that has a positive relation with Economic Development with the estimated correlation to be 0.806* with the p-value of 0.0000 which is less than the significance level of 0.01. The null hypothesis is rejected.

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>VA</th>
<th>PS</th>
<th>GE</th>
<th>RL</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig (2-tailed)</td>
<td>-0.1890</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.4380</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>-0.1370</td>
<td>0.774*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.5750</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>-0.1450</td>
<td>0.683*</td>
<td>0.596*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.5550</td>
<td>0.0010</td>
<td>0.0080</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>-0.1240</td>
<td>0.821*</td>
<td>0.707*</td>
<td>0.675*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.6140</td>
<td>0.0000</td>
<td>0.0010</td>
<td>0.0020</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.806*</td>
<td>-0.0500</td>
<td>-0.0370</td>
<td>0.0190</td>
<td>0.1070</td>
<td>1</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.0000</td>
<td>0.8390</td>
<td>0.8800</td>
<td>0.9400</td>
<td>0.6610</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: * Correlation is significant at 0.01 level (2-tailed).

D. Multi Linear Regression

Regression Analysis test is used to determine which of the five dimensions of Government Governance that has a huge impact contributes more to Economic Development.

<table>
<thead>
<tr>
<th></th>
<th>α₀</th>
<th>α₁</th>
<th>α₂</th>
<th>α₃</th>
<th>α₄</th>
<th>α₅</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3120</td>
<td>-0.8460</td>
<td>0.6860</td>
<td>-0.1250</td>
<td>-0.1560</td>
<td>1.1980</td>
<td>0.8170</td>
</tr>
<tr>
<td></td>
<td>0.0000</td>
<td>0.0050</td>
<td>0.0590</td>
<td>0.5060</td>
<td>0.5550</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Note: R² value of the Full Model regression is 0.8170 at P-Value of 0.000, which is less than significance level of 0.05 so it provides enough evidence that our model is significant with df= 18.

The model is statistically significant given the R-Squared value of approximately 82% of the variability of economic development is accounted for the five variables of WGI. VA has a negative relation with GDP (α₁=-0.8460). This indicates that for every increase of one percentage point of GDP, VA is predicted to be lower by 0.85. The p-value of 0.0050 is significant because it is less than the significance level of 0.05, null hypothesis is rejected and it does reliably predict the GDP. PS has a positive relation with GDP (α₂=0.6860). This indicates that for every unit increase in PS, GDP is predicted to be 0.69 units higher. The p-value of 0.0580 is not significant because it is greater than the significance level of 0.05, null hypothesis is accepted and it does not reliably predict the GDP. GE has a negative relation with GDP (α₃=-0.1250). This indicates that for every unit increase in GE, GDP is predicted to be 0.13 unit lower. The p-value of 0.0560 is not significant because it is greater than the significance level of 0.05, null hypothesis is accepted and it does not reliably predict the GDP. RL has a negative relation with GDP (α₄=-0.1560). This indicates that for every unit increase in RL, GDP is predicted to be 0.16 unit lower. The p-value of 0.5550 is not significant because it is greater than the significance level of 0.05, null hypothesis is accepted and it does not reliably predict the GDP. CC has a positive relation with GDP (α₅=1.1980). This indicates that for every unit increase in CC, GDP is predicted to be 1.20 units higher. The p-value of 0.0000 is statistically significant because it is less than the significance level of 0.05, null hypothesis is rejected and it does contributes more to the economic development.

IV. CONCLUSION AND POLICY IMPLICATIONS

Goverment is a key to success for any country as it can contribute positively towards boosting economy. Five dimensions of governance provided by World Wide Governance and their relation with economic development have been investigated in this study. After the detailed analysis, the research has concluded that the hypotheses formulated about VA, PS, GE and RL were rejected whereas hypothesis formulated about CC was accepted.

Overall, the main aim of this study is to find the relationship between government governance and economic development, as well as determining which of the five dimensions has a huge impact or the highest contribution to economic development in Samoa. Out of the five variables, Control of Corruption is the only variable that has a positive relationship with economic development and therefore has the highest contribution to the development of Samoa. Whereas the remaining four variables such as Voice and Accountability, Political Stability, Government Effectiveness and Rule of Law have negative relations and they do not contribute more to the development of Samoa. The government should focus more on these variables on how to improve their functions in the future.

A. Policy Implications

According to the results in table 5, VA has a negative relation with economic development in this study. It is suggested that the ability of the citizens to express their opinions and the government accountability and free media are one of the determinants of the economic development. The government should improve this variable level because if they don’t, the citizens may choose to replace the government. GE and RL have negatively affects the economic development as well. It is widely believed that the higher GE leads to higher economic development. However, the result in regression table 5, shows that lower in GE leads to lower in economic development. In this case, the government is not effective on how to govern the country, therefore they should be more active in planning, controlling, implementing and innovating new programs and reforms for the better economy. Lower RL leads to lower economic development. Having no strict regulations in a country leads to freedom, people will do whatever pleases them, the government should be more strict on this variable in order to improve the level of economic development. As for PS and CC, these two variables both have positive relations with economic development which showed a good sign of how to use these variables in the government.

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ACKNOWLEDGMENT

First and above all, I praise God, the Almighty for providing me this opportunity and granting me the capability to proceed successfully.

Appreciation is expressed to Professor Zhang Chen who helped and gave advice concerning this paper. Your valuable comments and suggestions have helped me to formulate and organize this paper.

My gratitude and appreciation also go to my fellow lab mates, friends and family who commented on and provided input and support during the writing of this paper.

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