The Influence of Budget Transparency on Quality of Governance

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Abstract

Public budget is the engine that drives any economy; thus, budget transparency contributes to shaping the political process and government performance. The current study examines the relationship between budget transparency (measured by Open Budget Index (OBI)) and governance quality (measured by Worldwide Governance Indicators (WGI)). The study covers four years – 2006, 2008, 2010, and 2012 where OBI data are available. Furthermore, the role of the human development level of nations in shaping this relationship is tested.

While the result of the analysis shows a significant relationship between budget transparency and governance quality, which is inconsistent with the literature, the findings indicate minimal influence of the human development level of nations on this relationship. This result confirms the influence of budget transparency in the adoption of good governance practices by governments and increased quality of governance. Future research can examine the relationship between human development and quality of governance in the process of understanding factors that contribute in enhancing the governing process.

Keywords: Budget transparency; Governance quality; Human development

Introduction

Aaron Wildavsky [1], in his masterpiece Political Implications of Budgetary Reform, stated “The budget is the life-blood of the government, the financial reflection of what the government does or intends to do” (p. 184). The budgetary system and the public budget process have impacts on the way government operates. Thus, the cornerstone of developing financial systems in countries starts with the development of the public budget. Also, the public budget contributes to human development, economic growth, and governing. Therefore, international organizations, donors, and civil society organizations advocate budget transparency and accountability toward better governance. Conversely, good governance has been introduced as a tool to work toward better service for citizens, political stability, and government effectiveness. Furthermore, good governance is connected to fighting corruption and holding bureaucrats and politicians accountable for their actions. Consequently, good governance practices by governments are a prerequisite of financial and nonfinancial aids from donors to countries in need of assistance. The main theme of the current article is to study the influence of budget transparency on good governance. The open budget index (OBI) as a measure of budget transparency, as well as the worldwide governance indicators (WGI) (Voice and Accountability (VA), Political Stability and Absence of Violence (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC)) as a measure of good governance, have been used in studying the relationship between budget transparency and good governance. The study covers 2006, 2008, 2010, and 2012, where OBI data are available. In addition, the current study will explore the influence of human development in shaping the relationship between good governance and budget transparency. The human development index (HDI), which will be used in the current study as a measure of human development, classifies countries into four groups (very high development, high development, medium development, and low development). The three dimensions used in constructing HDI are health, education, and living standards. Where most prior studies on this subject have concentrated on one aspect of governance, the current article is exploring the influence of budget transparency on all six indicators of good governance, which will enhance the knowledge regarding the relationship between budget transparency and quality of governance. Also, studying the relationship between budget transparency and governance on a global scale (compared to the regional or country level) allows for studying the relationship in a variety of political and governmental systems. In addition, the current study will explore the influence of human development on the relationship between good governance and budget transparency, thus filling the research gap in exploring this issue. While the result of the analysis shows a significant relationship between budget transparency and quality of governance, the analysis concludes that the human development level of nations has a minimal influence in shaping the relationship. This result confirms the influence of budget transparency on governments’ adoption of good governance practices and increasing quality of governance. In contrast, although human development significantly moderates the relationship between budget transparency and regulatory quality and between budget transparency and government effectiveness, it did not moderate any other relationships.

Budget Transparency

The theme of transparency has been addressed through numerous studies in many fields (e.g., political, economic, and social sciences). Kosack and Fung [2] argue that the notion of transparency has been adopted by governments and international organizations based on the promise that “disclosure of information about government institutions, policies, and programs empowers citizens to hold officials responsible for their spending and performance, thereby reducing corruption and mismanagement of public resources and leading, eventually, to more accountable, responsive, and effective governance” (p. 65). Thus, transparency is argued to be an important tool for better governing. Public budget, on the other hand, is the engine that drives...
the economy and government’s work. The structure of the budget, the budget process, and the way it is executed play a significant role in economic growth and sustainable development [3,4], political stability and political downturn [5,6], controlling corruption [2,7], and human development [8,9]. In addition, the impact of public budget goes beyond the public sector to influence private sectors’ performance and financial market [10].

Distinguishing between budgets and budgetary systems is a critical point that many previous researchers have mentioned. Whereas the budget refers only to the documents within which financial proposals are contained, the budget system refers to the relationship between the stages to be followed in order to compile the budget documents [11,12]. In addition, the public budget generally reflects the policy of the government with regard to economic policies. Over the years, many definitions of budget transparency have been introduced. Premchand defines budget transparency as “the availability of information to the public on the transactions of the government and the transparency of decision-making processes” (p. 17). The Organization for Economic Co-operation and Development (OECD) defines budget transparency as “the full disclosure of all relevant fiscal information in a timely and systematic manner” [13]. The definition of open budget initiative that will be utilized in the current paper explicates details in defining budget transparency: “transparency means all of a country’s people can access information on how much is allocated to different types of spending, what revenues are collected, and how international donor assistance and other public resources are used”.

Accordingly, budget transparency movements are motivated by the assumption that “enhancing transparency and accountability in the budget process will lead to improved democratic and developmental outcomes [8]”. In contrast, the length and complexity of the public budget makes it difficult for the average citizen to understand; thus, it has been argued that too much budget transparency can do more harm than good [14,15]. On the contrary, Carlitz stated that “access to budget information and budget processes clearly has the potential to empower citizens and make their governments respond in ways that may improve their lives” (p. 663).

**Good Governance**

Evaluating public sector performance and people’s participation in political and governmental decision-making processes are subjects that have dominated research in many fields (e.g., public administration and political science) [16,17]. In addition, many theories and models have been introduced, such as new institutionalism theory [18,19] and public choice theory [20], which study how governments perform their work and how politicians and bureaucrats behave in the policy process. The governance model is characterized by a change in the role of government from the only player to one of many players. Governance is marked by a change in government’s role in society, where nongovernmental actors (e.g., citizens and nonprofit organizations) participate in the decision-making process and where democratic principles are applied by giving the majority of people the right to participate in the governing process [21,22]. According to Neumayer [23], governance is defined as “the way in which policy makers are empowered to make decisions, the way in which policy decisions are formulated and implemented and the extent to which governmental intervention is allowed to encroach into the rights of citizens”.

Accordingly, good governance is the standard used to determine the quality of governing by countries and international institutions providing political, administrative, and financial support and advice to other countries. Also, international financial institutions (e.g., the IMF and the World Bank) and donor countries (e.g., the United States and the United Kingdom), use good governance as a standard to evaluate countries’ affairs and systems. This evaluation contributes, in part, to the decision of whether or not to provide aid to those countries [24,25].

Good governance is defined as “the ability of government to develop an efficient, effective and accountable public management process that is open to citizen participation and that strengthens rather than weakens a democratic system of government” [26]. In addition, international organizations deem that good governance is a condition for economic development and efforts to fight corruption. The United Nations has introduced eight major characteristics of good governance that define and articulate good governance practices by governments: “[good governance is] participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive, and follows the rule of law” [27]. In addition, good governance is characterized by respecting human rights and adopting democratic principles by governments (e.g., citizen participation and transparency) in decision-making processes [2,21]. Therefore, indices have been developed by organizations to measure quality of governance, and each index is structured and calculated differently [24,28,29]. While some are regionally based (e.g., measuring quality of governance among African nations), other indices have expanded annually by covering more countries. Other measures of quality of governance concentrate on one or two aspects of the governing process, such as the corruption perceptions index (CPI), which measures nations’ corruption levels. Arndt and Oman [28] argue that, although “the perfect governance indicator will undoubtedly never exist” (p. 11), some indicators have more validity and credibility than others. The number of sources used to structure an index, the comprehensiveness with which the governing process is covered, and the accuracy of the results are all factors that make one index more credible than others among users [24,28]. The worldwide governance indicators (WGI) project defines good governance as “the traditions and institutions by which authority in a country is exercised,” including: (a) the process by which governments are selected, monitored and replaced; (b) the capacity of the government to effectively formulate and implement sound policies; and (c) the respect of citizens and the state for the institutions that govern economic and social interactions among them [30]. Because they cover the most important aspects of the governing process [24,28] the worldwide governance indicators (WGI) will be adopted as a measure of good governance, in the current study. Unlike other indices, the WGI contains an indicator for each aspect of the governing process, affording researchers and policy-makers a better understanding of the political process [22,29,31]. Thus, the design of the WGI, coupled with the fact that it covers all member nations of the UN, helps to provide a clear understanding of the relationship between quality of governance and budget transparency.

**Transparency and Good Governance: Previous Studies**

Many studies have been conducted to examine the relationships between budget transparency and government’s performance and activities; budget transparency and countries’ development budget transparency, fiscal performance, and political turnover [5,32] and transparency and good governance [3,15]. The positive influence of government work’s transparency on a country’s development and quality of governance is a common finding among most of these studies. Benito and Bastida [5] study the relationship between budget transparency on one side and economic development and fighting corruption on the other. Even though every country has a different
culture and political system, which might affect the way each country applies public budget transparency standards, the authors find a strong relationship among budget transparency, economic development, and efforts to fight corruption in all countries included in the research. Additionally, the study concludes that budget transparency increases a government’s accountability and improves the decision-making process. In addition, Benito and Bastida [5] study the relationship between budget transparency based on the availability of information from governments and citizen participation in the political process. After admitting the difficulty of measuring political participation by using one only aspect of it (voting), the study nonetheless finds a positive relationship among budget transparency, fiscal performance, and political turnover. Renzio, Gomez, and Sheppard [33] study the relationship between budget transparency and human development in resource-dependent countries – that is, countries that depend on natural resources (e.g., oil or minerals) as their main source of income. Using open budget initiative data collected in 2006, they compare these scores with the UN Human Development Index (HDI) for each country. While they find that resource-dependent countries suffer from a lack of budget transparency, Renis et al. [33] find no clear relationship between budget transparency and a country’s level of development.

In contrast, Zucolotto and Teixeira study the influence of budget transparency on corruption, accountability, quality of legislature institutions, and democracy in countries. The study concludes that “countries that are more transparent have more and better accountability mechanisms and, consequently, a greater level of democracy and less corruption, all of which points to the importance of transparency in the process of democratic consolidation”. Although the literature has reached mixed conclusions in connecting transparency and budget transparency to good governance, there has been increasing interest in the potential of transparency to improve quality of governance [34,35]. According to Masud [36], “budget transparency has emerged as a key component in governance reform, particularly since citizens around the world frequently lack at least some of the most basic information about government decisions and actions at every stage of the budget process”. In summary, while budget transparency has been connected to good governance practices by governments, information access by the public has not played the role of an end in itself but rather a tool toward better governance. Thus, to have an effective and efficient system and to benefit from budget transparency, the public (e.g., citizens and nonprofit organizations) must have the capability to monitor authorities and hold them accountable for their actions. In their study of the effect of budget transparency on the performance of resource-rich countries, Kolstad and Wiig [15] argue that budget transparency in and of itself cannot be the only solution to reduce corruption and maintain sustainable development unless combined with improved quality of institutions and policies (financial and otherwise), citizen empowerment, and human development level. Similarly, Lindstedt and Naurin stated, “Reforms focusing on increasing transparency should be accompanied by measures for strengthening citizens’ capacity to act upon the available information if we are to see positive effects on corruption”.

Human Development

Human development has been associated with quality of governance [37,38] economic growth [39,40], and sustainable development [41,42]. In addition, human development shares some principals with good governance practices by governments, such as supporting free speech, upholding human rights, and improving public services’ quality [37,38]. Therefore, Pradhan and Sanyal [43] argue that good governance practices (e.g., rule of law and transparency) are conditions for high levels of education and health systems; thus, high quality of governance results in more efficient and effective government work that leads to high levels of human and economic development. Similarly, Alkire [41] thinks that human development (e.g., high-quality education and health systems) supports the productivity of an economy by providing healthy and highly trained individuals. To this end, human development requires both economic growth and good governance practices by governments. According to The United Nations Development Program (UNDP) [44], “resources generated by economic growth have financed human development and created employment while human development has contributed to economic growth”. Consequently, governments need to adopt balanced development of the governance process, economic and human development in order to enhance the well-being of citizens and increase the effectiveness of the government’s work. The current paper will test whether the state’s level of development influences the relationship between quality of governance and budget transparency. In addition, having four groups of human development as human development index (HDI) constructed (very high development, high development, medium development, and low development) will help in enhancing our understanding of the influence of nations’ human development levels on the relationship between budget transparency and quality of governance.

Theoretical Framework: New Institutionalism Theory

The new institutionalism framework has shaped studies in many fields, including public policy and public administration. According to Lane and Ersson [45], new institutionalism focuses on non-policy factors, such as economic and social factors, that affect the composition and functioning of institutions. New institutionalism theory argues that the quality of institutions is related to their governance quality [46,47]. In addition, new institutionalists stress the important role of institutions in shaping individuals, political processes, and economic outcomes [48,49], while individuals and society likewise influence institutions. According to Powell [47], “organizations are deeply embedded in social and political environments suggesting that organizational practices and structures are often either reflections of or responses to rules, beliefs, and conventions built into the wider environment”. Thus, there is a two-way relationship between governance and the structure and design of institutions [50]. Governance is a means of including all social and political actors in the decision-making process, while institutions can be seen as the rules of the game, controlling how the governance process takes place [51]. According to Bell [52], “institutions are important, because, as entities, they form such a large part of the political landscape, and because modern governance largely occurs in and through institutions”. In addition, Hall and Taylor argue that the quality of political outcomes and governance depends on improving human development factors (e.g., socioeconomic factors, education levels, and standard of living). Therefore, new institutionalism theory contributes to the debate over the role that individuals play in influencing an institution’s outcomes. Additionally, both governance and new institutionalism assert the importance of both formal and informal arrangements [53]. According to North [54], “institutions are the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)” (p. 97). Thus, since public budget is “the life-blood of the government” [1], we could argue that public budget transparency plays an important role in enhancing the quality of governance, government performance, and human development.
Accordingly, the current paper examines whether the public budget transparency levels of nations affect governance (i.e., quality of institutions).

**Methodology and Data Sources**

Although many studies have addressed governance throughout history, little has been said regarding the relationship between budget transparency and governance. The current paper attempts to fill this gap by studying the relationship between budget transparencies from 2006 to 2012. Thus, the first research question is: Is there a relationship between budget transparency (independent variable) and quality of governance (dependent variable)? Furthermore, the current study will explore whether the relationships between budget transparency and each governance indicator vary based on a country’s level of development. Thus, the second research question is: Does the relationship between budget transparency and quality of governance vary from country to country based on each country’s level of development?

**Measuring Budget Transparency**

Many indices and guidelines have been introduced in an effort to measure and evaluate the application of budget transparency by governments (e.g., open budget index (OBI), best practices for budget transparency by the Organization for Economic Co-operation and Development (OECD), and guidelines for public expenditure management by the International Monetary Fund (IMF)). Although it is based on data collected through surveys sent to institutions and civil society organizations – which raises some concerns regarding the accuracy of the results, since most of the data collection is based on the subjectivity of the participants rather than fact-based analysis [9] – the open budget index (OBI) is nonetheless considered by many scientists and organizations to be the most reliable and credible tool available for measuring the application of budget transparency by governments [55]. OBI “assesses whether governments provide their citizens with timely, comprehensive, and useful budget information; whether oversight institutions, including the legislature and external auditors, are effectively performing their role; and whether the public has opportunities to participate in the budget process” [36]. OBI is a product of the open budget initiative, which is part of the International Budget Partnership’s (IBP) program, which is founded by the Center on Budget and Policy Priorities. The first index of OBI was issued 2006, and it has been issued every two years since. OBI collected data from 100 countries in 2012. In the current paper, the open budget index is used as a measure of budget transparency. According to International Budget Partnership (2012): The Open Budget Index (OBI) assigns each country a score from 0 to 100 based on the simple average of the numerical value of each of the responses to the 95 questions in the questionnaire that assess the public availability of budget information. A country’s OBI score reflects the timeliness and comprehensiveness of publicly available budget information in the eight key budget documents.

**Measuring Governance**

While there are many governance indices, most specialize in measuring certain aspects of the governing process, while few attempt to comprehensively cover all aspects of governance. The World Bank Group’s set of worldwide governance indicators (WGI) is considered by many scholars to be “the most comprehensive publicly available set of governance indicators” [28]. The current paper will use the worldwide governance indicators (WGI) as a measure of the quality of governance for several reasons. The WGI includes six indicators, each of which measures one aspect of the governing process. Unlike other indices, the WGI contains an indicator for each aspect of the governing process, affording researchers and policy-makers a better understanding of the political process [22,56]. Accordingly, in the current research, each indicator will be used as a separate, unique variable in order to reach a better understanding of the relationship between each aspect of the governance process and budget transparency. In addition, 31 sources of data were used to construct the WGI indicators, thus enriching their quality [57]. The WGI, which used more than 441 variables in formulating and measuring the six indicators of governance, covers more than 213 countries and territories, making this the only set of indicators to cover all member states of the United Nations [28]. The WGI has been an annual indicator since 2004; however, it was biannual from 1996-2003. Accordingly, a scale of low to high quality of governance (-2.5 to +2.5), will be adopted in the current paper. Six dimensions are used in measuring the level and quality of governance as part of the Worldwide Governance Indicators (WGI): 1) Voice and Accountability (VA), 2) Political Stability and Absence of Violence (PS), 3) Government Effectiveness (GE), 4) Regulatory Quality (RQ), 5) Rule of Law (RL), and 6) Control of Corruption (CC) [30].

**Measuring Human Development**

Many studies have found a strong correlation between governance on the one hand and economic growth and human development on the other [33,58]. Thus, a nation’s human development level is used in this study to analyze the relationship between governance and budget transparency. Many indices and reports have been issued for measuring and evaluating countries’ human development level, including the human development index (HDI), human rights index (HRI), and human development reports (HDRs) [59,60]. HDI has been adopted in the current study because it has been recognized as a well-designed index that captures and measures the majority of human development aspects in a credible and valid way [61,62]. HDI is a product of the United Nations Development Program (UNDP) and has been published annually since 1990. HDI is an index that ranks countries based on their human development level relative to other countries. Three dimensions – adult literacy, life expectancy at birth, and standard of living – are used in calculating HDI [44]. According to UNDP [44], gross national income (GNI) is used to measure the standard of living, life expectancy at birth is used to measure level of life expectancy at birth, and mean years of schooling and expected years of schooling are used to measure level of adult literacy. For every human development component, there is a mathematical formula, and there is an aggregate formula that includes all three formulas to construct HDI [44]. HDI can range from 1.0-0.0, where scores of the final formula divides countries as follows: 1.0-0.79 (very high development), 0.78-0.698 (high development), 0.69-0.52 (medium development), and 0.51-0.28 (low development) [44]. For the current paper, the 2006, 2008, 2010, and 2012 issues of HDI will be used.

**The Relationship between Budget Transparency and Good Governance**

The first research question sought to determine whether there was a relationship between budget transparency (as measured by the open budget index) and good governance (as measured by Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption) [63]. Since all the variables were measured using an interval scale, correlation procedures were conducted. As most of the variables were highly skewed and not distributed normally, non-parametric Kendall-Tau correlation tests were utilized.
Budget Transparency and Good Governance in 2006

The findings in Table 1 reveal that the Open Budget Index (OBI) was positively associated with the six indicators of good governance in 2006. Therefore, increased levels of budget transparency were significantly associated with increased levels of Voice and Accountability (VA), Political Stability (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC) [64].

Budget Transparency and Good Governance in 2008

The findings in Table 2 show that the OBI was positively associated with five of the indicators of good governance in 2008. Therefore, increased levels of budget transparency were significantly associated with increased levels of VA, PS, GE, RQ, RL, and CC but not PS [65].

Budget Transparency and Good Governance in 2010

As shown in Table 3, the OBI was positively associated with five of the indicators of good governance in 2010. Increased levels of budget transparency were significantly associated with increased levels of VA, GE, RQ, RL, and CC but not PS [66].

Budget Transparency and Good Governance in 2012

As shown in Table 4, the OBI was positively associated with five of the indicators of good governance in 2012. Once again, increased levels of budget transparency were significantly associated with increased levels of VA, GE, RQ, RL, and CC but not PS.

The Moderating Effect of Human Development on the Relationship between Budget Transparency and Good Governance

The second research question sought to determine whether the relationship between budget transparency (as measured by the OBI) and good governance (as measured by VA, PS, GE, RQ, RL, and CC) varied across nations’ levels of human development. The independent variable, budget transparency, was transformed into a binary variable, with the top 50 countries categorized into the highly transparent group and the bottom 50 countries assigned to the less transparent group. The moderator, human development, was transformed from a four-category variable into a two-category variable with the Very High and High categories collapsed into a single group and the Medium and Low categories collapsed into another group. Because the indicators of good governance were highly skewed (and transformations did not correct for skewness), the six indicators were coded into binary variables based on their medians [67]. Since the dependent variables were binary, logistic regression procedures were conducted. The product of the independent and moderator variables, the interaction term, was evaluated at an alpha of .05.

Results for 2006

Control of corruption

The findings in Table 5 indicate that human development did not moderate the relationship between budget transparency and CC scores in 2006, B = .07, p = .949. Rather, human development had a main effect on CC scores, B = -2.16, p = .001. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher CC scores dropped by.

Government effectiveness

Likewise, human development did not moderate the relationship between budget transparency and GE scores, B = -1.78, p = .187, but it did have a main effect on GE scores, B = -2.90, p = .001. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher GE scores dropped by .06.

Political stability

Human development did not moderate the relationship between budget transparency and PS scores, B = -6.4, p = .520, nor did it have a main effect on PS scores, B = -8.5, p = .088.

Rule of law

Human development did not moderate the relationship between budget transparency and RL scores, B = -63, p = .542, but it did have a
**Political stability**

Human development also did not moderate the relationship between budget transparency and PS scores, $B = 1.46$, $p = .141$, nor did it have a main effect on PS scores, $B = -.57$, $p = .253$.

**Rule of law**

Human development did not moderate the relationship between budget transparency and RL scores, $B = .63$, $p = .524$, nor did it have a main effect on RL scores, $B = -.89$, $p = .072$.

**Regulatory quality**

Human development did not moderate the relationship between budget transparency and RQ scores, $B = -.87$, $p = .450$, but it did have a main effect on RQ scores, $B = -2.04$, $p = .001$. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher RQ scores dropped by .09.

**Voice and accountability**

Human development did not moderate the relationship between budget transparency and VA scores, $B = 1.47$, $p = .192$, nor did it have a main effect on VA scores, $B = -.29$, $p = .603$.

### Results for 2010

#### Control of corruption

The findings in Table 7 indicate that human development did not moderate the relationship between budget transparency and CC scores in 2010, $B = .87$, $p = .425$. Rather, human development had a main effect on CC scores, $B = -1.53$, $p = .005$. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher CC scores dropped by .22.

#### Government effectiveness

Likewise, human development did not moderate the relationship between budget transparency and GE scores, $B = -.82$, $p = .501$, but it did have a main effect on GE scores, $B = -2.37$, $p = .001$. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher GE scores dropped by .17.

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### Variables

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* $p < .05$, ** $p < .01$, *** $p < .001$.  

**Table 5:** Logistic Regression Results for Good Governance in 2006 (N=89).

Human development significantly moderated the relationship between budget transparency and RQ scores, $B = -3.16$, $p = .027$. Post-hoc procedures reveal that within countries scoring high on human development, there was no relationship between budget transparency and RQ scores, $B = .77$, $p = .502$; however, within countries scoring lower on human development, there was a relationship between budget transparency and RQ scores, $B = -2.39$, $p = .003$. In particular, in comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher RQ scores dropped by .09.

### Results for 2008

#### Control of corruption

As shown in Table 6, human development did not moderate the relationship between budget transparency and CC scores in 2008, $B = 1.00$, $p = .340$. Rather, human development had a main effect on CC scores, $B = -.25$, $p = .017$. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher CC scores dropped by .29.

#### Government effectiveness

Similarly, human development did not moderate the relationship between budget transparency and GE scores, $B = -.05$, $p = .963$, but it did have a main effect on GE scores, $B = -1.77$, $p = .001$. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher GE scores dropped by .17.

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**Table 6:** Logistic Regression Results for Good Governance in 2008 (N = 82).
that were not as transparent would have higher GE scores dropped by .09.

Political stability

Human development also did not moderate the relationship between budget transparency and PS scores, B = .14, p = .144, nor did it have a main effect on PS scores, B = -.12, p = .095. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher PS scores dropped by .34.

Regulatory quality

Human development did not moderate the relationship between budget transparency and VA scores, B = .23, p = .050, nor did it have a main effect on VA scores, B = 1.75, p = .060. In comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher VA scores dropped by .13.

Voice and accountability

Human development did not moderate the relationship between budget transparency and CC scores, B = -1.75, p = .060, nor did it have a main effect on CC scores, B = -1.12, p = .108.

Results for 2012

Control of corruption

As shown in Table 8, human development did not moderate the relationship between budget transparency and CC scores, B = 1.87, p = .178, nor did it have a main effect on CC scores, B = -1.12, p = .108.

Government effectiveness

Human development significantly moderated the relationship between budget transparency and GE scores, B = 3.47, p = .048. Post-hoc procedures reveal that within countries scoring highly on human development, there was a relationship between budget transparency and GE scores, B = -4.09, p = .008; in particular, in comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher GE scores dropped by .02. However, within countries scoring lower on human development, there was no relationship between budget transparency and GE scores.

Political stability

Despite increasing the number of iterations to 50, a final solution could not be found. Cross-tabulations revealed that there were no countries that could be categorized as high on human development with minimal budget transparency and high PS scores. It is thus possible that the result is an indication of failure of estimation.

Rule of law

Human development did not moderate the relationship between budget transparency and RL scores, B = -1.32, p = .050. Human development also did not have a main effect on RL scores, B = -1.27, p = .050. Human development did not moderate the relationship between budget transparency and VA scores, B = 1.73, p = .095, nor did it have a main effect on RL scores, B = -1.32, p = .108.

Voice and accountability

Human development did not moderate the relationship between budget transparency and VA scores, B = .23, p = .095, nor did it have a main effect on VA scores, B = -1.32, p = .108.

Discussion

In regard to the research question of whether there was a relationship between budget transparency and GE scores, B = 3.47, p = .048. Post-hoc procedures reveal that within countries scoring highly on human development, there was a relationship between budget transparency and GE scores, B = -4.09, p = .008; in particular, in comparison to countries that were highly transparent, the likelihood that countries that were not as transparent would have higher GE scores dropped by .02. However, within countries scoring lower on human development, there was no relationship between budget transparency and GE scores.

Political stability

Despite increasing the number of iterations to 50, a final solution could not be found. Cross-tabulations revealed that there were no countries that could be categorized as high on human development with minimal budget transparency and high PS scores. It is thus possible that the result is an indication of failure of estimation.

Rule of law

Human development did not moderate the relationship between budget transparency and RL scores, B = -1.82, p = .222. Human development also did not have a main effect on RL scores, B = - .37, p = .619.

Regulatory quality

Human development did not moderate the relationship between budget transparency and RL scores, B = -1.32, p = .050. Human development also did not have a main effect on RL scores, B = -1.27, p = .050.

Voice and accountability

Human development did not moderate the relationship between budget transparency and VA scores, B = .23, p = .085, nor did it have a main effect on VA scores, B = -1.32, p = .108.

Table 7: Logistic Regression Results for Good Governance in 2010 (N = 73).

* p < .05. ** p < .01. *** p < .001.
shows the importance of budget transparency in improving quality of governance, the analysis concludes that, while the human development level of nations has an influence in shaping the relationship between budget transparency and quality of governance, this influence is not entirely significant. Thus, regarding the second research question of whether the relationship between budget transparency and good governance varies across levels of human development of nations, the answer varies across variables and years. While human development significantly moderated the relationship between budget transparency and regularity quality in 2006 and the relationship between budget transparency and government effectiveness in 2012, it did not moderate relationships in any other years.

To conclude, while the result emphasizes the importance of budget transparency in improving institutional quality human development has minimal influence on the relationship between budget transparency and good governance. The length and complexity of the public budget make it difficult for the average citizen to understand, and this could be a reason for the minimal influence of human development on the relationship. Also, the result confirms a significant influence of human development on the relationship between budget transparency on one hand and regulatory quality and government effectiveness on the other, which can be interpreted in terms of people devoting more attention to those factors that have a direct influence on their daily lives (e.g., regulatory quality and government effectiveness) than to the rest of the factors. Furthermore, other factors that might maximize the influence of public budget transparency on institutional quality (e.g., political and social factors) have not been included in the analysis. Also, the current study covers only four years, whereas including more years in the analysis might give us better understanding of the effect of the human development level of nations on the relationship between budget transparency and quality of governance.

Conclusion

Public budget is the engine that drives any economy; thus, budget transparency has an influence in shaping the political process and government performance. The result of the analysis shows a significant relationship between budget transparency and quality of governance, which is inconsistent with the literature. Thus, budget transparency contributes to reducing corruption, improving government performance, and holding bureaucrats and politicians accountable for their actions. Hence, the budgetary system and the public budget process have impacts on the way government operates. Conversely, while the human development level of nations significantly moderated the relationships between budget transparency and regularity quality and between budget transparency and government effectiveness, it did not moderate any other relationships. Future research should examine the relationship between human development and quality of governance in the process of understanding factors that contribute to enhancing the governing process.

References