Research Article

Does Good Governance Mediate Between GDP To Debt and Economic Development?
Qaiser Aman

ABSTRACT
The main motive of the study was to investigate the role of good governance between debt to GDP and economic development. Existing study used the data over the period of period 1990 to 2020 of World Bank. Per capita Income (PCI) is taken as dependent variable for economic performance. While good governance (GG) is considered as mediating variable in this study which is measured through the Worldwide Governance Indicators (WGI). Whereas debt to GDP is used as an independent variable in this study. This study measured the direct and indirect effect of mediating and independent variables. The study results concluded that there is a relationship between debt to GDP and economic development. It shows that more debt to GDP leads to higher economic development. Study also found significant relationship of mediating variable between debt to GDP and economic development.

KEYWORDS
Debt to GDP, Good Governance, Per Capita Income, Economic Development, Saudi Arabia

1 | INTRODUCTION

The modern world is evolving with new methods, approaches, and strategies that are establishing new trends. Nothing is steady these days; economies frequently experience ups and downs. For the world's economy, politics, institutions, and to make progress, effective governance is necessary. Technology is improving so fast that is why all walks of life as well as all economies are affected. Every nation is heavily dependent on every other nation. To satisfy the current demands of society, a nation needs strong political, institutional, and economic structures. Managing debt is one of the problems that today's economies are confronting. Global public debt has increased dramatically because of economic crises. Numerous issues arise from this increase in governmental debt, which also affects economic factors (Reinhart & Kenneth 2009). Public debt is an important means for economies to finance investments in growth and development, according to the IMF (2021). In addition, it's critical to manage the public debt as a sustainable obligation and to pay it off on schedule. "Going into debt distress is often a painful process that can impede a nation's progress for years and jeopardize macroeconomic stability." Public debt becomes required when a nation experiences a budgetary shortfall. According to Barro (1979) and Dotsey (1994), debt stress has an impact on a nation's GDP, interest rate, high inflation, interest rates, higher taxes, political instability, and future policy inconsistencies. It has recently become a major concern for rising and developing economies. Public debt has a detrimental effect on growth and can occasionally get out of control and have an adverse effect on GDP. One of the main issues facing developing nations is debt management. They lack stable economic policy, have incompetent economic management, and constantly deal with political unrest. However, maintaining steady economic growth and attempting to keep the amount of public debt under control continue to be the top priorities for all governments. Macroeconomic variables and the political system are closely related. Political economies that are stable outperform
those that are unstable (Kim, Ha, & Kim 2017). Taking up debt is not a big deal; the use of that debt for purposes other than constructive purposes is. Inconsistent economic policies, a weaker institutionalized system, and an inability to use public debt are the causes of this issue (Asiedu 2003; Fata's & Mihov 2013).

In 1989, the World Bank (WB) coined the phrase "good governance." This phrase has become widely utilized in various academic fields due to its increased popularity. Undoubtedly, this topic is essential to every subject of study. Given the nation's economic progress, it has become essential. Without effective governance, no nation can reach its economic development goals. Numerous international organizations, including the World Bank, the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development, the Asian Development Bank, and others, encourage and help nations to implement good governance. Ensuring quality governance benefits all parties involved in a nation. By defending each party's rights, it promotes investment and exemplifies fair play. It regulates unethical behavior and fosters national openness. Transparency promotes fair play and inhibits corruption. Additionally, it encourages constructive rivalry between people and organizations. (Hamadaoui, Kaktouf, & Farj, 2001). The current era is characterized by strong governance, and numerous recent studies show that good governance and economic progress are positively correlated. As a result, everyone agrees that sound governance is essential to a nation's ability to manage its debt. Only competent and efficient fiscal and monetary policies can enable quality governance in a nation. Prior studies explore the effects of economic factors on economic development while concentrating solely on economic considerations. A non-economic component was absent from earlier studies. These days, analysts and academics are more interested in non-economic variables and how they affect economic development, such as the caliber of institutions. This study looks at the relationship between a nation's economic development and its debt to GDP, considering the considerations. According to this study, no nation can achieve its goal of economic progress without sound governance. The next forecast is that developing countries' economies will be negatively impacted by high debt to GDP.

2 | LITERATURE REVIEW

2.1 | Public Debt and Economic Growth

The general perception of economists on the public debt-growth relationship indicates that in a short period a public debt exercises a significant influence on economic growth and overall demand (Elmendorf and Mankiw 1999). Although some past research studies claimed a negative debt-growth relationship and pointed out opposing the Ricardian equilibrium Barsky, Mankiw and Zeldes (1986). A few studies supported the idea of Ricardian equilibrium (Evans 1988 & Evans 1991). While some studies found the mixed results (Haug 1990). Still the issue is to be determined and researchers are trying to find debt-growth relationship through various networks. Some studies such as (Gale and Orszag, 2002, Kumar and Baldacci, 2010, Corsetti, Kuester, Meier and Muller 2013, Jacobs, Ogawa, Sterken & Tokutsu 2019) recommend that high public debt to GDP is harmful for an economy in the long run. According to (Sargent & Wallace 1981; Barro 1995; Cochrane 2011; Aizenman, Kletzer & Pinto 2007; Burnsie, Eichenbaum & Rebelo 2003) high public debt pays huge amount of interest as well as a question of sovereignty. Many studies pointed out many negative consequences of high public debt. They have highlighted that there is an increase in tax, increase inflation, decline long run economic growth, negative impact on banking sector which leads to monetary crises and ultimate leads to economic instability.

2.2 | Economic Growth and Governance

Governess includes conducts and institutes through which powers of state is exercised. It involves how governments are selected, controlled, transferred, replaced, promote, develop and implement comprehensive policies, promote justice, believe in equity, make effective economic policies, interaction between state and society. Since the late 1990s, governance of a country has become an integral part of international organizations like WB, IMF, and WHO etc. WB, World Governance Index (WGI) is a widely used tool to measure the degree of good governance of country. WGI comprised on six dimensions of governance, economists and practitioners agree that good governance plays a vital role in the performance analysis of a country (Khan 2007). According to (Gani, 2011, and Corray, (2009) good governance is a significant indicator in growing an economy. Even though, a few research studies propose the significance of governance and essential institutional condition and capacity. Despite that, some researchers. Abdullah (2020) considers good governance as a forecast of economic growth and government institutions play an important role in an economy growth.
2.3 Governance, Debt and Economic Growth

Many studies examine debt-governance association with political and institutional factors. Good governance supports the government to accumulate the public debt, Woo (2006). Kim, Ha and Kim (2017) also found that corrupt practices affecting economic growth adversely. Lack of accountability and corruption waste the economy resources, which ultimate increase the debt financing of an economy which enhance the burden and interest rate. Roe and Siegel (2011) pointed out that matured political setup plays an important role in the financial management of economy. According to Parker (1999) regulatory institutions/system of a country encourage investors, enhance their confidence level for investment. Accountability, transparency and consistency of economic policies are the main characteristics of regulatory system. In short, a sick regulatory system and ineffective government strengthens the corruption that ultimately distort the macroeconomic environment (Basco, 2016).

3 METHODOLOGY AND DATA

This scholarly investigation looks at the direct and indirect effects of debt to GDP on the economic growth of two well-known Muslim nations. The study uses simple regression and correction to examine the relationship between debt to GDP (DGDP) and economic development to quantify the direct impact. In contrast, the study's indirect impact examines how good governance (GG) mediates the relationship between GDP debt and economic growth. Economic development is considered a dependent variable for the goal and is assessed using GDP to Per Capita Income (PCI). In contrast, the ratio is used to measure the independent variable of debt to GDP. The Worldwide Governance Indicators (WGI) index is used to monitor and assess good governance, which is regarded as a mediator. Voice and accountability, political stability and violence, government efficacy, rule of law, regulatory excellence, and corruption control are among the six variables that make up WGI. The ranges for all six good governance indicators are -2.5 to +2.5. This study modifies a new index using the average of these six variables. Better governance is indicated by higher mean values, and vice versa. Information on PCI and debt to GDP is gathered from the International Monetary Fund (IMF) for the years 1990–2020. The World Bank's (WB) WGI is the source of the good governance index, however. The research employs bivariate regression to quantify the direct influence (c) between DGDP and PCI, whereas multiple regression is used to measure the indirect effects (a*b). Step 1: Use bivariate regression to determine the direct effects of PCI and DGDP. Phase 2: Bivariate regression reveals the direct effect between GG and DGDP. Step 3: How DGDP and GG directly affect PCI. In Step 4, the Sobel test is used to examine the indirect effect of multiple regression on the indirect effect (a*b) and the statistical significance of mediation (GG) between DGDP and PCI.

Four equations are used in this work to calculate the mediating impact.

\[ Y_{it} = \beta_0 + \beta_1 D_{ITG} + \epsilon \]  
\[ Y_{it} = \beta_0 + \beta_1 DTG + \epsilon \]  
\[ Y_{it} = \beta_0 + \beta_1 PCI + \epsilon \]  
\[ Y_{it} = \beta_0 + \beta_1 PCI + \beta_2 GD + \epsilon \]

In this case, Y stands for per capita income, \( \beta_0 \) for constant, and \( \beta_1 \) for debt to GDP of country i over time period t. In this case, Y stands for good governance, \( \beta_0 \) for constant, and \( \beta_1 \) for excellent governance of nation i over period t. In this case, Y stands for excellent governance, \( \beta_0 \) for constant, \( \beta_1 \) for per capita income (i), and t is the time period. For each country I and time period t, Y stands for per capita income, \( \beta_0 \) for constant, \( \beta_1 \) for debt to GDP, \( \beta_2 \) for excellent governance, and \( \epsilon \) for an error term.
4 | INTERPRETATION AND ANALYSIS

Table 1
Descriptive Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI</td>
<td>30</td>
<td>7525.30</td>
<td>25208.17</td>
<td>1.5005E4</td>
<td>6636.92066</td>
<td>.233</td>
<td>-1.653</td>
</tr>
<tr>
<td>DTGDP</td>
<td>30</td>
<td>1.60</td>
<td>103.00</td>
<td>43.4067</td>
<td>34.56642</td>
<td>.384</td>
<td>-1.385</td>
</tr>
<tr>
<td>GG</td>
<td>30</td>
<td>.21</td>
<td>.48</td>
<td>.3290</td>
<td>.06036</td>
<td>.489</td>
<td>.592</td>
</tr>
</tbody>
</table>

Table 2
Correlation

<table>
<thead>
<tr>
<th></th>
<th>PCI</th>
<th>DTGDP</th>
<th>GG</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.881**</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>DTGDP</td>
<td>Pearson Correlation</td>
<td>-.111</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.561</td>
<td>.800</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

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

Table 3
Direct Effect (KSA)

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>p</th>
<th>β</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTGDP</td>
<td>0.884</td>
<td>.781</td>
<td>48.071</td>
<td>0.000</td>
<td>-0.878</td>
<td>-9.728</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Sobel test statistics= 2.594 (Showing significant)

The above table explains the results of F-statistics and regression coefficients. It shows F (4, 10) = 0.000, P < .05, R² = 0.781. The overall regression model was significant. In the above table, R-squared = 0.781, taken as a set, the predictors DTGDP and GG account for 78% of the variance in PCI. The findings of regression show that there is a statistically significant relationship between debt to GDP and economic development. Debt to GDP is a good predictor for economic development. The results show that Debt to GDP and economic development has a negative relationship. While study found insignificant relationship between GG and economic development.

Table 4
Indirect Effect

<table>
<thead>
<tr>
<th>Regression</th>
<th>R</th>
<th>R²</th>
<th>F-statistics</th>
<th>P</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step-1</td>
<td>.881</td>
<td>.776</td>
<td>97.058</td>
<td>.000</td>
<td>-.881</td>
<td>-9.852</td>
<td>.000</td>
</tr>
<tr>
<td>Step-2</td>
<td>.048</td>
<td>.002</td>
<td>-.033</td>
<td>.800</td>
<td>.048</td>
<td>.256</td>
<td>.800</td>
</tr>
<tr>
<td>Step-3</td>
<td>.111</td>
<td>.012</td>
<td>.346</td>
<td>.561</td>
<td>-.111</td>
<td>-.588</td>
<td>.561</td>
</tr>
<tr>
<td>Step-4</td>
<td>.884</td>
<td>.781</td>
<td>48.071</td>
<td>.000</td>
<td>-.878</td>
<td>-9.728</td>
<td>.000</td>
</tr>
</tbody>
</table>

Sobel test statistics= 2.594 (Showing significant)

There is clear indication from the above calculation that Sobel test as greater than 1.98 which is the minimum criteria of having to be significant and effective. Therefore, the study rejected the null hypothesis. The study found and predicted a significant relationship of GG between debts to GDP and economic development.
5 | CONCLUSION

Study results showed a positive impact of good governance on debt to GDP. It would be a great lesson for developing countries to get help from Saudia Arabia economic managers and institutions. The country is taking debt but due to good governance they are managing debt in a productive way. Due to good governance their corruption level is low, there is rule of law and no one above it. A Saudi National Anti-Corruption Commission, an Arabic version (NAZAHA) playing a significant role to overcome the corruption. Institutions are also strong, and they are accountable of any misuse of financial and non-financial resources. Even debt to GDP is high but there is a positive impact of debt on economic development. Their economy is expanding day by day. Many mega projects have started and some of them are going to be functional very soon. Indeed, expansion needs huge financial resources, and the public debt is a main source to finance the economy. In short, integrity, sincerity, commitment, accountability, transparency, zero tolerance on corruption, competent leadership are the main drivers of the economy. The first step to good governance is to strengthen the institutions and lay down transparent policies. Due to globalization standards of good governance, best practices of debt management and good policies for economic development are exposed to every economy.

REFERENCES


International Monetary Fund: Washington, DC, USA.