The Influence of the Global Economic Crisis on the Relationship Between Governance and Economic Growth

by

Bassam A. Albassam

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SUPERVISORY COMMITTEE:

Clifford McCue, Ph.D.
Dissertation Advisor

Khi Thai, Ph.D.

Eric Prier, Ph.D.

Khi Thai, Ph.D.
Director, School of Public Administration

Rosalyn Carter, Ph.D.
Dean, College for Design and Social Inquiry

Barry T. Rosson, Ph.D.
Dean, Graduate College

December 13, 2012
Date

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Abstract

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The current economic crisis has affected all aspects of life, which has resulted in political instability, personal financial troubles, and a growing number of business bankruptcies. While these are serious issues, simply developing a government policy that injects an economy with money is not an appropriate means to achieve economic recovery and long-term economic development unless combined with an effective and efficient governing system. The present research studies whether the strong relationship between governance and growth exists during economic crises or only during non-crisis periods. The results of the current research show that the global economic crisis has had an influence on the relationship between governance and economic growth. In addition, this study found that different levels of development affect the relationship between governance and growth differently during times of crisis. Consequently, the results of the current research show the instability in the relationship between governance and

economic growth during the economic crisis; this unsteadiness is a sign of the need for long-term strategies to promote global and national good governance practices that are not adversely affected by crises.

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Chapter I: Introduction

The current economic crisis has affected all aspects of life, which has resulted in political instability, personal financial troubles, and a growing number of business bankruptcies. While these are serious issues, simply developing a government policy that injects an economy with money is not an appropriate means to achieve economic recovery and long-term economic development unless combined with an effective and efficient governing system (Aikins, 2009; Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009). According to Aikins (2009), "without appropriate economic policy and regulatory framework, a nation's financial system becomes vulnerable to crisis and jeopardizes the stability of the entire economy" (p. 39)

Economic growth has been connected both directly and indirectly to government practices and the way governments govern (Adams & Mengistu, 2008; Ndulu & O'Connell, 1999; Pradhan & Sanyal, 2011). In addition, governing processes are affected by economic crises (Furubotn & Richter, 2005; Smith, 2007). For decades, international organizations (IOs) such as the International Monetary Fund (IMF), the United Nations, and the World Bank have argued that good governance is a means to an ends like economic growth and human development (Kaufmann & Kraay, 2002; Mehanna, Yazbeck, & Sarieddine, 2010; United Nations, 2000). Scholars and researchers agree that there is a strong relationship between economic growth and governance, yet it is debatable whether good governance practices lead to economic growth or that economic

growth leads to good governance (Acemoglu, Johnson, & Robinson, 2001; Arndt & Oman, 2006; Dixit, 2009; Kaufman, Kraay, & Mastruzzi, 2009b; Smith, 2007).

The present research studied whether there is a relationship between governance and economic growth, and if a relationship exists, is this relationship altered as a result of the global economic crisis. In addition, there are a limited number of studies examining the influence of economic crises on shaping the relationship between economic growth and governance, where the current study attempted to fill this gap. Thus, studying the relationship between economic growth and governance before and after the beginning of the economic crisis of 2008 will help academics, policymakers, and IOs better understand this relationship, and whether their efforts to promote governance can help alleviate the consequences of a major economic shock in the market place. In addition, economic growth is a cornerstone for countries' development (Adams & Mengistu, 2008; Ndulu & O'Connell, 1999; Pradhan & Sanyal, 2011). Consequently, studying economic growth and its relationship to the governing process will help us understand the factors that influence it during times of crisis and the ways it may be improved.

Governance

The concept of governance has been discussed in political science and public administration research for decades. Governance has been introduced as an alternative to traditional methods of governing (Kettl, 2002; Rhodes, 1997). In the traditional way of governing, government has the upper hand in decision-making processes (Hysing, 2009; Peters & Pierre, 1998); in contrast, under governance, other players affected by governmental decisions (e.g., civil society and the private sector) participate in decision-making processes (Kettl, 2002; Newman, 2001; Osborne & Gaebler, 1992; Rhodes,

1997). Although there is no agreement on defining governance, there is a common theme among scholars that governance means more participation in the political and decision-making process by nongovernmental institutions (Agere, 2000; de Ferranti, Jacinto, Ody, & Ramshaw, 2009; Lovan, Shaffer, & Murray, 2004; Mimicopoulos, Kyj, & Sormani, 2007). Thus, under governance, government is one of several players, rather than the only player, in managing a nation's affairs (Frahm & Martin, 2009; Kettl, 2002; Lovan et al., 2004; Rhodes, 1997).

According to de Ferranti et al. (2009) "governance describes the overall manner in which public officials and institutions acquire and exercise their authority to shape public policy and provide public goods and services" (p. 8) and it is "representing the overall quality of relationship between citizens and government, which includes responsiveness, efficiency, honesty, and quality." (p. 8). Similarly, the United Nations defines governance as "the process of decision-making and the process by which decisions are implemented (or not implemented)" (United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], 2009, p. 1). In addition, IOs have introduced characteristics of good governance practices as a global standard to be adopted by governments that receive their aid. According to the United Nations, "good governance has 8 major characteristics; it is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive, and follows the rule of law" (UNESCAP, 2009, p. 1). These criteria are often used by IOs and recipient nations to assess how their governments are achieving better governance (Mimicopoulos et al., 2007). In addition, IOs argue that good governance will have a

positive impact on the quality of government work, the way services are provided to their citizens, and the way programs are executed (Agere, 2002; Mimicopoulos et al., 2007).

Because international donors (whether countries or international organizations like the International Monetary Fund and the World Bank) are seeking the best use of aid to achieve economic development in receiving countries, these donors use good governance characteristics introduced by IOs to evaluate the performance of receiving governments. While there is a debate among scholars and politicians on the practicality of using the good governance characteristics introduced by IOs as a measure of governing quality (Farazmand, 2002; Poluha & Rosendahl, 2002), there is no doubt that good governance characteristics have gained popularity and creditability among IOs and politicians and most noteworthy in academic research (Arndt & Oman, 2006). In addition, in many cases these characteristics play a major role in the approval of loans or direct aid by international donors to countries in need (Mimicopoulos et al., 2007; Santiso, 2001).

Economic Growth

While there is no universally agreed-upon definition of economic development, a commonality among researchers is emerging that economic development results in better lives for people, and is necessary for a strong long-term national economy. Economic development implies both the improvement of people's health, education, and general well-being and the presence of positive economic indicators such as economic growth and low unemployment rates (Adams & Mengistu, 2008; Aidt, 2009; Arndt, 1987). Sustainable development is another issue related to economic development, because without strong long-term economic growth, an economy will be in danger of collapse in

any economic or political crisis (Blair & Carroll, 2008; Mayer-Foulkes, 2009; Nafziger, 2006; Ndulu & O'Connell, 1999).

Economic development is important because it has implications on people's lives (Adams & Mengistu, 2008; Arndt & Oman, 2006; Chong & Calderon, 2000; Kaufmann & Kraay, 2002; Mehanna et al., 2010; Smith, 2007). With economic development, people will have better education and healthcare and be more productive (Agere, 2000; Mimicopoulos et al., 2007). Economic development also affects crime rates and political stability (Przeworski, Alvarez, Cheibub, & Limongi, 2000); better-developed nations tend to have lower crime rates and greater political stability than less developed countries (Abdellatif, 2003; Adams & Mengistu, 2008; Kaufmann & Kraay, 2002).

Economic growth is a major concern for countries, as it results in providing jobs for citizens, encouraging domestic and international trade and investment, and raising standards of living (Adams & Mengistu, 2008; Agere, 2002; Kaufmann & Kraay, 2002). In addition, economic growth contributes to political stability (Gasiorowski, 1995; Smith, 2007). Thus, economic development has been adopted by United Nations as one of the Millennium Goals that UN members countries need to achieve by 2015 (Mimicopoulos et al., 2007; United Nations, 2000).

According to Wong and Autio (2005), "GDP per capita is the most commonly used measure of economic growth" (p. 346, note). Many studies have used GDP per capita as a measure of economic growth (Adam, 2003; Calderón & Liu, 2002; De Long & Summers, 1991; Harttgen, 2012; Islam, 1998; Kentor, 1998; Wong & Autio, 2005; van den Bergh, 2009). Following these studies' format, GDP per capita adjusted for purchasing power parity (PPP) is used in the current study as a measure of economic

growth. GDP per capita is calculated by dividing a country's GDP by its total population (Constanza et al., 2009; Shostak, 2001; Vachris & Thomas, 1999).

According to van den Bergh (2009), GDP per capita has been criticized for not accurately measuring human well-being and progress. This criticism is based on the argument that "the GDP per capita indicator emphasizes average income and neglects (changes in) the income distribution, even though an uneven distribution implies unequal opportunities for personal development and well-being" (van den Bergh, 2009, p. 119). Despite criticism of GDP per capita as a measure of human well-being and growth, van den Bergh (2009) notes that the GDP per capita indicator influences political and economic decisions and has been used by many studies as a measure of economic growth. Van den Bergh (2009) argues that "The real GDP per capita (corrected for inflation) is generally used as the core indicator in judging the position of the economy of a country over time or relative to that of other countries" (p. 117). In addition, Vachris and Thomas (1999) deem that using GDP per capita adjusted for PPP reflects the differences between the purchasing power of individuals in different countries in a more accurate way. Thus, change in GDP per capita adjusted for PPP will be used in the current study to measure economic growth.

Economic Crisis

The economic crisis of the late 2000s has caused many countries to suffer politically and economically as a result of weak economic infrastructures at both the global and local levels. The absence of regulations to organize the financial markets (Bernanke, 2009; Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009) and the lack of sustainable prior economic growth that might have minimized the impact of the crisis

(Acha, 2011; Agarwal, 2009; Aikins, 2009; Mayer-Foulkes, 2009) are major contributing factors to the weakness and instability of the national and global economics that has resulted in the vulnerability of local economies in facing the global economic crisis (Baily & Elliot, 2009; Bernanke, 2009; Simkovic, 2011).

The term *economic crisis* refers to a general slowdown of economic activity characterized by a decrease in gross domestic product (GDP), drying up of liquidity, and high rate of unemployment (Begg, De Grauwe, Canova, Fatas, & Lane, 2009; Gressani & Kouame, 2009; Sirimanne, 2009). Globally, economic crisis results in decreased international trade and investment (Claessens & Kose, 2009; National Bureau of Economic Research [NBER], 2012). In addition, economic crisis might lead to a recession, which has been the case for most countries over the last several years. According to the national bureau of economic research (NBER, 2003), two consecutive quarters of negative economic growth means that an economy is in recession. It takes time for economies to recover from the long-term influences of a recession (Aikins, 2009; Cerra & Saxena, 2008; Langmore & Fitzgerald, 2010).

Many reports from international organizations, independent institutions, and country officials have discussed the economic crisis and proposed timelines for recovery. While the influence of the economic crisis has varied among countries (e.g., some oil-exporting countries have not experienced the economic crisis to the same extent as other countries), it is certain that almost all countries have felt the impact of the crisis in one way or another (Gressani & Kouame, 2009; Sirimanne, 2009; UNCTD, 2009).

Although there is no exact date for when the economic crisis started, nor is there an exact date to say that the economic crisis was a global crisis, officials in many

countries (e.g., Ireland, Denmark, and Estonia) announced that their economies had entered a recession period in 2008 (Statistics Denmark, 2009; Statistics Estonia, 2012). Also, annual economic reports for 2009 from both countries and international organizations showed a decline in global and national GDP in 2008, international trade activities such as foreign direct investment (FDI), and export and import between countries (United Nations Conference on Trade and Development [UNCTD], 2009). In addition, a significant number of requests for financial assistance from countries affected by the economic crisis were made in 2008 and beyond to the IMF, the World Bank, and strong economies such as China (International Monetary Fund [IMF], 2010; World Bank, 2012a). Finally, in 2008, many countries took economic and political actions in response to the crisis, such as the Emergency Economic Stabilization Act of 2008 in the United States, the Economic Resiliency Plan (ERP) of 2008 in the Philippines, and created agencies such the National Asset Management Agency in Ireland, where all these governments' actions were introduced as a response to the economic crisis of 2008 (Baily & Elliot, 2009; Simkovic, 2011; Yap, Reyes, & Cuenca, 2009). Thus, 2008 has been touted as the beginning of the global economic crisis and will be used for the purposes of the present research. Though the year in which the crisis began has been identified as 2008, it is important to understand that the global economic crisis did not arise in a single year, but rather resulted from a series of earlier events, such as the housing bubble of 2006 and 2007 (Bernanke, 2009; Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009). In addition, it is important to mention that, even though the economic crisis became global in 2008, its influence was felt differently among different nations. Some countries, such as Ireland, Greece, and Spain, faced massive economic and political turbulence after the

crisis began, while others, such as oil-rich countries and China, felt the consequences of the crisis through slow economic growth (Gressani & Kouame, 2009; Sirimanne, 2009).

Purpose of Research

Many research efforts have discussed possible causes of the current crisis, including lack of local regulations to organize financial markets (Bernanke, 2009; Reinhart & Rogoff, 2009), government failure (Davidoff & Zaring, 2008; Gruenewald, 2010), and international organizations' failure to take action to organize the global market (Cerra & Saxena, 2008; Langmore & Fitzgerald, 2010; Repucci, 2011). However, research on the influence of the current economic crisis on shaping the relationship between governance and economic growth is severely lacking. The present research attempts to fill this gap by studying the influence of the economic crisis of 2008 on the relationship between governance and economic growth.

Studying whether times of crisis are different from non-crisis times in shaping the relationship between governance and economic growth is the main goal of the current study. Besides filling the gap caused by the shortage of research on the subject, developing a clear understanding of the influence of the economic crisis on the relationship between governance and growth will have important implications for both local and global political and decision-making processes.

In general, governments typically respond to crises with short-term remedial plans, potentially resulting in a harmful long-term economy recovery (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009). In addition, Davidoff and Zaring (2008) argue that governments focus more on economic growth than on governance development during economic crises. Thus, if the influence of economic crises on the relationship

between governance and growth is understood, governments can be encouraged to adopt strategies that will enhance governance quality and economic growth in the long run without sacrificing good governance practices in the short-run.

International organizations that support good governance practices, such as the United Nations, the IMF, and the World Bank, will also benefit from the current study. For decades, IOs have supported good governance practices as a means for human development and economic growth (Mimicopoulos et al., 2007; Santiso, 2001; United Nations, 2007). However, during crises, most countries score low in governance indicators because their governments concentrate more on economic growth than on adopting and improving good governance practices (Davidoff & Zaring, 2008; Kaufman, Kraay, & Mastruzzi, 2009b & 2010a; Reinhart & Rogoff, 2009). Thus, understanding the role that economic crises play on shaping the relationship between governance and growth during crises will encourage IOs to adopt long-term strategies of promoting global good governance practices that are not adversely affected by crises.

For the purpose of this study, six governance indicators will be used to measure the quality of governance: voice and accountability, political stability, regulatory quality, rule of law, government effectiveness, and control of corruption (Kaufman et al., 2009b). The level of influence of the current economic crisis on shaping the relationship between economic growth and governance is expected to vary from one indicator to another. Having six indicators focusing on different aspects of the governance process, rather than one aggregate index of governance, allows decision makers to understand the relationship between each aspect of the governance process and economic growth during times of

crisis. In addition, decision makers will have a clear understanding of the role that each indicator plays in enhancing economic growth during crisis periods.

In addition to studying the relationship between governance and economic growth, this paper investigates whether the relationship between governance and economic growth is the same across nations during times of crisis. The current study will address four groups of countries based on their human development level, using the United Nations' human development index (HDI). These four groups are classified into the following categories: very high development, high development, medium development, and low development (United Nations Development Program [UNDP], 2010). The United Nations uses the HDI to measure human development factors such as adult literacy, levels of education, and health care. The purpose of using countries' development levels in this research is to study the relationship between each country's level of development and the impact of the economic crisis on shaping the relationship between governance and economic growth in that country. In other words, this research attempts answer the following question: Does the effect of the economic crisis on the relationship between economic growth and governance vary from country to country based on each country's level of development?

North (1990) argues that institutional structure and design impact economic and political outcomes. In addition, human development has an influence on economic growth and the way governments govern (Provan & Kenis, 2007; Smith, 2007). Thus, analyzing the influence of a particular nations' level of development on shaping the relationship between economic growth and governance, both before and after the beginning of the economic crisis, will lead to understanding the relationship between

institutional and human development on one hand and economic growth on the other hand, most noteworthy during times of economic crisis.

Research Questions

The research questions addressed in the current study are as follows:

1. Is the relationship between governance and economic growth affected by the economic crisis?

2. Does the effect of the economic crisis on the relationship between economic growth and governance vary from country to country based on each country's level of development?

These research questions are addressed on a global scale, using data covering 173 countries, through the years of 2005 to 2010. In addition, the four categories of human development are included in this study to provide a better understanding of the influence of countries' human development level on shaping the effect of the economic crisis on the relationship between governance and economic growth.

Research Method

The sample framework to be included in this study includes all United Nations' members that are covered by the worldwide governance indicators (as a measure of governance) and have GDP (as a measure of economic growth) data available from 2005–2010. In addition, each of these nations will be classified by the HDI. To address the research questions, an extensive literature review examining the relationship between economic growth and governance is discussed, specifically looking at those studies that examine the relationship between economic conditions and governance.

In the current study, gross domestic product (GDP) per capita at Purchasing Power Parity (PPP) in the current international dollar will be used to measure economic growth. GDP is considered a measure of economic growth by IOs such as the IMF and the World Bank (UNDP, 2010). In addition, many studies have used GDP to measure economic growth (Arndt & Oman, 2006; Kaufmann & Kraay, 2002; Przeworski et al., 2000). PPP is used in this study because it acknowledges the population increase and cost of living of each country (Ignatiuk, 2009; Nguyen, 2005; Vachris & Thomas, 1999).

This study adopted WGI as a measure of governance quality because it measures the efficiency and effectiveness of government work (using the rule of law, regulatory quality, and government effectiveness indicators), as well as the extent to which governments fight corruption and encourage citizens to participate in the political process (using the control of corruption, political stability and absence of violence/terrorism, and voice and accountability indicators) (Kaufmann et al., 2010a).

Because of the wide application of the WGI as a measure of governance (Arndt & Oman, 2006), the researcher used the WGI indicators herein for the purpose of this research. The six worldwide governance indicators (WGI) were used by Kaufmann et al. (2010a) to measure quality of governance. Additionally, WGI indicators have been used by policymakers, IOs, and academic scholars to evaluate countries' affairs and to what extent governments apply good governance characteristics such as public participation in the political process, or fighting corruption (Arndt & Oman, 2006; Langbein & Knack, 2010; Thomas, 2008). The first WGI edition, published in 1996, covered 186 countries; the edition published in 2010 covered the economies of 213 countries and territories. WGI indicators are published annually by The World Bank Group.

To answer the research questions, quantitative methods were used. To test whether the relationship between governance and economic growth has been affected by the economic crisis of 2008, required comparing the levels of the relationship both before (2005–2008) and after (2009–2010) the beginning of the crisis. If the nature of the relationship has changed after the crisis began, this would indicate that the economic crisis has affected the relationship between governance and economic growth. In contrast, if nature of the relationship has not changed, this would indicate that the economic crisis has not affected the relationship. This method will be applied to all countries and to each of the four development groups included in the study. Finally, having 2 years after the crisis began as compared to 4 years before the crisis in addressing the subject is a limitation of the current study.

The current research was based on credible and reliable sources of data that measure governance quality and economic growth (Arndt & Oman, 2006; Mimicopoulos et al., 2007). Many studies, policymakers, and IOs have used the same sources to measure these variables (Kaufmann & Kraay, 2002; Mehanna et al., 2010). In addition, these data were analyzed using partial least square (PLS) methodology in order to produce results that will best answer the research questions. The process of analyzing data will be an exploratory process using countries' GDP data, WGI scores, and HDI score. In addition, this research includes secondary data collected from Worldwide Governance Indicator, the World Bank, and the United Nations Development Program.

Organization of the Dissertation

The dissertation will be organized as follows. The Introduction covers the main theme of the subject under investigation and includes a brief discussion on governance,

economic growth, and economic crisis. This chapter also discusses contributions of the current research to political science and public administration, as well as the proposed research method for the present research. After the introduction, the study will be developed into three sections.

The first section of the dissertation will begin with the literature review in Chapter 2, which discusses the existing literature on governance and economic growth and the relationship between them. In addition, the economic crisis and its relationship with governance are discussed. Chapter 3 discusses the framework of the analysis. In Chapter 4, the relationship between governance and growth is examined.

In the second section, Chapter 5 presents the research questions and data sources. In Chapter 6, different methodologies that could be applied to the current research are discussed. Also, data preparation (data preprocessing) is discussed in Chapter 6. In addition, the methodology that was followed to answer the research questions is discussed.

In the third section of the dissertation, findings are discussed in Chapter 7 after applying the appropriate method. Chapter 8 summarizes the research and discusses the possible implications of this study on the relationship between governance and economic growth. Finally, Chapter 9 concludes with a discussion of future research that might be conducted based on the results of the current research.

Chapter 2: Review of the Relevant Literature

This dissertation studied the influence of the global economic crisis on the relationship between quality of governance and economic growth, as well as discussed whether a nation's human development level influences this relationship during times of crisis. Part I of the dissertation is arranged as follows. First, the governance concept and its relationship to economic growth is reviewed. In Chapter 3, an explanation of the analytical framework and its applications for discussing the influence of the economic crisis on the relationship between governance and economic growth is presented. In Chapter 4, measures for identifying the economic crisis across time and across countries and measures of governance are discussed. Finally, the importance of the economic crisis studied in the current research, as well as measures of governance and economic growth, are discussed.

Overview

"The concept of governance is not new" (Kaufman & Kraay, 2008, p. 5); in any society, a form of governing is necessary to address the relationship between people and agents (e.g., rulers, kings, public servants, etc.) and to organize the way governments govern (Bevir, 2010; de Alcántara, 1998; Kaufman & Kraay, 2002; Kjaer, 2004; Warren, 1999). Although the word *governance* did not gain extensive popularity in academia and political debates until the late 1960s and early 1970s (Dixit, 2009; Kemp & Parto, 2005; Rhodes, 1997), documented discussions of governance concepts appear in early

civilizations such as the Arthashastra (Kaufman & Kraay, 2002). According to Kaufman and Kraay (2008),

> Early discussions go back to at least 400 B.C. to the Arthashastra, a fascinating treatise on governance attributed to Kautilya, thought to be the chief minister to the King of India. In it, Kautilya presented key pillars of the 'art of governance,' emphasizing justice, ethics, and anti-autocratic tendencies. He further detailed the duty of the king to protect the wealth of the State and its subjects; to enhance, maintain and also safeguard such wealth, as well as the interests of the subjects. (p. 5)

Accordingly, different aspects of governance, such as fighting corruption and public participation in the decision-making and political process, have been present in different civilizations and cultures throughout history (Bevir, 2010; Kjaer, 2004; Warren, 1999; Wilkinson, 2005). De Alcántara (1998), in a historical study of governance, argues that the governance concept has been applied to most situations in which there is an interaction between the government and citizens. In addition, de Alcántara (1998) posits that "although the concept is applied to many situations in which no formal political system can be found, it still implies the existence of a political process" (p. 105).

In addition, although the concepts of governance have been applied and used in different fields of study, governance concepts have been connected mostly to development, especially economic development (de Alcántara, 1998; Dixit, 2009; Kemp & Parto, 2005). Grindle (2010) states that "the idea of good governance owes much to the intellectual resurrection of the state as a positive 'player' in economic and political development" (p. 3).

Additionally, the concept of governance has been used in the last two to three decades by many organizations and institutions, such as the World Bank and the IMF, as well as in academia, to evaluate governments' work and the way governments govern (Arndt & Oman, 2006; Kaufman & Kraay, 2002; Fredrickson, 2004; Rhodes, 2007; Wilkinson, 2005). Also, international institutions that provide both financial and non-financial aid are demanding that countries receiving aid need to adopt good governance practices in order to be eligible for financial aid (IMF, 2010; Mimicopoulos et al., 2007; World Bank, 1991; Wilkinson, 2005). In addition, governance models, where citizens and nongovernmental organizations participate in the political and decision-making processes, have been introduced as an alternative to the traditional governmental model, where government (bureaucracy) dominates the decision-making process (Box, 1998; Denhardt & Denhardt, 2007; Frahm & Martin, 2009; Kettl, 2000; Rhodes, 1996, 2007).

On the other hand, the relationship of governance to human and economic development has long been debated among scholars in the social sciences and other fields (Arndt & Oman, 2006; Box, 1998; Islam, 2003; Kaufmann & Kraay, 2002; Mehanna et al., 2010; Przeworski et al., 2000). According to Pradhan and Sanyal (2011), "the issue of good governance and its impact on development is the heart of all policy debates among the policy makers and researchers" (p. 3). In addition, Grindle (2007) argues that "development researchers remain far from a consensus on the relationship between development and good governance, and they continue to disagree on issues related to methodology and inference" (p. 571). This debate makes governance a rich subject that attract more academic research projects in academia than other areas, such as traditional government and new public management.

In this dissertation, the relationship between governance and growth is the main focus, specifically whether this relationship changes during times of crisis. In addition, the same argument will be used to analyze the influence of a nation's human development level on shaping the relationship between governance and growth during times of crisis. Because the quality of the governance process is important in shaping economic growth and recovery from the economic crisis, governance is a critical issue in studying the influence of the economic crisis on the relationship between governance and growth. Importantly, nongovernmental institutions in this dissertation refer to not only for-profit and nonprofit organizations, but also all nongovernmental institutions such as quasi-governmental organizations.

In this chapter, governance terminology and concepts have been defined, and the relationship between governance and economic growth is then discussed. In addition, previous studies addressing the relationship between governance and economic growth are examined, as well as the influence of economic crises on shaping the relationship between economic growth and governance.

Governance

Evaluating public sector performance and people's participation in political and governmental decision-making process are subjects that have dominated research in many fields, including public administration and public policy (Arndt, 1987; Birkland, 2006; Gerston, 2010; Kettl, 2002; Osborne & Gaebler, 1992; Rhodes, 2007; Peters, Pierre, & Randma-Liiv, 2010). In addition, many theories and models have been introduced, such as new institutionalism theory (Lecours, 2005; March & Olsen, 1984; North, 1990; Powell & DiMaggio, 1991) and public choice theory (Buchanan & Tullock,

1962; Tullock, Seldon, & Brady, 2002) to study how governments perform their work and how politicians and bureaucrats behave in the policy process.

Governance as a concept includes both governmental and nongovernmental institutions in political and decision-making processes (Clingermayer & Feiock, 2001; Kettl, 2002; Newman, 2001; Rhodes, 1997). In addition, governance has been found to be positively correlated with economic growth (Arndt & Oman, 2006; de Ferranti et al., 2009; Kaufmann & Kraay, 2002; Kemp & Parto, 2005). Different aspects of the governance process, such as fighting corruption, efficient and effective government, and applying democratic principles, have been connected to economic growth (Apaza, 2009; Arndt & Oman, 2006; Baumol, 1965; Bevir, 2010; Repucci, 2011; Weingast, 1995).

In recent years, the issue of changing the concept of 'government' to 'governance' has been the concern of many academic studies. In the following section, the change of government's role in society will be addressed by examining the political and administrative relationship between governmental and nongovernmental institutions. In addition, different definitions for governance will be introduced to provide a clear understanding of the concept of governance. The section will begin by exploring the nature of governance compared to government and the reasons for adopting governance rather than government as the main subject for this research.

Government to governance. The change in focus from government to governance has had a big influence on research in fields like public administration and political science. According to Hysing (2009), the shift "from government to governance is a grand story line about the changing role of the state, which has had a great impact upon researchers and practitioners" (p. 647). Although there is no universal definition of

governance, scholars agree that governance is different from government in many ways, such as the increasing role of more players such as the nonprofit and private sectors in the political process (Fry, 1989; Heinrich, Lynn, & Milward, 2009; Kettl, 2002; Peters & Pierre 1998; Rhodes 1996). According to Rhodes (1996):

> Current use does not treat governance as a synonym for government. Rather governance signifies a change in the meaning of government, referring to a new process of governing; or a changed condition of ordered rule; or the new method by which society is governed. (pp. 652–653)

As governments have worked to serve the public, the relationships between governments and other players who play major roles in shaping and influencing its work have changed over time (Blakely, 1989; Egger, 2009; Friedman & Miles, 2002; Hood, 1995: Hummel, 2008; Morse, 2007; Newman, 2001; Peters, 2002; Scott, 2010). Many factors have contributed to this change. For example, the complexity of our society has increased as a result of many factors, including demographic changes and population increases (Agranoff, 2003; Newman, 2001; Scott, 2010), which have led to an increase in demand for services (Hendriks, 1999; Knight, 1992; Scott, 2010), as well as the increase in social, economic, and political influences from nongovernmental institutions such as the private sector (Hood, 1995; Kettl, 2002; Osborne & Gaebler, 1992) and the nonprofit sector (Albassam, 2012; Hammack, 2002; Heinrich et al., 2009). Also, new management styles such as new public management (NPM), which supports privatization and increased roles for nongovernmental organizations in providing services for the public, have contributed to changing government's role in society (Denhardt & Denhardt, 2007; Hood, 1995; Osborne & Gaebler, 1992; Rhodes, 1997).

Interestingly, Fredrickson (2004), after realizing the importance of governance in recent theoretical discussions in the social sciences, argues that governance concerns the process of making things happen rather than doing them; therefore, it is process rather than action. Fredrickson (2004) argues that governance cannot be an alternative to traditional style of governing. Instead, the "traditional" practice of public administrators is necessary for any government to run effectively and efficiently. Identifying two basic functions of public administration—day-to-day work and "the management of the extended state," which he calls "public administration as governance" (p. 30)—Fredrickson (2004) argues that governance needs to be considered as part of public administration rather than an alternative to it.

Rhodes (1996, 2007) argues that change from government to governance in the 1990s and the subsequent reforming governance movement in the 2000s are the result of the change in people's beliefs, for example, the belief in government failure. This change of believes leads to response from governmental institutions to meet these changes by adopting new ways of governing. Accordingly, Rhodes (1996) argues that "central government is no longer supreme. The political system is increasingly differentiated" (p. 657). Governmental shortcomings in delivering services to the public and the complexity of and changes in society's structure are all factors that have contributed to a new way of governing (Hood, 1995; Hummel, 2008; Rhodes, 1996; Scott, 2001, 2003). Thus, de Ferranti et al. (2009) argue that governance has been introduced and has been adopted by international organizations and governments because "governments are not effectively working on behalf of their citizens" (p. 12).

In addition, most services are now introduced by third parties, not governments, which has caused a shift of the government's role in some situations from direct to non-direct service provider. This raises new challenges regarding accountability and the role that the public sector plays in people's lives (Blair & Carroll, 2008; Dubnick & Frederickson, 2009; Heinrich et al., 2009; Hummel, 2008; Rhodes 1996). Another challenge to the traditional style of governing includes the increased economic and political roles of non-governmental organizations (Hammack, 2002; Hood, 1995; Kettl, 2000). Kettl (2000) explains the new era of governance in the United States as follows:

> Government in the United States thus has become increasingly intertwined in the world's governance. The federal government shares domestic policy with state and local governments and with non-government organizations – and state and local governments do the same. These changes are not the result of an explicit policy decision; rather, they grew gradually and imperceptibly from hundreds of tactics decisions over two generations of public policy. They have cumulated, however, into a fundamental transformation of governance – a transformation that poses substantial challenges for public institutions and how we manage them. (p. 496)

In recent years, a government's role in running and managing a nation's affairs and in making decisions has changed from that of the only player to only one of the players and, in some cases, to just a coordinator among the players (Frahm & Martin, 2009; Hummel, 2008; Kettl, 2002; Lovan et al., 2004; Peters & Pierre 1998; Rhodes, 2007). Consequently, under governance, civil society, including watchdog institutions and citizens, plays an important role in the decision-making process and in monitoring

and holding elected officials and bureaucrats accountable for their actions. Peters and Pierre (1998) discuss the widespread use of governance practices where more than one player participates in the political process, arguing that "these amorphous collections of actors—not formal policy-making institutions in government—control policy" (p. 225).

Although governance does not have a single, established meaning, most scholars agree that good governance practices fight corruption (Agere, 2000; Bevir, 2010; Mimicopoulos et al., 2007), lead to effective and efficient government programs (Agere, 2000; Box, 1998; Salamon, 2002; Santiso, 2001), hold elected officials and bureaucrats within government accountable for their actions (Agere, 2000; Dubnick & Frederickson, 2009; Heinrich et al., 2009), and maintain economic growth (Adams & Mengistu, 2008; Alkire, 2010; Kaufmann & Kraay, 2002; Mehanna et al., 2010). According to Winters and Yusuf (2007), "current development theory gives governance a central role in accumulation and resource allocation, and hence in growth" (p. 28). Consequently, these characteristics of governance make it beneficial for studies to adopt governance rather than traditional government as a standard when evaluating governments' work. For all of these reasons, governance rather than government was chosen for this research study. But what is governance?

What is governance? As discussed earlier, the governance model is characterized by a change in the role of government from the only player to one of many players. This change influences different tasks performed by traditional government. The way different aspects of the governing process, such as citizen participation in the political and decision-making process and accountability mechanism, are approached and

implemented are different under the governance model than under the traditional government model.

Many interpretations and definitions have been introduced to explain governance and the way it differs from government. The United Nations defines governance as "the process of decision-making and the process by which decisions are implemented (or not implemented)" (UNESCAP, 2009, p. 1). For the World Bank, governance is "the manner in which power is exercised in the management of a country's economic and social resources for development" (World Bank, 1991, p. i). Kaufmann, Kraay, and Mastruzzi (2009b) state that governance "consists of the traditions and institutions by which authority in a country is exercised" (p. 1). According to Kaufmann et al. (2009b), governance includes all activities by authorities to solve people's problems and apply democratic principles to society.

Governance as a concept discusses the act of governing by government and the way government performs its responsibilities and duties such as serving people and providing public programs (Bevir, Rhodes, & Weller, 2003; Denhardt & Denhardt, 2007; Frahm & Martin, 2009; Kjaer, 2004; Lovan et al., 2004). The relationship between government and people is one of the central issues of governance (Cheema & Rondinelli, 2007; Neumayer, 2003; Salamon, 2007). According to de Ferranti et al. (2009), "governance describes the overall manner in which public officials and institutions acquire and exercise their authority to shape public policy and provide public goods and services" (p. 8). Consequently, governance shares some of its characteristics with those found in stakeholder theory. According to stakeholder theory, managers (government) give due consideration to the interests of shareholders (people), realizing the diversity of

shareholders needs and demands on one hand, and the impact of non-shareholders (other organizations) who affect the organizations' work on the other (Friedman & Miles, 2002; Heath & Norman, 2004). In addition, governance as a notion considers the increasing role of other players in political and administrative process such as private and nonprofit sectors (Austin, 2003; Hummel, 2008; Jansen, 2007; Kettl, 2002; Rhodes, 1997, 2007; Stoker, 1998).

Governance is marked by a change in government's role in society, where nongovernmental actors participate in the decision-making process, and democratic principles are applied by giving the majority of people the right to participate in the governing process. According to Neumayer (2003), 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" (p. 8).

Accordingly, one of the characteristics of the governance model is the ability of civic leaders and citizens to participate in the decision-making process (Box, 1998; Clingermayer & Feiock, 2001; Frahm & Martin, 2009; Lovan et al., 2004; Selee, 2004). Under the governance model, citizens within a community will influence the political and decision-making process through participation in the decision-making process; in contrast, under the government model, the government carries out most of the decisions and citizens have a small role to play (Salamon, 2002; Selee, 2004; Teisman & Klijn, 2002; Warren, 1999). Thus, the ability of community leaders and citizens to participate in the decision-making process gives participants the power needed to design and structure the community's needs and demands. In contrast, under the traditional government

model, the government performs most of the planning in meeting community needs and demands (Bevir, 2010; Salamon, 2002; Tulchin & Selee, 2004). Thus, Lovan et al. (2004) argue that citizen participation in the governing process is what makes governance "good."

Consequently, the structure and design of policies under the governance model is different than under the government model. Frahm and Martin (2009) argue that under the governance paradigm, "social and other public policies tend to be more decentralized" (p. 415). While traditional government policies tend to have a uniform design and structure that applies to all communities (Austin, 2003; Daly, 2003; Hummel, 1998; Lovan et al., 2004), policies under the governance model will be decentralized in structure, which means that different policies will be structured and designed in order to meet the specific needs and demands of a community (Cheema & Rondinelli, 2007; Tulchin & Selee, 2004; Wilkinson, 2005; Wilson, 2002). Thus, Lovan et al. (2004) deem that diversity among citizens with varying demands makes governance a successful model compared to government.

Additionally, policies and programs under the governance model are more flexible, able to be changed and modified based on changing community needs (Agranoff, 2003; Austin, 2003; Hansen, 2001; Scott, 2003). In contrast, making changes to policies and programs under the government model is a long and complicated process (Frahm & Martin, 2009; Salamon, 2002; Selee, 2004). Furthermore, Frahm and Martin (2009, p. 414) argue that the governance model focuses on how to implement policies and programs to achieve the desire purpose (i.e., "tools focus"), while creating and

designing policies and programs is the concentration of the traditional government model in addressing social and political issues (i.e., "program focus").

Accordingly, networking has been counted as a main component of governance (Agranoff, 2003; Hummel, 1998; Kingdon, 1984; O'Toole, 1997). O'Toole (1997; Rhodes, 2007), points out that formal and informal networks need to play an important role in the governing process. In addition, Newman (2001) calls governance "two way traffic" (p. 15), where networks such as citizens and nongovernmental organizations influence government decisions, and vice versa. Furthermore, coordination and collaboration between different networks shape the governance process. Rhodes (1997), stating that "governance is about managing networks" (p. 52), comments on the way that networks are managed and organized by different actors who participate in articulating and shaping the political and administrative decision-making process.

Therefore, governance is the process of decision-making that includes all players who participate and have influence in articulating, formulating, designing, implementing, and evaluating decisions and activities in managing governmental affairs. Both formal and informal groups are included in this process. Formal groups include businesses and nonprofit organizations, while informal groups include citizens affected by such decisions. According to Mimicopoulos et al. (2007), "governance refers to the formal and informal arrangements that determine how public decisions are made and how public actions are carried out from the perspective of maintaining a country's constitutional values" (p. 3).

Another aspect of the governance model is the mechanism of accountability. While traditional government is responsible for providing services and programs and is

responsible for their outcomes, accountability under the governance model is shifted toward community-outcome as a result of citizen participation in the decision-making process (Cheema & Rondinelli, 2007; Hansen, 2001; Salamon, 2002). According to Frahm and Martin (2009), "the governance paradigm shifts accountability to all sectors and actors by conceptualizing accountability in terms of outcomes, particularly community-level outcomes" (p. 414). In addition, the participation of non-governmental actors and citizens in the decision-making and political process under the governance model makes public servants accountable toward citizens and other actors who participate in the governing process. In contrast, under the traditional government model, bureaucrats and public officials are accountable to the electorate and state institutions, such as Congress (de Ferranti et al., 2009; Lovan et al., 2004; Tulchin & Selee, 2004).

To summarize, under the governance model, the relationship between service delivery and its recipients is integrated, rather than a top-down model in which civil society and nongovernmental institutions have no voice in governing (Denhardt & Denhardt, 2007; Kettl, 2000; Rhodes 1996, 2007; Teisman & Klijn, 2002). In addition, governance is the process of including all active players in the decision-making process (Hansen, 2001; Lovan et al., 2004; Peters & Pierre, 1998). Accordingly, governance has been recognized as a tool that can be used to apply democratic principles, fight corruption, and offer effective and efficient government services and programs (Egger, 2009; de Ferranti et al., 2009; Grindle, 2010; Kemp & Parto, 2005; Newman, 2001). Table 1 shows the differences between government and governance.

Table 1

Differences Between Government and Governance

Dimension	Government	Governance
The Role of Government	Major Actor	One of Many Actors
Authority & Decision Making	Centralized Command & Control	Decentralized negotiation & Persuasion
System Structure	Closed & Vertical	Open & Horizontal
Focus	Program	Tool
Democratic Process	Representative	Participatory
Accountability	Process Output Quality Outcome	Community Level Outcomes
Policies	Centralized/ Uniform	Decentralized/ Place Sensitive

Source: Frahm and Martin (2009, p. 410).

One issue raised by Rhodes (1996) is "hollowing out the state" (p. 652), which refers to changes in the nature and quantity of services introduced by the state compared to other sectors under the governance model. Governments provide fewer services under the governance model than under the traditional government model. According to Rhodes (1996), "the public sector is becoming both smaller and fragmented and this process of hollowing-out raises several problems. Three problems are of immediate concern: fragmentation, steering and accountability" (p. 661). In contrast, other scholars argue that governance means a return to the original values of government work. Box (1998) argues that, because it allows citizen and nongovernmental institutions to play important roles in governing and the decision-making process, at least at the local level, governance is a return to the original democratic values of public administration. Between these two extreme views, other scholars argue that, under the governance model, governments have

the legislative power and play managing and coordinating roles among the different actors—citizens, businesses, and nonprofit organizations—who influence the decision-making process (Lovan et al., 2004; Newman, 2001).

Because the worldwide governance indicators' (WGI) definition of governance is comprehensive and widely applied (Apaza, 2009; Arndt & Oman, 2006; Mimicopoulos et al., 2007), it will be adopted in this research. According to Kaufmann et al. (2009b), governance is:

> The traditions and institutions by which authority in a country is exercised. This includes (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. (p. 1)

Conversely, it is important to differentiate between "governance" and "good" or "bad" governance. Governance is "the process of decision-making and the process by which decisions are implemented (or not implemented)" (UNESCAP, 2009, p. 1), while "good" or "bad" governance depends on the way these decisions are made and implemented (Agere, 2002; de Ferranti et al., 2009; Lovan et al., 2004; UNESCAP, 2009; World Bank, 1991). Unfortunately, scholars and practitioners do not agree on the specific parameters for "good" and "bad" governance. Furthermore, international organizations and donors argue that good governance practices by governments strongly influence economic growth at least in the long run (Cheema & Rondinelli, 2007; Kaufman & Kraay, 2008; Mimicopoulos et al. 2007; Osborne, 2004; Weiss, 2000; Wilkin, 2011; Wilkinson, 2005). Thus, before attempting to determine whether the economic crisis of

2008 impacted the relationship between governance and economic growth, the difference between "good" and "bad" governance must be discussed. Studies that challenge descriptions of good governance as described by international organizations, such as the IMF and World Bank, will also be discussed.

What is 'good' governance? Good governance is the standard used to determine the level of a country's governing quality by international institutions and countries providing political, administrative, and financial support and advice to other countries. Also, international financial institutions, such as the IMF and the World Bank, and donor countries, such as 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 financial and non-financial aids to those countries (Mimicopoulos et al., 2007; Riddell, 2007; Santiso, 2001).

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" (Riddell, 2007, p. 374). In addition, international organizations deem that good governance is a condition for economic development and fighting corruption. According to Mimicopoulos et al. (2007), "the United Nations has considered 'good' governance as an essential component of the Millennium Development Goals [MDGs], because 'good' governance establishes a framework for fighting poverty, inequality, and many of humanities' other shortcomings" (p. 7). The millennium development goals (MDG) are a set of goals agreed upon in 2000 by the members of the United Nations (UN) with the target date of 2015. The aim of these goals is to encourage human and economic

development by fighting poverty and enhancing health and education services among the member countries of the UN. The intended aim of setting these goals is to produce balance and sustainable development among the UN members.

The United Nations introduces characteristics of good governance that define and articulate good governance practices by governments. According to the United Nations, "good governance has eight major characteristics; it is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive, and follows the rule of law" (UNESCAP, 2009, p. 1). In addition, good governance is characterized by respecting human rights and adopting democratic principles by governments such as citizen participation and transparency in decision-making processes (Agere, 2000; Clingermayer & Feiock, 2001; Denhardt & Denhardt, 2007). Agere (2000) states that good governance "encompasses many essential elements of democracy such as participation, opening up to civil society, respect for human, civil and property rights, as well as peaceful conflict management" (p. 10).

Weiss (2000) argues that good governance is not only applying democratic principles, but includes other characteristics such as human development, transparency, and accountability, where lack of these characteristics signal bad governance. In addition, Weiss argues that good governance features need to be adopted and applied as a whole, because good governance is a package that cannot be fragmented. Finally, good governance practices need to consider diversity among states, where every state has unique characteristics – in other words, no "one-size-fits-all" (Aidt & Gassebner, 2010; Grindle, 2010; Osborne, 2004; Wilkin, 2011).

Abdellatif (2003) mentions different characteristics of good governance and the result of applying these characteristics, which could be introduced as a definition of good governance. According to Abdellatif (2003),

> Good governance is, among other things, participatory, transparent and accountable, effective and equitable, and it promotes the rule of law. It ensures that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and the most vulnerable are heard in decision-making over the allocation of development resources. (p. 4)

In contrast, the absence of democratic principles and the non-transparency of government work are examples of bad governance practices. Abdellatif (2003) states that "when governance is bad and undemocratic or only superficially democratic, the pathologies of development inevitably have regional and global consequences" (p. 13). According to Abdellatif (2003), the absence of rule of law and the increase of corruption are examples of such consequences.

The World Bank has raised the same argument about good governance characteristics. According to the worldwide governance indicators project of the World Bank, good governance refers to including all actors in the policy and decision-making process, providing accountability and transparency in the governing process to its people, and fighting corruption (Kaufmann, et al., 2009a, 2009b; Kaufman & Kraay, 2008). Six governance indicators developed by the worldwide governance indicators project include: (a) voice and accountability, (b) political stability and absence of violence, (c) government effectiveness, (d) rule of law, (e) regulatory quality, and (f) corruption control. These indicators measure quality of governance: scoring high indicates 'good'

governance practices by governments; scoring low indicates 'bad' governance practices (Kaufmann et al., 2009a).

Enhancing citizens' and civic leaders' participation in the decision-making process, as one of the themes of good governance, plays a major role in shaping the effectiveness and efficiency of services introduced to the public, as well as in the way programs are executed. Citizen participation means that needs and problems are addressed directly by the end-consumer who will benefit from such services (Cheema & Rondinelli, 2007; Lovan et al., 2004; Wilkinson, 2005; Wilson, 2002). Compared to the traditional methods of public administration (government), where bureaucrats perform most of the planning, governments' adoption of good governance enables citizen to participate in the planning and design of public services and programs (Salamon, 2002; Selee, 2004; Teisman & Klijn, 2002; Warren, 1999). In addition, under good governance, bureaucrats and elected officials are accountable to citizens, who have the power to hold public servants accountable for their actions (de Ferranti et al., 2009; Frahm & Martin, 2009; Lovan et al., 2004). These characteristics of good governance result in the ability of governments to reflect the changing demands and needs of citizens and society by enhancing citizen participation in the decision-making and political process. Therefore, adopting good governance practices results in a democratic, accountable, and efficient system. In addition, good governance, as promoted by international organizations (IOs), is meant to enhance a nation economic growth and human development. In contrast, bad governance results in high corruption, ineffective and inefficient public services, and less respect for human rights.

On the other hand, economic growth has been associated with good governance practices by governments. Although there is a debate regarding the causal direction of the relationship between quality of governance and growth, IOs, policy-makers, and scholars agree that the two are strongly correlated (Acemoglu et al., 2001; Adams & Mengistu, 2008; Alkire, 2010; Osborne, 2004; UNDP, 2010); however, different aspects of the governance process have varying degrees of influence on economic growth (Case & Fair, 1999; Kaufmann & Kraay, 2002; Nafziger, 2006). For example, in their evaluation of worldwide governance indicators from 1996-2002, Kaufmann and Kraay (2002) found that some governance indicators, such as voice and accountability and political stability, are more connected to economic growth than other indicators, such as government effectiveness and rule of law indicators.

In addition, good governance practices do not just promote effectiveness in the public sector, but also lead to productivity in the private sector (Abdellatif, 2003; Agere, 2000). Therefore, good governance can lead to sustainable development and better political and economic outcomes (Agere, 2000; de Ferranti et al., 2009; Kemp & Parto, 2005; Osborne, 2004). Osborne (2004) stated that "bad economic policy—bad governance—matters a great deal for economic development"; therefore, "bad governance can easily destroy significant per capita growth in countries that can least afford it" (p. 420).

As discussed earlier in this chapter, governance concerns the process, not the end result of the governing process. Thus, most definitions of good governance describe characteristics of good governmental policies and practices, the opposite of which can be

described as bad governance practices. Agere (2000) introduces the features of good governance as follows:

> Good governance is therefore the highest state of development and management of a nation's affairs. It is good that a democratic form of government is in place, that people participate in decision-making processes, that services are delivered efficiently, that human rights are respected, and the government is transparent, accountable and productive. (p. 5)

As outlined earlier, good governance practices by governments tend to have a positive influence on economic growth and human development. Thus, the results of adopting good governance practices by governments are high quality governance that leads to a developed economy and a stable country where citizens participate in the governing process. This dissertation continues the inquiry into governance practices by studying whether the correlation between quality of governance and economic growth is changed during times of crisis. Also, because human development is connected to good governance and economic growth, human development of nations was utilized in this dissertation to analyze the influence of human development on the relationship between governance and growth during times of crisis.

Critique of standard definitions of "good" governance. In recent years, governance indicators have been the main tool used by many international institutions and countries to measure the governing quality of countries (Apaza, 2009; Arndt & Oman 2006; Mimicopoulos et al., 2007; Kaufman et al., 2009b). The IMF, the World Bank, and even some donor countries such as the United States have used governance indicators as the main tool in evaluating the eligibility of each country for support. According to

UNESCAP (2009), "major donors and international financial institutions are increasingly basing their aid and loans on the condition that reforms that ensure 'good governance' are undertaken" (p. 1).

In contrast, good governance as a concept has been challenged by many authors. Most critiques have been based on the good governance definition adopted by most international organizations and developed countries. Poluha and Rosendahl (2002) conducted a study on people's involvement in politics, covering a sample of countries from different continents and with different political systems. The authors found that each country has different social, economic, and political conditions, so applying the "one-size-fits-all" governance characteristics that have been adopted by international organizations is an unfair and inaccurate way of measuring the quality of governance in different countries.

Farazmand (2004) argues that governance, as promoted by developed countries and international organizations such as the IMF, the World Bank, and the UN, is not appropriate applied to developing and less developed countries. He also argues that the idea of "good" governance has been used to influence countries to adopt Western ways of governing as a result of "the globally dominant neo-colonialist power structure" (p. 10). Finally, he thinks that "good governance" covers only the technical and rational features, while what he calls "sound governance" adds normative features to the notion of governance. According to Farazmand (2004), sound governance, which considers diversity among countries in adopting political, administrative, and financial systems with dynamics formats, avoids the shortcomings of the concept of good governance.

In contrast, UNESCAP (2009) responds to these challenges by arguing that good governance characteristics are a general format that can be adjusted to the culture and demands of different countries. Thus, every society and political system has different requirements, conditions, and methods for achieving good governance. According to UNESCAP (2009), "it should be clear that good governance is an ideal which is difficult to achieve in its totality. Very few countries and societies have come close to achieving good governance in its totality" (p. 3). Finally, while good governance definitions have been criticized as utopian ideals that oversimplify the governance concept (Grindle, 2007; Poluha & Rosendahl, 2002), good governance indices and measures play a major role in shaping the decision-making process for both givers and recipients of financial and other forms of aid (Arndt & Oman, 2006; Mimicopoulos et al., 2007; Santiso, 2001).

Transitional economies case. The idea that good governance practices lead to development has been challenged by the cases of countries such as China and India. While these countries score low on most governance indicators, they have experienced high economic development compared to some countries with high-quality governance (Besley & Kudamatsu, 2007; Keefer, 2007; Weiss, 2000). Also, the economic growth of these economies challenges theories such as new institutionalism theory, which argues that institutional quality is a precondition for economic growth. The case of such countries challenges the notion that quality of governance is an important factor in human and economic development.

Weiss (2000) argues that considering high economic growth in transitional economies such as China and Russia as a failure of good governance misunderstands the concept of good governance. Concentrating in one aspect of good governance—

democracy and election—in evaluating good governance practices by transitional economies is another mistake. Thus, he thinks that transitional economies are, in fact, in a transitional governance period, where these economies transfer from central and less democratic systems to adopt good governance practices, which takes time. Weiss also thinks that a region's level of governance affects the performance of national governments. Yugoslavia and the Russian Federation failed as a union, while the European Union achieved global political and economic power.

Keefer (2007), who examined the relationship between governance and economic development in China and India through history, found that these countries benefit economically from characteristics such as large markets and low-cost labor, even though they score low on governance indicators. He further argues that the Chinese and Indian experience cannot be applied to other poor countries with low quality levels of governance if they lack such characteristics. In addition, he states that economic growth in China and India took place after their governments' adoption of political and administrative reforms in the late 1970s and early 1980s. Those reforms must continue to improve in order for China and India to continue experiencing economic development.

Scholars have provided many explanations to analyze economic growth of some transitional economies such as China and India even though they have low or average scores in governance indicators. First, because these countries are outliers, they cannot be used as a model to be applied to other countries (de Ferranti et al., 2009; Grindle, 2010; Keefer, 2007). Also, they have moved from a negative to a positive developmental status, and such a positive move requires time to be affective and reflected in the governance process (Kemp & Parto, 2005; Osborne, 2004; Weiss, 2000). Osborne

(2004), who studies the history of economic growth and its relation to good governance practices such as adopting sound policies by governments and fighting corruption in advanced and transitional economies, argues that "radical reform seems clearly preferable to gradual reform in terms of sustainability and the potential to generate growth" (pp. 420–421). Consequently, these countries need to apply good governance characteristics in order to maintain the increased level of development. This is occurring in China, where the government has recently adopted and applied good governance characteristics such as transfer from a centralization to a decentralization model (Aidt & Gassebner, 2010; Osborne, 2004; IMF, 2010; UNESCAP, 2009).

Economic Growth and Quality of Governance

Economic growth is the increase of real gross domestic product (GDP) or other measurements of aggregate income. According to the World Bank (2004), economic growth is "quantitative change or expansion in a country's economy" (para. 10). In addition, the World Bank (2004) contends that "economic growth is conventionally measured as the percentage increase in gross domestic product (GDP) or gross national product (GNP) during one year" (para. 10). Accordingly, real GDP has been used by many studies to measure economic growth (Arndt & Oman, 2006; IMF, 2010; Kaufmann et al., 2010a; Przeworski et al., 2000; World Bank, 1991; UNDP, 2010).

Economic growth concerns all nations trying to increase their GDP per capita in order to increase their citizens' well-being (Adams & Mengistu, 2008; Kaufmann & Kraay, 2002; Mankiw, 2009; UNDP, 2010). Although scholars debate whether it is a consequence of human development or a precondition for human development, economic growth is considered an important component of economic and human development.

Smith (2007) argues that human development and economic development need each other, so countries cannot concentrate on one and ignore the other. According to Smith (2007), "there is in effect a virtuous circle of human development and economic development, each enhancing the other" (p. 14). In addition, the United Nations Development Program states that economic growth, education, and health are the key parts of human development, with each part dependent on the others. According to UNDP (2000), "resources generated by economic growth have financed human development and created employment while human development has contributed to economic growth" (p. 7).

After acknowledging the existence of the relationship between economic growth and human development, the human development reports (UNDP, 2010) indicate that the direction of the relationship is not clear-cut. According to the HDRs (2010), "even if there is a causal relation, the direction is unknown: higher incomes could improve quality of life, or improvements in health and education could make societies more productive" (p. 48). In addition, both the income distribution among citizens and the quality of goods and services produced are as important for any nation as increasing income levels. According to Nijitin, A. (2009), "from a human development perspective, the quality of economic growth is just as important as its quantity" (p. 134).

In addition, economic growth has been linked to governance improvement (Furubotn & Richter, 2005; Kaufmann & Kraay, 2008; Mantzavinos, 2001). Kaufmann and Kraay (2002) argue that governance quality and economic growth are positively related. In their evaluation of the worldwide governance indicators (WGI) from 1996-

2002, they found that "per capita incomes and the quality of governance are strongly positively correlated across countries" (p. 1).

Accordingly, the relationship between economic growth and quality of governance impacts international aid assistance from countries such as the United States and the United Kingdom and from international organizations such as the World Bank and the IMF. According to Mehanna et al. (2010), "the issue of causality between governance and economic development is crucial and has many implications from an international agency perspective; resolving this issue would assist international organizations in their choices between prioritizing pro-growth or institutional policies" (p. 123).

Therefore, the power and direction of the relationship between economic growth and governance has been and will continue to be the subject of disagreement among policymakers and in academia (Acemoglu et al., 2001; Alkire, 2010). Although it is beyond the scope of this dissertation to study the causality and direction of the relationship between governance and growth, it is important to understand the nature of this relationship. One view states that development in governance leads to economic growth, while the other states that economic growth leads to governance development. Both views will be addressed in the following section.

Governance development as a precondition for economic growth. Beginning in 1990, the United Nations Development Program (UNDP) issued human development reports (HDR), which studies countries' human development issues, such as health, education, and economic growth. These HDRs show that governance development is a precondition for sustainable human development. According to UNDP (2000), "this

report clearly shows the cause/effect relationships between the two discourses and establishes the truism that Good Governance is an essential pre-requisite for human resources development and sustainable growth" (p. 65).

The World Bank (n.d.) deems that rule of law, transparency, fighting corruption, and other characteristics of good governance lead to economic growth by increasing fairness in business competition and productivity of nations. According to the World Bank (n.d.), "governance improves growth by improving the business environment" (p. 28). Pradhan and Sanyal (2011) also argue that governance development is a precondition for economic growth. According to Pradhan and Sanyal (2011):

> [T]here is now a growing body of evidence, which shows that the quality of governance is related to differentials in growth and development. This is because government can efficiently deliver the resources to the public so as to improve the well being of people. (p. 2)

Abdellatif (2003) thinks that governance development utilizes economic growth and translates it to human development in such forms as better education and health. He argues that governance development and economic growth must move hand in hand to achieve desired ends. According to Abdellatif (2003), "good governance constrains the actions of corrupt officials and reducing corruption stimulates technological change and encourages economic growth" (p. 17). He concludes that "good governance is essential for successful development" (p. 4).

Ndulu and O'Connell (1999) conducted a study on the relationship between governance and economic growth in Sub-Saharan African countries. They find that the absence of good governance practices by governments benefits a small group of people

rather than contributing to overall economic growth and human development in countries receiving financial assistance. Ndulu and O'Connell (1999) argue that "governance affects long-term growth not only through policy distortions and transactions costs, but also via the capacity to handle external economic shocks as they occur" (p. 60). They conclude that governance practices influence not just economic growth but also sustainable economic development.

In contrast, after acknowledging the importance of governance development and its positive relation with economic growth, Adams and Mengistu (2008) argue that good governance practices have a negative influence on income distribution and gender equality. In a study that examined 82 developed and developing countries from 1991–2002, Adams and Mengistu (2008) found that "good governance had a positive impact on economic growth and a negative impact on income inequality" (p. 2).

Sustainable economic growth is another issue connected to governance (Abdellatif, 2003; Adams & Mengistu, 2008; Ndulu & O'Connell, 1999). Abdellatif (2003) studied the relationship between economic growth and governance in the Middle East and North Africa (MENA) region. He found that MENA countries need to adopt good governance practices in order for these countries to sustain economic and human development. According to Abdellatif (2003), "there is also evidence that non-democratic countries with a low quality of governance cannot sustain their economic growth in the long run without good governance" (p. 18).

Economic growth as a precondition for governance development. Although many studies have been conducted on the relationship between quality of governance and economic growth (Adams & Mengistu, 2008; Pradhan & Sanyal, 2011; Ndulu &

O'Connell, 1999; North, 2009), fewer studies have been conducted on the influence of economic growth on quality of governance (Chong & Calderon, 2000; Kurtz & Schrank, 2007). According to Grindle (2007), "a somewhat distinct body of literature takes as a given that governance is important to development, and then addresses problems created for governance by particular conditions" (p. 560).

Grindle (2007) argues that economic and political developments are mandatory for governance development: "the adoption of the good governance paradigm implies a very wide range of institutional preconditions for economic and political development and for poverty to be significantly reduced" (p. 553). As an alternative to the concept of "good" governance, Grindle (2007) suggests the idea of "good enough" governance, which means that "interventions thought to contribute to the ends of economic and political development need to be questioned, prioritised, and made relevant to the conditions of individual countries" (p. 554). He also argues that good enough governance involves maintaining a minimum condition for governance development to take place.

Chong and Calderon (2000) conducted a study to determine the relationship between institutional quality and economic growth. After acknowledging that most researchers have studied institutional quality and governance as a precondition for economic growth, they argue that studying the influence of economic growth on institutional quality has been neglected and needs further consideration from researchers. Their study found, first, that economic development and the institution quality influence each other, and, second, that poor countries are at a disadvantage in adopting and applying good governance practices. According to Chong and Calderon (2000):

> It appears that the poorer the country, and the longer the wait, the higher the influence of institutional quality on economic growth. However, we also show the existence of reverse causality. Indeed, it appears that economic growth also causes institutional quality. (p. 69)

Kurtz and Schrank (2007) conducted a study reexamining the worldwide governance indicators (WGI) by using GDP to reassess the relationship between quality of governance and economic growth in countries. Arguing that there is a misreading and misinterpretation of the existing economic and governance figures, the authors decide to scrutinize the WGI. Kurtz and Schrank (2007) find that "there is far more reason to believe that growth and development spur improvements in governance than vice versa" (p. 538). They indicate that findings concerning the influence of economic growth on governance are undermined by the lack of agreement in academia on the definition of governance, measurement errors of the WGI, and difficulty of measuring non-quantitative human development factors such as happiness. Finally, they deem that political development and a country's adoption of good governance practices are not consequences of economic development; rather, they claim that nations with higher economic status are more likely to have successful political development. The authors mention Indonesia in the 1990s, Malaysia, and Singapore in the 2000s as examples of countries that adopt good governance practices after achieving strong economic growth.

Finally, according to Abdellatif (2003), "there remains to be conflicting views on the causal linkages between Governance (or democratic governance) and economic growth" (p. 16). Although scholars disagree on the direction of causality between economic growth and governance, they do agree on the strong correlation between the

two (Acemoglu et al., 2001; Alkire, 2010; Arndt & Oman, 2006; Nafziger, 2006; North, 2009).

Measuring the Quality of Governance: Governance Indicators

A variety of academic studies (e.g., Apaza, 2009; Arndt & Oman, 2006; Kaufmann & Kraay, 2008; Thomas, 2008) have shown an interest in measuring the quality of governance for several reasons. First, having a quantitative measure of governance help governments and decision makers to evaluate different countries' governing process. For example, a quantitative measure of governance could be a useful tool for IOs and governments in determining how aid should be allocated. Second, a quantitative measure would also be helpful in assessing various countries' government efficiency and effectiveness in academic research. Third, governments might benefit from these developed measurements of governance to aid in improving the governing process and to enhance public services (Kaufmann et al., 2009a; Mimicopoulos et al., 2007; Santiso, 2001). According to Arndt and Oman (2006):

> A veritable explosion of interest in the quality of "governance" in the developing world is driving explosive growth in the use of governance indicators by international investors and both national and multilateral official OECD [the Organisation for Economic Co-operation and Development] development co-operation agencies. Based on the maxim that you can only manage what you can measure, these decision makers seek to quantify the quality of governance in developing and emerging-market economies. (p. 11)

As a result of this increasing interest, many different indices have been developed by many organizations to measure quality of governance. Most of these indicators expand

every year by covering more countries, while some are regionally based (e.g., measuring quality of governance among African nations). Other measures of governance concentrate on one or two aspects of the governance process, such as the corruption perceptions index (CPI) which measures nations' corruption levels. In addition, each governance indicator is structured and calculated differently (Arndt & Oman, 2006; Mimicopoulos et al., 2007; Thomas, 2008). Arndt and Oman (2006) argue that, although "the perfect governance indicator will undoubtedly never exist" (p. 11), some indicators are more transparent and credible 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 an index more credible than others among users (Arndt & Oman, 2006; Mimicopoulos et al., 2007).

In this study, the worldwide governance indicators (WGI) were used because these indicators cover the most important aspects of the governing process (Arndt & Oman, 2006; Mimicopoulos et al., 2007). Unlike other indices, the WGIs contain an indicator for each aspect of the governing process, affording researchers and policy-makers a better understanding of the political process (de Ferranti et al., 2009; Kaufmann et al., 2009a; Langbein & Knack, 2010; Thomas, 2008). 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 governance and growth during times of crisis. Further discussion on the structure of the WGI will be presented in chapter 5.

Worldwide Governance Indicators

The six worldwide governance indicators (WGI) introduced by Kaufmann et al. (2009a) have been adopted by policy makers to evaluate the quality of a country's

governance (Arndt & Oman, 2006; de Ferranti et al., 2009; Kurtz & Schrank, 2007). These six indicators, which have been widely used compared to other indicators that measure governance quality (Arndt & Oman, 2006; Apaza, 2009; Langbein & Knack, 2010; Thomas, 2008), are 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). Each indicator measures one or more aspects of the governance process.

The WGI uses 31 sources to construct the governance indicators, and each indicator concentrates on measuring one aspect of the governance process. In addition, the WGI use an aggregate methodology to construct the indicators, each of which has been structured using many data sources, such as surveys and reports. Each country is assigned a governance score between +2.5 (high quality) and -2.5 (low quality), and its performance is ranked on a scale of 0 to 100. The authors of the WGI recommend interpreting each governance indicator individually, rather than using all indicators as one index in comparing the performance of different countries (Kaufmann et al., 2009a, 2010a). In-depth discussion on the WGI will be presented in Chapter 5. As part of the subject of this dissertation, each of the worldwide governance indicators, as measures of governance quality, will be discussed in the following section.

Voice and accountability (VA). Kaufmann et al. (2010a) define voice and accountability as "perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media" (p. 6). Public participation in the democratic process is

considered by IOs and scholars to be one of the main characteristics of good governance (Agere, 2002; Box, 1998; Mimicopoulos et al., 2007). In addition, people's participation in the political and decision-making process has been adopted by United Nations as one of the Millennium Development Goals that need to be adopted by governments by 2015 (Mimicopoulos et al., 2007).

A government's adoption of democratic principles and human rights has also been connected to economic development (Clingermayer & Feiock, 2001; Gasiorowski, 1995; Przeworski et al., 2000). Gasiorowski (1995) argues that democratic principles, like public participation in the political process, as well as human rights factors like free speech and freedom of expression, help fight corruption and other bad governance practices which, in turn, will lead to economic growth. According to Dubnick and Frederickson (2009), "concepts of accountability are worthy of defense and are critically important to modern understandings of governance" (p. 44).

Political stability and absence of violence (PS). The second dimension of the WGI, political stability and absence of violence (PS), concentrates on political stability and its contribution to improving the quality of the governing process. According to Kaufmann et al. (2010a), PS refers to "perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism" (p. 6).

Przeworski et al. (2000) studied the differences between democratic and non-democratic political systems and the relationship between the type of political system on one hand and governance quality, transparency, and economic growth on the other. Their study, which covers 141 countries from 1950–1990, covers many subjects (e.g., labor

productivity and population growth), but the current research will focus on their findings regarding the relationship between democracy and non-democracy on one hand and governance quality and economic growth (GDP per capita) on the other.

Przeworski et al. (2000) find a positive relationship between a country's political stability and governance quality. They argue not only that political stability has a positive impact on a country's economic growth, but that economic growth has a positive impact in helping countries to adopt good governance practices and improve their current democratic practices. Further, they state that adopting democratic practices accelerates economic growth. Thus, clearly, the political stability and absence of violence indicator plays a major role in shaping the governing process and economic growth (Gasiorowski, 1995; Haftel & Thompson, 2006).

Government effectiveness (GE). Government effectiveness (GE), the third dimension of the WGI, concentrates on the way governments introduce services and execute programs as well as the overall quality of a government's work. Kaufmann et al. (2010a) define government effectiveness as "perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies" (p. 6).

Serving the public well is one of the main responsibilities of any government (Kettl, 2002; Newman, 2001; Rhodes, 1997). One of the promises of good governance practices is to improve the way public programs are executed and the way services are provided to the public (Agere, 2002; Box, 1998; de Ferranti et al., 2009; Kettl, 2002). Thus, effectively providing quality services to the public and formulating and

implementing policies and procedures are basic components of the governing process and good governance practices (Egger, 2009; Kaufmann et al., 2009b; Santiso, 2001).

Regulatory quality (RQ). Regulatory quality, the fourth dimension of the WGI, deals with "perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development" (Kaufmann et al., 2010a, p. 6). Regulations and rules that organize people's lives, businesses, and the way governments interact with people play a critical role in shaping the governing process (Levi-Faur, 2010; Pradhan & Sanyal, 2011; Repucci, 2011).

The weakness or even absence of quality regulations is one of the reasons for economic crises (Baily & Elliot, 2009; Bernanke, 2009; Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009; Simkovic, 2011). In the United States, for example, weak regulations, especially financial regulations, have been identified as a cause of the weakness of the financial system that has led to the current economic crisis (Bernanke, 2009; Krishnamurthy, 2010; Levi-Faur, 2010). On the other hand, one of the reasons of the South Korean economic collapse in the 1990s was a lack of institutional and regulatory quality compared to high economic growth (Kim, 2000).

Reinhart and Rogoff (2009) argue that governments do not learn from history. They believe that, although regulatory quality is essential to prevent or at least minimize the consequences of economic crises, governments keep repeating the same mistakes by either adopting low-quality regulations or only taking action when a crisis is already underway. Thus, regulatory quality is an important element in improving the quality of governing and economic growth (Birkland, 1997; Kaufmann et al., 2009b; Reinhart & Rogoff, 2009; Repucci, 2011).

Rule of law (RL). The equality of people under the law, one of the main characteristics of human rights and good governance practices by governments (Box, 1998; Pradhan & Sanyal, 2011), has been adopted by the United Nations as one of the Millennium Development Goals that need to be adopted by governments by the year 2015 (Mimicopoulos et al., 2007). Kaufmann et al. (2010a) define rule of law as "perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (p. 6).

As one of the characteristics of good governance practices by governments, rule of law has been connected with economic growth, enhancing business activity and lending confidence to the economy (Kaufmann & Kraay, 2002). Considered a basic element toward high quality of governance, the rule of law indicator is an important dimension of governance quality and good governance practices by governments (Arndt & Oman, 2006; Repucci, 2011; Haftel & Thompson, 2006).

Control of corruption (CC). Fighting corruption, another of the main characteristics of good governance practice by governments (Agere, 2002; Box, 1998; Heckelman & Powell, 2007; Mironov, 2005), is also one of the main promises of governance compared to the traditional government style (Kettl, 2000; Osborne & Gaebler, 1992; Rhodes, 1996). Control of corruption has also been connected to economic growth (Dixit, 2009; Greif & Laitin, 2004; Kurtz & Schrank, 2007; Mironov, 2005).

According to Kaufmann et al. (2010a), control of corruption refers to "perceptions of the extent to which public power is exercised for private gain, including both petty and

grand forms of corruption, as well as 'capture' of the state by elites and private interests" (p. 6). Thus, holding public officials accountable for their actions is one of the promises of control of corruption (Arndt & Oman, 2006; Repucci, 2011). Also, the control of corruption indicator supports the idea that the public needs to have the power to control and monitor government actions (Apaza, 2009). Therefore, control of corruption is one of the main dimensions of governance quality and economic growth (Apaza, 2009; Heckelman & Powell, 2007; Pradhan & Sanyal, 2011; Mironov, 2005).

Economic Growth, Economic Crises, and Governance: Previous Studies

In the following section, studies that discuss the relationship between economic growth, governance, and the influence of the economic crises on shaping the relationship between economic growth and quality of governance will be explored.

Economic crises and regime change. Gasiorowski (1995) used the event history analysis technique to study changes in types of political systems (democratic, semi-democratic, and non-democratic) in 75 third-world countries from the 1950s to the 1980s to examine the influence of the economic crises on regime change. In addition, he used 13 explanatory variables which are "generally thought to have the greatest effect on regime change" (p. 886), which include economic crisis variables, socioeconomic and social structure variables, political culture variables, political institution variables, international variables, and miscellaneous variables. The study tested whether these variables, in conjunction with economic crises, contribute to regime change, as well as whether this contribution has changed over time.

After acknowledging the difficulties in quantifying most of the variables that he uses in the analysis, Gasiorowski (1995) argues that "economic crises do not simply

undermine the legitimacy of whatever type of regime currently exists in a country" (p. 892). In addition, he finds that the factors that affected regime changes in the 1950 and 1960s, such as inflationary crises, differ from the factors that affect changes in the 1970s and 1980s. Thus, the study found that the economic crisis in itself did not cause a change in the political system unless there were other factors to support this political change, such as the lack of rule of law and other bad governance practices.

One of the shortcomings of Gasiorowski's study is the lack of consideration of time-varying effects of variables on regime change. In other words, variables might have a long-run rather than a short-run effect, which is the case with most socioeconomic factors. Another important factor missing from the study is the colonization factor (i.e., most of the third-world countries studied were occupied by other countries). Colonization, which has a significant influence on a country's transformation to a democratic or nondemocratic state, needs to be included in the analysis to provide a better understanding of political regime change over time (Acemoglu et al., 2001).

The 1997 financial crisis and governance: The case of South Korea. Kim (2000) conducted a study on the South Korean economy to analyze causes behind Asia's financial crisis of 1997, in which South Korea's economy was affected. In his theoretical paper, Kim (2000) opines that one of the main reasons South Korea was severely affected by the crisis, in spite of its high pre-crisis GDP scores, is that economic growth and market liberalization had developed in South Korea more quickly than state institutions. Kim (2000) states that "unfettered financial liberalization implemented in a weak institutional setting makes the economy liable to devastating consequences from global capital forces" (p. 29).

Therefore, he argues that governance and institutional development need to be ahead of and act as a base for economic growth in order to have successful market and economic reforms, sustainable economic growth, and to minimize financial crises consequences. Also, he suggests that governance reforms "involves not only changes in policy matrix but fundamental structural changes in a wide range of social, economic, and political institutions" (Kim, 2000, p. 30).

Kim (2000) further contends that developing and emerging economies share the same shortcomings in governance and institutional development. He argues that, for any country to minimize the effect of economic crises and prepare for economic turbulence, governance and institution development must occur side-by-side with economic growth. In contrast, weak or unimplemented governance reforms will make the economy weak and ready to collapse in times of economic turbulence. According to Kim (2000):

> Reforms in labor, business, the rural economy, and foreign trade, as well as government, must be implemented in the framework of a coherent whole. For many emerging nations, there is the need to build institutions for complex democratic politics that can ensure fair competition to all participants, since market reform cannot be achieved without the rule of law and support based on democratic institutions. (pp. 30-31)

Democracy and development. Przeworski et al. (2000) studied the differences between democratic and non-democratic political systems, and the relationship between the type of political system on one hand and transparency and economic growth on the other. Their study, which covers 141 countries from 1950–1990, deals with many subjects (e.g., labor productivity and population growth) but, in the current research,

attention will be placed on their findings regarding the relationship between democracy and non-democracy on one side and economic growth (GDP per capita) on the other.

The authors argue that a high level of income helps nondemocratic political systems and dictatorships to stay in power longer. According to Przeworski et al. (2000), "indeed, dictatorships survived for years in countries that were wealthy by comparative standards" (p. 94). Additionally, Przeworski et al. (2000) think that other factors might also impact governance improvement and democratic practices by governments, such as preferred geographic location and people's level of education and health.

In addition, Przeworski et al. (2000) find a positive relationship between a country's transition to democracy and improving current democracy on one side and a country's economic growth on the other. They argue that economic growth has a positive impact on helping countries to adopt good governance practices and improve their current democratic practices. Moreover, adopting democratic practices accelerates economic growth.

Growth without governance. Kaufmann and Kraay (2002) conducted a study on countries in the Latin America and Caribbean region to study the relationship between governance and economic growth. The authors used rule of law (RL) indicator to represent the other worldwide governance indicators, in measuring quality of governance. Using rule of law (RL) from the 2000 worldwide governance indicators (WGI) to measure governance and GDP per capita to measure economic growth and building on the assumption that GDP per capita and RL do not change profoundly over time for the countries under investigation, the authors assumed that results based on data for the year

2000 could be used to estimate the long-term relationship between GDP per capita and RL.

They found that the quality of governance had a strong positive effect on GDP per capita, while GDP per capita had a weak and even negative effect on the quality of governance. Kaufmann and Kraay (2002) summarize their findings as follows:

> We propose an empirical strategy that allows us to separate this correlation into: i) a strong positive causal effect running from better governance to higher per capita incomes, and ii) a weak and even negative causal effect running in the opposite direction from per capita incomes to governance. The first result confirms existing evidence on the importance of good governance for economic development. The second result is new and suggests the absence of "virtuous circles" in which higher incomes lead to further improvements in governance. (p. 169)

The authors explained the negative impact of higher income on governance improvement, arguing that nations with high income per capita will not demand political and administrative reforms regardless of whether their country ranks high in governance indicators. Thus, the authors conclude that high income per capita will not lead to adoption of good governance practices. According to Kaufmann and Kraay (2002), "as countries become richer, higher incomes do not necessarily lead to demands for better institutional quality, despite conventional wisdom to the contrary. In fact, just the opposite might occur" (p. 176).

In addition, Kaufmann and Kraay (2002) argue that business and political elites are more influential than other citizens in inducing governments to adopt (or not adopt) and apply good governance practices by governments, citing East Asian countries as

examples. According to Kaufmann & Kraay (2002), "as long as the established elites within a country reap private benefits from the status quo of low-quality institutions, there is little reason to expect that higher incomes will lead to demands for better governance" (p. 204).

Unfortunately, the small sample size prevents this study from being used as a model. In addition, this study is weakened by several factors. First, it uses only one of the six indicators of WGI (rule of law) and argues that it represents the other indicators in measuring governance. Second, the study covers only one year, thus neglecting the sustainable development issue. Finally, other factors that might have an impact on governance and economic growth, such as health and education levels, favorable geographical location, political stability, natural resource abundance, and foreign aid receipt are not considered in the study discussion.

Rethinking governance indicators. Arndt and Oman (2006) conducted a study that addresses and analyzes different governance indicators, such as WGIs and the international country risk guide (ICRG). Arndt and Oman (2006) found that:

> [C]urrent governance indicators are high positively correlated with measures of current national per capita income. The challenge is to identify the direction(s) of causality in the relationship between the quality of governance and the level of income in a country. (p. 77)

After discussing the advantage of WGI over other governance indicators, such as the ICRG and Freedom House Index, Arndt and Oman (2006) expand on the Kaufmann and Kraay (2002) study by adding more countries (all countries included in the WGIs) and expanding the number of years (1970–2000). Building on Kaufmann and Kraay's

analysis, Arndt and Oman (2006) add variables such as population growth, average investment rate, rate of mortality, and geographic location.

Arndt and Oman (2006) justify their decision to expand on Kaufmann and Kraay's (2002) study as follows:

> a) we wish to account for possible bias caused by omitted variables by including more variables that may significantly affect per capita GDP growth and "Rule of Law" scores, respectively, in our two equations; b) we wish to distinguish the effect of income growth and income levels (standards of living) over a time horizon of the past 30 years; c) we wish to relax somewhat one of Kaufmann and Kraay's assumptions mentioned earlier namely that the quality of governance in a country does not change much over time, so that its current governance score is a good proxy for the quality of its governance before substantial per capita GDP differences emerged across countries. (p. 82)

The findings of the study fail to confirm the negative impact of economic growth on governance development that was found by Kaufmann and Kraay (2002). According to Arndt and Oman (2006), the different techniques and models used to analyze the data impacted the findings of the two studies. In addition, the authors argue that the Kaufmann and Kraay's (2002) findings regarding the negative or weak impact of economic growth on the quality of governance may be true only for subgroup countries such as those studied by Kaufmann and Kraay (2002), so that the result cannot be generalized to all regions.

Arndt and Oman (2006) think that, while short-term economic growth could be achieved even in the absence of governance improvement, long-term economic growth

requires governance development. The same argument has been expressed by Ndulu and O'Connell (1999) in their study of the Sub-Saharan region's economic growth and its relation to governance. Ndulu and O'Connell (1999) find that good governance is a condition for sustainable economic growth, and that a country's failure to adopt and apply good governance practices results in failure to maintain their economic growth.

Arndt and Oman's (2006) study adds to the debate among researchers on the nature of the relationship between economic growth and quality of governance. However, their study has the same shortcoming as Kaufmann and Kraay's (2002) study in that it uses only one of the six WGIs (rule of law), claiming it represents the remaining indicators in measuring quality of governance. In addition, their use of indices from different sources over different periods of time to measure the same variable may influence the accuracy of the study. For example, they use rule of law (RL) as one indicator of governance for the period of 1970-2000, even though the WGIs were not issued until 1996.

Governance and economic development in MENA countries. Mehanna et al. (2010) conducted a longitudinal study on 23 countries of the MENA region from 1996–2005 to study the relationship between quality of governance and economic development. Using worldwide governance indicators (WGIs) as the measurement of governance, the authors studied the relationship between GDP per capita, religious fractionalization, infant mortality rate, and year of independence on one hand and governance on the other. Finally, the authors applied the generalized method of moments (GMM) technique to study the level and direction of the relationship between different variables.

One of the main findings of the Mehanna et al. (2010) study is that "governance and economic development would reinforce each other" (p. 118). In addition, they find that "the impact of the level of economic development on governance is weaker than the impact of governance on economic development" (p. 131). Moreover, they determine that good governance practices are a condition for not only economic growth but also for sustainable development. Finally, the Mehanna et al. (2010) study found that "governance reforms would be the main challenge for MENA countries to ensure a long-run sustainable virtuous circle, notably in oil-exporting countries where oil acts as a resource curse" (p. 118).

Although this study made a valuable contribution to scholarship studying the relationship between growth and governance development, it has some limitations, including the small sample size, which affects the generalizability of the study. Additionally, the different economic structures of countries within the MENA region—e.g., Saudi Arabia and Qatar are rich, oil-based economies, while Morocco and Egypt are agricultural, service-based economies—may influence the accuracy of the study. Finally, the study did not consider other factors that might affect the results, such as foreign aid and types of political systems.

Human Development

Human development has been associated with quality of governance (Alkire, 2010; Grindle, 2007; Pradhan & Sanyal, 2011; Sagar & Najam, 1998), economic growth (Adams & Mengistu, 2008; Ndulu & O'Connell, 1999; Smith, 2007), and sustainable development (Alkire, 2010; Ndulu & O'Connell, 1999; Sagar & Najam, 1998). According to Pradhan & Sanyal (2011), "the issue of good governance and its impact on

development is the heart of all policy debates among the policy makers and researchers" (p. 3).

According to Sagar and Najam (1998), income is an important factor that affects people's lives. Similarly, Pradhan and Sanyal (2011) argue that economic growth (as measured by GDP per capita) is a means to the desired end of human development. According to Pradhan and Sanyal (2011),

> In fact, per capita GDP is neither the quality of life nor an end in itself. It is only considered as a means but the end of development is the welfare of human beings. So the emphasis has now shifted to multidimensionality of human development, which ensures an overall development of human beings and the society and plays a key role in the development process. (p. 1)

According to Alkire (2010), there are reciprocal relationships among good governance, economic growth, and human development. Alkire (2010) argues that human development (examples of which include high-quality education and health systems) supports the productivity of an economy by providing healthy and highly trained individuals. In order to do so, human development requires both economic growth and good governance practices by governments (Alkire, 2010).

The current study will discuss the nature relationship between human development, good governance, and economic growth during times of crisis. The human development index (HDI), which will be used in the current study, classifies countries into four groups (very high human development, high development, medium development, and low development). The three dimensions used in constructing HDI are

health, education, and living standards. More discussion on the structure of HDI will be presented in Chapter 5.

Chapter Summary

Peters et al. (2010) state that "governance has always been difficult and has relied on judgment, and the crisis [the economic crisis of 2008] has made it an all the more difficult undertaking" (p. 26). The influence of the global economic crisis on the relationship between governance and economic growth is the main subject of this dissertation. As discussed in this chapter, governance quality has been associated with economic growth, and most of the studies discussed in this chapter show a correlation between quality of governance and economic growth. Thus, studying the relationship between economic growth and quality of governance during times of crisis compared to times of non-crisis will contribute to our understanding of connection between governance and growth.

Chapter 3: Theoretical Framework: New Institutionalism Theory

Two research questions will be discussed in the current study:

1. What is the influence of the economic crisis on the relationship between governance and economic growth?

2. Does the nation's development level impact this relationship during times of crisis?

In this chapter, new institutionalism is discussed as the analysis framework. In addition, the framework applications on the subject of the current dissertation are discussed.

Overview

Governance is a collective process that includes governmental and nongovernmental institutions in the political and decision-making process (Bevir et al., 2003; Kjaer, 2004; Lane & Ersson, 1999; Provan & Kenis, 2008; Stoker, 1998). Garson (2008) argues that "institutions are governance structures based on rules, norms, values, and systems of cultural meaning" (para. 10). In addition, Arndt and Oman (2006) deem that the new institutional economics movement plays an important role in shaping the governing notion. They argue that new institutionalism emphasizes the importance of the quality of governance in supporting economic growth, human and social development, and vice versa. Thus, studying the institution as the unit of the analysis will help in understanding the relationship between governance and growth during times of crisis.

The new institutionalism framework has shaped studies in many fields, including public policy and public administration. According to Lane and Ersson (1999), 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 quality of governance on one hand and economic growth on the other (Nee, 2005; North, 1989; Powell, 2007; Weingast, 1995). In addition, new institutionalists deem that political and economic outcomes are affected by an institution's structure and design (March & Olsen, 1984; Powell, 2007; Weaver & Rockman, 1993).

In addition, Hall and Taylor (1996) argue that human development and the quality of institutions are interdependent. In addition, economic growth under new institutionalism has been linked to an institution's environment and development (Hira & Hira, 2000; March & Olsen, 1984; Olson, 1996). Moreover, new institutionalists stress the importance of society and culture in institutional change and the quality of the governing process (March & Olsen, 1984). Thus, testing whether the state's level of development influences the relationship between governance and growth during times of crisis will enhance our understanding of the relationships among human development, economic growth, and an institution's quality during periods of crisis and non-crisis.

Compared to public choice theory, which studies politician and bureaucrat behavior in job performance (Buchanan & Tullock, 1962; Tullock et al., 2002), and principal-agent theory, which studies the relationships between principals (people) and agents (politicians and governments) (de Ferranti et al., 2009; Waterman, Rouse, & Wright, 2004), new institutionalism theory studies an institution's structure and design

and how it affects and is affected by its environment and other institutions' design and structure (North, 1990; Powell & DiMaggio, 1991). Thus, new institutionalism theory will be used as framework in the current research because (a) it provides an approach to analyze the relationship between political and economic outcomes on one hand, and institutional environment on the other, and (b) it provides a framework for examining the relationship between governance as a means of including all players in the political and decision-making process, and institutions as the rules of the game that control the governing process.

The role of institutions in shaping individuals and political processes and outcomes is significant. The opposite is also true; individuals and society likewise influence institutions (Hall & Taylor, 1996; March & Olsen, 1984; Moe, 1984; Scott, 2003). According to Powell (2007), "organizations are deeply embedded in social and political environments suggested that organizational practices and structures are often either reflections of or responses to rules, beliefs, and conventions built into the wider environment" (p. 1).

Governance influences and is influenced by an institution's structure and design. Governance is a means of including all players (e.g., social and political actors) in the decision-making process, while institutions are the rules of the game that control how the governance process occurs (North, 1990; Williamson, 1998). According to Bell (2011), "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" (p. 1).

Hall and Taylor (1996) 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). In addition, they argue that new institutionalism theory contributes the most to the debate on the role that individuals play in influencing an institution's outcomes. According to Hall and Taylor (1996):

> [New institutionalists] draw our attention to the role that strategic interaction between actors plays in the determination of political outcomes. This represents a major advance on traditional approaches that explain political outcomes largely in terms of the force that structural variables, such as level of socioeconomic development, educational attainment or material discontent, are said to exercise directly over individual behavior. (p. 951)

Accordingly, Jansen (2007) claims that an institution's design is an important factor to facilitate the success of governance and that new institutionalism stresses the importance of society and culture in institutional change. In addition, March and Olsen (1984) argue that, under new institutionalism, "the state is not only affected by society but also affects it" (p. 738). Furthermore, Bevir (2006) thinks that "the state has become increasingly dependent on organizations in civil society and more constrained by international linkages" (p. 15).

From an economic perspective, an institution's structure and interaction with other institutions plays an important role in economic growth (Hira & Hira, 2000; North, 1989; Olson, 1996; Ostrom, 1990; Roland, 2004). North (1989) reviews the historical path between institutions and economic growth, arguing that an institution's structures and the way rules are implemented minimize transaction cost, which then influences

economic growth. North (1990) claims the fact that "institutions affect the performance of economics is hardly controversial. That the differential performance of economics over time is fundamentally influenced by the way institutions evolve is also not controversial" (p. 3). In addition, Olson (1996) deems that institutional quality is an important factor in economic growth and development. According to Olson (1996), there is "direct evidence of the linkage between better economic policies and institutions and better economic performance" (p. 22).

Roland (2004) agrees with North (1989) and argues that "in order to better understand the determinants of economic growth, economists should seek a better understanding of the role of values and norms in shaping both ideas and institutions" (p. 128). Additionally, Roland (2004) states that culture differences influence an institution's performance and economic growth. He also finds a strong relationship between an institution's structure, design, and performance on one side, and economic growth on the other.

In a study of per capita income and other factors that might contribute to economic growth, Olson (1996) found that improving the quality of institutions will have a positive impact on sustainable economic development and real wealth of nations. According to Olson (1996), "the great differences in the wealth of nations are mainly due to differences in the quality of their institutions and economic policies" (p. 19).

The following section discusses institutions and new institutionalism theory. The definitions of institution and the importance of institutions to people's lives are explored. Also, the difference between old and new institutionalism is presented. In addition, using

new institutionalism theory to analyze the relationship between governance and growth during economic crises is then examined.

Institution

Regardless of the fact that they are defined in different ways, institutions undoubtedly play an important role in shaping people's lives. Different kinds of institutions (political, social, or religious) affect people's lives as a result of their daily interactions with them. Also, interaction among institutions shapes the way institutions work (Brinton & Nee, 1998; Hall & Taylor, 1996; Hopcroft, 1999; Scott, 2001). Bell (2011) argues that institutions are an important element in social, political, and economic processes:

> 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. Institutions also matter because they (or at least actors within them) typically wield power and mobilise institutional resources in political struggles and governance relationships. Institutions are also said to matter because they are seen as shaping and constraining political behaviour and decision making and even the perceptions and powers of political actors in a wide range of ways. (p. 1)

According to North (1990), an institution is defined as "the rules of the game in a society or, more formally…the humanly devised constraints that shape human interaction" (p. 3). In addition, he argues that formal and informal constraints formulate and construct institutions, and every society's institutions have their own structure based on many factors such as culture, national history, and the norms and values of a society.

In addition, North (1991) argues that an individual's behaviors and motives need to be analyzed in order to understand how institutions work. According to North (1991), "institutions are a creation of human beings. They evolve and are altered by the human beings; hence our theory [new institutionalism theory] must begin with the individual" (p. 5). He also argues that "institutions reduce uncertainty by providing a structure to everyday life" (p. 3), since institutions establish "the rules of the game," which organize the way we approach economic, political, and social issues.

Although there are many definitions of institution, most agree that institutions affect and are affected by an individual's values and principles. According to Cooley (1909), "the individual is always cause as well as effect of the institution" (p. 314). In addition, the environment in which an institution operates influences the institution's structure and operations (Cooley, 1909; Hopcroft, 1999; North, 1990). Consequently, Ostrom (1990) defines institutions as:

> [T]he set of working rules that are used to determine who is eligible to make decisions in some arena, what actions are allowed or constrained, what aggregation rules will be used, what procedures must be followed, what information must or must not be provided, and what payoffs will be assigned to individuals dependent on their actions. (p. 51)

Hall (1986) enhances the definition of institution by including the role that individuals play in addressing political and economic issues as part of an institution's structure and design. Hall (1986) defines institution as "the formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units in the polity and economy" (p. 19). Powell and DiMaggio

(1991) also define the association between institutions and individuals as a two-way relationship. According to Powell and DiMaggio (1991), institutions "are first and foremost products of human actions" (p. 18). Bell (2011) shares the same thoughts about an institution's structure and influence on individuals, and he argues that "institutions can be defined as sets of rules, codes or tacit understandings which shape behaviour" (p. 13).

Importantly, the role that institutions play is increasing over time. As institutions become more complex, the interactions of institutions with people and with other institutions also become increasingly defined and complex (March & Olsen, 1984; Scott, 2001). According to March and Olsen (1984):

> Social, political, and economic institutions have become larger, considerably more complex and resourceful, and *prima facie* more important to collective life. Most of the major actors in modern economic and political systems are formal organizations, and the institutions of law and bureaucracy occupy a dominant role in contemporary life. (p. 734)

An institution's structure and design affect both the institution's performance and the way governments work (Ansell & Gash, 2008; Jansen, 2007; Provan & Kenis, 2008). Thus, Ansell and Gash (2008) argue that, in order for institutions to be effective and efficient and to help collaborative governance be meaningful and successful, their designs need to include "Participatory Inclusiveness, Forum Exclusiveness, Clear Ground Rules, and Process Transparency" (p. 550).

At this point, in order to establish a clear understanding of institution and new institutionalism theory and its applications to the current subject, it is important to discuss briefly the differences between organizations and institutions. North (1990) argues that,

while institutions and organizations are different both in concept and in practice, the interaction between them is inevitable and each one influences the other. According to North (1990), organizations such as political parties "are groups of individuals bound by some common purpose to achieve objectives" (p. 5); in contrast, institutions establish a framework for how organizations evolve and perform. Thus, according to North (1990), "both what organizations come into existence and how they evolve are fundamentally influenced by the institutional framework" (p. 5). In addition, organizations "influence how the institutional framework evolves" (North, 1990, p. 5), resulting in a two-way relationship between organizations and institutions.

These definitions of institution assert that institutions have different applications in various social science disciplines. According to Garson (2008):

> In economics, institutions serve to minimize market transaction costs. In sociology, institutions are social structures which come to be sanctioned by the norms and values of the society. In the public sphere, institutions create checks and balances, facilitate political cooperation, and reduce political uncertainties. (para. 4)

New Institutionalism Theory

New institutionalism theory adopts institution as its unit of analysis. Since people interact frequently with institutions, we could argue that new institutionalism theory influences other theories. According to Garson (2008), "since any writing that deals with governments, corporations, churches, or even families is dealing with an institution, 'institutional theory' can be construed to include an extremely wide variety of writings by very different authors" (overview section, par. 1).

Lane and Nyen (1992) argue that new institutionalism theory provides an alternative to traditional public administration theories in studying how governments govern and in analyzing policy process and outcomes. They claim that the new institutionalism approach takes into account all players who make, implement, or benefit from decisions. According to Lane and Nyen (1992), "Neo-institutionalism may be generalized into an alternative framework to the traditional public administration and welfare economics approaches to the public sector – an economic organization theory about the state and local government" (p. 360).

One of the main themes of the new institutionalism is the rejection of rational actor model of individual behaviors in explaining political processes and organizational change. According to new institutionalists, individuals take into account, for example, the legal framework, culture, and organizational interests when making decisions (Powell & DiMaggio, 1991; Scott, 2001; Selznick, 1996). Thus, new institutionalism theory argues for bounded rationality rather than rationality of individual behaviors in making decisions. According to Powell and DiMaggio (1991):

> The new institutionalism in organization theory and sociology comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supra-individual unites of analysis to aggregations or direct consequences of individuals' attributes or motives. (p. 8)

In addition, new institutionalists argue that institution structure and design as well as the relationships among them help explain the political process and the behavior of individuals as well as organizations (Powell & DiMaggio, 1991; Selznick, 1996). Also,

new institutionalism theory concentrates on the role of institutions in social, economic, and political processes (Furubotn & Richter, 2005; Lecours, 2005; North, 2009). Thus, individuals, other institutions' structures and designs, culture, and other factors play important roles in shaping an institution's structure and operations, and vice versa (Mantzavinos, 2001; North, 1991; Powell, 2007). Selznick (1996) posits that new institutionalism is based on the argument that "the organization is highly sensitive to the cultural environment within which it lives" (p. 273). Accordingly, new institutionalists argue that all kinds of institutions (e.g., political, economic, social, and religious) interact with their environments. According to Powell and DiMaggio (1991):

> There are, in fact, many new institutionalisms—in economics, organization theory, political science and public choice, history, and sociology—united by little but a common skepticism toward atomistic accounts of social processes and a common conviction that institutional arrangements and social processes matter. (p. 5)

Another theme of new institutionalism theory is that organizations operate in a competitive environment with other organizations under the same conditions, such as rules and formal and informal constraints. Goals like economic success and perceived legitimacy are the main sources of competition among organizations (North, 1991; Powell, 2007; Powell & DiMaggio, 1991). Powell (2007) states that "the signature of the new institutionalism has been a focus at the field level, based on the insight that organizations operate amidst both competitive and cooperative exchanges with other organizations" (p. 6).

New institutionalism theory has been utilized by many disciplines, such as political science and economics, to facilitate a better understanding of political processes and institutional change. In political science, for example, new institutionalists argue that "political behaviour and the sources of political power [are] derived primarily through informal relationships within and beyond the institutions of government" (Bell, 2011, p. 4). Thus, compared to public choice theory, which suggests that politicians act in their own interest, new institutionalism theory maintains that both informal relationships and formal procedures play important roles in the policy process (North, 1990; Ostrom, 1986; Powell & DiMaggio, 1991).

Accordingly, the relationship between political institutions and their environment, including individuals and other institutions, is reciprocal (Hall & Taylor, 1996; March & Olsen, 1984; Roland, 2004). March and Olsen (1984) argue that old thinking in political science relies heavily on the effect of politics on individual behavior and society while neglecting the role that individual behavior has on a political institution's performance and structure. Thus, they argue that, under new institutionalism, the state not only affects society but is also affected by it (March & Olsen, 1984).

Consequently, new institutionalism theory considers more factors that contribute to the political process (e.g., individual socioeconomic and education levels) than other theories (e.g., rationalism and public choice theory). According to Hall and Taylor (1996), the new institutionalism approach in studying policy processes and outcomes "represents a major advance on traditional approaches that explain political outcomes largely in terms of the force that structural variables, such as level of socioeconomic

development, educational attainment or material discontent, are said to exercise directly over individual behavior" (p. 951).

In addition, new institutionalism theory has introduced the transaction cost approach to evaluating the policy process. According to this approach, decisions are the outcome and the policy process is the cost of obtaining that outcome (Williamson, 1998). According to Powell and DiMaggio (1991), "the new institutional economics takes the transaction as the primary unit of analysis" (p. 6). Although scholars do not agree on the definition of transaction cost or how to apply it to institution analysis, new institutionalists think that transaction cost needs to be one of the main components of studying institutions (North, 1990; Powell & DiMaggio, 1991; Williamson, 1998).

North (1987, 1990) further states that the economic growth of any country relies heavily on the way transaction costs are handled. He argues that reducing transaction costs, such as the cost of enforcing property rights and laws, will lead to an institution's success and economic growth. According to North (1990), "how transaction costs are handled by societies plays a major role in determining the societies' economic growth rates" (p. 7).

Williamson (1998) argues that considering and minimizing transaction costs will lead not only to an institution's success but also to better governance. Williamson (1998) states that "transaction-cost economics is located on the branch of the NIE [New Institutional Economics] that is predominantly concerned with governance" (p. 75). According to Williamson (1998):

> Transaction-cost economics concurs that the transaction is the basic unit of analysis and regards governance as the means by which order is accomplished in

a relation in which potential conflict threatens to undo or upset opportunities to realize mutual gains. (p. 76)

Old and new institutionalism. Although there are similarities between old and new institutionalism in approaching institutional analysis, several differences distinguish the two approaches. Both old and new institutionalisms reject the rational actor model and consider an organization's environment an important factor in the way the organization operates (Powell & DiMaggio, 1991; Selznick, 1996). Selznick (1996) states that "both the 'old' and 'new' reflect a deeply internalized sociological sensibility" (p. 273).

Powell and DiMaggio (1991) summarize similarities between old and new institutionalism as follow:

> Both the old and new approaches share a skepticism toward rational-actor models of organization, and each views institutionalization as a state-dependent process that makes organizations less instrumentally rational by limiting the options they can pursue. Both emphasize the relationship between organizations and their environments, and both promise to reveal aspects of reality that are inconsistent with organizations' formal accounts. Each approach stresses the role of culture in shaping organizational reality. (p. 10)

In contrast, new institutionalism differs from old institutionalism in its explanations of institutional change, the influence of informal arrangements on organizational structure, and the role of cultural and cognitive influence on individual behavior. Powell and DiMaggio (1991) describe the transformation from old to new institutionalism as follows:

> The shifts in theoretical focus from object-relations to cognitive theory, from cathexis to ontological anxiety, from discursive to practical reason, from internalization to imitation, from commitment to ethnomethodological trust, from sanctioning to ad hocing, from norms to scripts and schemas, from values to accounts, from consistency and integration to loose coupling, and from roles to routines have quite naturally altered the questions that students of organizations have asked and the kinds of answers they have offered. (p.17)

In addition, human behavior as part of institutional analysis has been approached differently by the two schools. Rather than explaining individual behavior as just following rules to try to maximize personal gains, as old institutionalism does, new institutionalism argues that culture and informal arrangements influence individual behavior and decisions (Furubotn & Richter, 2005; North, 1990; Powell & DiMaggio, 1991). Garson (2008) argues that informal procedures play an important role in shaping an institution's design and structure under new institutionalism, noting "a new focus on the role of norms, symbols, myths, belief systems, and informal arrangements forming the culture of the organization" (para. 1).

Critiques of new institutionalism. New institutionalism theory has been criticized, primarily for its counts of exogenous and endogenous factors in explaining a institution's performance and change. This section will present the main criticisms of new institutionalism theory.

According to new institutionalists, institutional change is incremental and based on changes in "cultural constraints" (North, 1990, p. 6). Gorges (2001) argues that "changes in the overall socio-economic or political context, leadership and ideas (norms,

ideology and culture)" (p. 142) are the three reasons of institutional change agreed on by new institutionalists. However, Gorges (2001) thinks that the new institutionalism view of institutional change is lacking, arguing that "new institutionalists should specify more rigorously the factors that change institutions and explicate the links between these factors and institutional change" (p. 137).

In other words, Gorges (2001) thinks that new intuitionalism theory does not explain the mechanism of the interaction among factors that leads to institutional change. Also, he thinks that, because the new institutionalists' argument of institutional change relies on "variables such as critical junctures, path dependency, leadership or the role of ideas, it leaves institutions behind and employs a grab-bag of explanations that proponents of almost any theoretical perspective could use" (Gorges, 2001, p. 137). Therefore, according to George (2001), the limitations of the new institutionalists' explanation originate from the fact that "the conditions under which these variables matter are unspecified and the causal relevance of institutions themselves is unclear" (p. 137).

Hira and Hira (2000) argue that new institutionalists rely heavily on exogenous factors in explaining institutional change and pay less attention to endogenous factors. According to Hira and Hira (2000), economic factors such as minimizing transaction cost and leadership are the two reasons for institutional changes as introduced by new institutionalists. According to Hira and Hira (2000), "in emphasizing the "rules of the game," the new institutionalism underplays the importance of power, position, and prestige in manipulating or ignoring those rules. In addition, the new institutionalism also underestimates the importance of personality" (p. 276). In addition, Hira and Hira (2000)

think that new institutionalists' explanation of institutional change is limited by the fact that they do not offer a source for their reasons for such change and they do not explain sudden changes. Therefore, Hira and Hira (2000) argue that the discussion of institutional change needs to start by discussing the reasons and causes for changing the "rules of the game" and leadership.

New Institutionalism, Governance, and Growth

There is a two-way relationship between governance and the structure and design of institutions (North, 1991; Stoker, 1998). 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 (Bell, 2011; Stocker, 2010; Williamson, 1998). According to Bell (2011), "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" (p. 1). Similarly, Williamson (1998) argues that institutional arrangements affect privatization, for example: "[V]iewing the institutional arrangements (rules of the game) through the lens of contract and governance has helped, among other things, to disclose when and why privatization efforts will succeed or fail" (p. 77).

Jansen (2007) argues that the design of institutions is an important factor in facilitating a meaningful and successful governance process. In addition, he thinks that new institutionalism stresses the important of society and culture in institutional change. Similarly, March and Olsen (1984) argue that under new institutionalism, "the state is not only affected by society but also affects it" (p. 738). The notion of governance shares similar ideas regarding the importance of civil society in the decision-making process. As

a result of the governance notion, Bevir (2010) deems that "the state has become increasingly dependent on organizations in civil society and more constrained by international linkages" (p. 15).

Additionally, both governance and new institutionalism assert the importance of both formal and informal arrangements (Lane & Nyen, 1992; North, 1991). According to North (1991), "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). It is also important for formal and informal groups to play certain roles in order for the governance process to be successful. According to Blanco, Lowends, and Pratchett (2011), "concepts such as 'policy network' and 'governance network' are part of a variety of theoretical developments stressing the importance of both formal and informal interactions between participants in the policy process" (p. 297).

From the economic perspective, the structure of and interaction among institutions plays an important role in economic growth. North (1990) argues that the structure and performance of institutions influence economic performance: "[That] institutions affect the performance of economics is hardly controversial. That the differential performance of economics over time is fundamentally influenced by the way institutions evolve is also not controversial" (p. 3).

Therefore, the design, structure, and function of institutions are very important in influencing both the governance process and economic growth (North, 1990; Powell & DiMaggio, 1991). Institutions, in turn, are influenced by various facets of human

development, including education, health, and economic growth (Blanco et al., 2011; Jansen, 2007). According to Provan and Kenis (2007), "although all networks comprise a range of interactions among participants, a focus on governance involves the use of institutions and structures of authority and collaboration to allocate resources and to coordinate and control joint action across the network as a whole" (p. 231).

New institutionalists assert that high institution quality leads to better governance and economic outcomes (Lane & Nyen, 1992; Powell & DiMaggio, 1991; Selznick, 1996). In addition, existing literature on the relationship between economic growth and the quality of governance supports the existence of a strong and positive relationship between the quality of governance and economic growth (Adams & Mengistu, 2008; Kaufmann & Kraay, 2002; Mankiw, 2009; Smith, 2007). The current study examines whether a relationship between the quality of governance and growth exists, and if so, whether this relationship has been affected by the economic crisis.

In addition, new institutionalists stress the important role that institutions play in shaping individuals as well as political processes and economic outcomes (Blanco et al., 2011; March & Olsen, 1984; North, 1990). According to new institutionalists, there is a correlation between human development, the quality of institutions, the quality of governance, and economic growth (Mantzavinos, 2001; North, 1991; Powell, 2007; Powell & DiMaggio, 1991; Selznick, 1996). Accordingly, the human development level of nations plays an important role in enhancing the quality of governance and economic growth (Ndulu & O'Connell, 1999; Smith, 2007). In the current study, there is an effort to examine the impact of the human development of nations on the relationship between governance and growth during times of crisis. This study examines whether the human

development levels of nations affect the relationship between governance and growth, and if so, whether this impact of human development on the relationship between governance and growth has or has not been affected by the economic crisis.

Chapter Summary

The impact of the global economic crisis on the relationship between quality of governance and economic growth, as well as the way a nation's development level impacts the influence of the economic crisis on the relationship between governance and growth are the two issues under consideration in this dissertation. As discussed in this chapter, new institutionalism as the framework of the analysis of the current subject has been applied to the relationship between governance and growth. Consequently, institution design and structure influence governance quality and economic growth and the relationship between them.

Chapter 4: Economic Crises and the Relationship Between Governance and Growth

As outlined in Chapter 2, a correlation between quality of governance and economic growth exists. In this dissertation, this relationship has been discussed before and after the beginning of the global economic crisis to ascertain whether the crisis affects this relationship. In addition, the current research also analyzes the influence of the level of human development of nations on the relationship between governance and growth during times of crisis.

In this chapter, the influence of the economic crisis on shaping the relationship between quality of governance and economic growth is discussed. Different factors that contribute to shaping the influence of the economic crisis on this relationship (e.g., globalization, government responses to the crisis, and the role of IOs to help countries to recover from the economic crisis) are discussed. Research contributions to the literature are presented at the end of the chapter.

Overview

The current financial crisis has been attributed to the failure of national governments to govern effectively as well as the market's failure to correct itself. Consequently, governments failed to adopt regulations that might prevent the current crisis from happening (Bernanke, 2009; Davidoff & Zaring, 2008; Gruenewald, 2010; Levi-Faur, 2010). In addition, economic crises and their influence on the way governments govern present challenges for theories such as new institutionalism (Peters

et al., 2010; Reinhart & Rogoff, 2009). According to new institutionalists, the relationship between institutional quality and economic growth is such that countries with higher levels of institutional quality will be less affected by crises. However, crises through history have had an influence on all countries, including those with high institutional quality.

Gasiorowski (1995) argues that financial crises have their roots in governance and regulations as well as economic perspectives. She thinks that previous economic crises teach us that weak or unimplemented regulations in almost all countries play an important role in deepening the economic crises. Thus, she argues that "efficient financial crisis containment requires a clear institutional and legal framework with an explicit allocation of responsibilities and proper channels of accountability. It models a governance framework, the core of which is a crisis containment council" (p. 69).

A report by UNDP studies governments' responses to the global economic crisis of 2008 in the regions of Eastern Europe and Central Asia, concluding that "it is generally accepted that the original causes of the global financial crisis were tied to weak regulation" (Repucci, 2011, p. 2). In addition, the way governmental institutions are structured has affected their responses to the financial crisis. The report concludes that the crisis affects governance structure in the countries under study. According to the report, governance improvement is necessary to deal with the current crisis and prevent future crises.

Cerra and Saxena (2008) conducted a study of 190 countries to determine their economic recovery after the economic crises. They also studied the responses of governments and of the global community to the economic crises. The study found that

signs such as global and national growth decline appeared prior to the crises; recognizing these signs would help minimize the impact of the crises. In addition, they found a correlation between institutional quality on one hand and the way governments responded to the crises and the impact of the crises on the local economy on the other, in that high institutional quality positively influenced the ability of the national economy to survive in times of crises. Finally, they argue that the economic crises have revealed an imbalance in the sustainable development and good governance practices by governments before the economic crises. Consequently, in the following section, different factors connected to the global economic crisis of will be discussed.

Globalization, governance, and economic crises. Although the current economic crisis began in the United States, it quickly spread around the globe. According to Agarwal (2009), "even though the origins were concentrated in the economies of North America and Europe, this crisis [the economic crisis of 2008] is not contained in terms of its global impact and reach" (p. 1). Accordingly, globalization has played a major role in shaping the current economic crisis (Agarwal, 2009; Bell & Blanchflower, 2011). On the other hand, economists, politicians, and academic scholars debate the role that international organizations (IOs), such as the IMF and the World Bank, have contributed to deepening the crisis by failing to have international agreements organizing the global market.

IOs have been key players in the global political and economic systems since World War II (Haftel & Thompson, 2006; Tangsupvattana, 2005; Wilkinson, 2005). Many IOs have been established since WWII, such as the United Nations. In contrast, IOs such as the World Trade Organization (WTO) have been established as a result of

globalization and globally increasing foreign direct investment (FDI) activities (Henderson, 2000; Jones, 2009). The assumed roles of IOs are to help organize the global scene (politically, economically and administratively), and to afford financial and non-financial aid to needy countries (Haftel & Thompson, 2006; Henderson, 2000; Jones, 2009). Accordingly, politicians, economists, and academics debate the efficiency and effectiveness of IOs in pushing development, fighting corruption, supporting human rights and higher living standards, and maintaining good governance practices worldwide. Also, politicians disagree about the independence of the decision-making processes of the IOs, which have been accused of serving the interests of developed countries. Finally, there is a debate on the role that IOs should play in preventing economic crises and managing the current crisis (Bhagwati, 2005; Henderson, 2000; Jones, 2009; Langmore & Fitzgerald, 2010).

IOs such as the WTO, and international agreements such as the Kyoto Protocol attempt to regulate and organize the global market, but their success is limited due to their lack of political and economic independence, as well as the conflicts of interest between political and profitable issues, and between developed countries (e.g., USA, Japan, and Western EU) and developing countries (e.g., China, Brazil, and India) (Bhagwati, 2005; Henderson, 2000; Jones, 2009; United Nations Conference on Trade and Development [UNCTD], 2011). Consequently, Henderson (2000) thinks that "international agreements on full disclosure, accounting standards, and other measures to police global capital markets are still rudimentary" (p. 1236).

Langmore and Fitzgerald (2010) argue that international institutions, especially financial institutions, have failed to give voice to emerging economies. They argue that

"international economic and social institutions have failed to adequately evolve in the face of deepening of global interdependence" (Langmore & Fitzgerald, 2010, p. 390). In addition, they think that the shortcomings of international institutions in meeting globalization requirements, such as managing global economic activities, have contributed to the current economic crisis. Thus, they believe the global community needs to rethink and reorganize the role that international organizations play in global governance. According to Langmore and Fitzgerald (2010), "as the world moves toward recovery following the financial crisis, it is imperative to strengthen institutions of global governance to facilitate the well-being of all people, everywhere" (p. 393).

In addition, while he acknowledges the advantages of globalization, such as advanced technologies and the increased global economic growth rate, Mayer-Foulkes (2009) thinks that the way globalization is handled by advanced countries and international organizations is the main cause of the global economic crisis of 2008. According to Mayer-Foulkes (2009), "the economic crisis that began in 2008 has long-term causes that are rooted in the economic dynamics of globalization" (p. 2). In addition, he deems that individual country's responses to the economic crisis will not help the long-term recovery of the national and global economies. Thus, Mayer-Foulkes (2009) argues that global harmonization among countries and international organizations in promoting economic, political, and human development is necessary for economic recovery and sustainable development. According to Mayer-Foulkes (2009):

> Thus, what really needs to be stimulated is the global economy. This can only be done through promoting the development of whole new economic sectors and technologies in advanced countries, deepening economic development in

underdeveloped countries, and reforming globalization to achieve the new levels of governance that are required to meet challenges in infrastructure, education, health, science and sustainability. (p. 15)

To summarize, the lack of international arrangements and laws that organize global economic activities such as global trade and money transactions have been blamed for the spread and intensity of the current financial crisis. Thus, the need for regulations at both the local and global levels to organize and control economic activities such as international trade and local markets is the first lesson learned from the current economic crisis (Birkland, 2006; Blundell-Wignall, Atkinson, & Lee, 2008; Mayer-Foulkes, 2009).

Governments' response to economic crises. Although globalization has been blamed for spreading and deepening the current economic crisis (Langmore & Fitzgerald, 2010; Mayer-Foulkes, 2009), national governments share some blame (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009; Peters et al., 2010). Lack of regulations and short-term strategies have been mentioned by economists and researchers critical of governmental actions dealing with economic crises. Although MacIntyre (1999) thinks that globalization and IO influence have affected countries' responses to the crises, he argues that local governments play a key role in shaping countries' preparedness and response to economic crises by having low-quality regulations. Thus, he argues that the quality of a country's institutions is the main factor in shaping their financial systems and readiness to face and minimize the consequences of economic crises.

On the other hand, the current economic crisis has had a mostly negative impact on governance in developed, less-developed, and developing countries. Harrison and Cline-Cole (2009) think that quality of institutions and governance of a nation

contributed heavily to the impact of the crisis on the national economy. According to Harrison and Cline-Cole (2009), "It is hardly surprising [then] that 'crisis' is politically constructed in different ways, depending on state, region and history" (p. 1). Thus, he deems that low quality of governance in non-developed economies makes their economy weak in facing the global economic crisis. In addition, less developed counties, such as those in Africa, have been more affected by the crisis as a result of the shortage of financial support from developed countries and international organizations (Harrison & Cline-Cole, 2009; Repucci, 2011).

This is not the first and will not be the last economic crisis, but it seems we have not learned from our mistakes (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009; Peters et al., 2010). Davidoff and Zaring (2008) analyze economic crises throughout history, including the current crisis. After reviewing governments' responses to economic crises, they argue that governments have not learned from previous crises to be better prepared to respond to new crises. The authors argue that governments have responded to financial crises throughout history with a short-term view, stretching old regulations and laws rather than implementing new ones that would prevent crises from happening or at least limit their consequences. Additionally, Davidoff and Zaring (2008) argue that governments use emergency responses to financial crises rather than using long-term strategies. According to Davidoff and Zaring (2008), "the problem often begins with the scramble of governments to keep up with fast-paced and deleterious market events, leading to an initial, *ad hoc* phase in government action, where emergencies are responded to with emergency-style rules, and emergency-style process" (p. 63).

In addition, using entrepreneurial and emergency-style responses rather than implementing long-term strategies leads to high corruption levels and less democracy in governance (Davidoff & Zaring, 2008; Repucci, 2011). According to Davidoff and Zaring (2008), governments make political deals in response to economic crises, which have negative consequences on the governing process. Davidoff and Zaring (2008) argue that "government by deal is not open government, and it rejects some of the usual values of administrative law, such as pre-decision notice to affected parties and the public, measured, deliberate action, and comment-ventilated policymaking" (p. 6).

In fact, many theories such as regulatory capture theory, which argues that regulatory state agents created to act in the public interest instead service the interest of all but the public (Dal Bo, 2006); and public interest theory, which assumes that markets are fragmented with special interests and conflict of interests that cannot be self-regulated, so regulators need to both regulate the market and service the public interests and the society in general at the same time (Posner, 1974); contribute to the analysis of the influence of the current economic crisis on the relationship between governance and growth. For the current economic crisis, governments act like entrepreneurs in dealing with financial crisis, where governments' actions such as bailouts serve the interests of businesses more than benefiting the public (Aikins, 2009; Davidoff & Zaring, 2008). In addition, regulators are blamed for failure to adopt quality regulations and laws that follow market development and protect the public interests (Gorton & Metrick, 2012; Krishnamurthy, 2010; Levi-Faur, 2010). Thus, governments need to adopt quality regulations and laws in order for the economy to recover and to prevent future economic crises. According to Krishnamurthy (2010), "more generally, the fallout during this crisis

points to challenges going forward: regulation needs to be geared towards creating financial/organizational structures that are less prone to crises" (p. 27).

The Economic Crisis Across Countries and Across Time

While "there is no official definition of recession, there is general recognition that the term refers to a period of decline in economic activity" (Claessens & Kose, 2009, p. 52). Decline in real gross domestic product (GDP) for two consecutive quarters is considered by economists to be a sign that an economy has entered a recession period (NBER, 2003). Other indicators, such as decline in employment, productivity, and international trade, have also been used by many financial institutions and scholars in defining recession (Claessens & Kose, 2009; NBER, 2003). The National Bureau of Economic Research (NBER), a private research organization that maintains a chronology of U.S. and global economic activities, defines recession as:

> [A] significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales. A recession begins just after the economy reaches a peak of activity and ends as the economy reaches its trough. (NBER, 2003, p. 1)

Countries have identified different starting points of the current economic crisis and their own recession periods. For example, Estonian and Danish officials announced in 2008 that their national economies were in crisis (Statistics Denmark, 2009; Statistics Estonia, 2009), while independent institutions in the United States that maintain a chronology of economic activities stated that the U.S. economies had entered a recession period in 2008 (NBER, 2012). At the global level, statistics of international trade, FDI

figures, and statements from international financial organizations recognized the beginning of 2008 as the economic crisis year (Gressani & Kouame, 2009; IMF, 2010; Sirimanne, 2009; World Bank, 2012b).

The U.S. housing bubble and credit crises of late 2007, resulting from poor lending and shortages in mortgage-market regulations, are considered to have ignited the global economic crisis (Baily & Elliot, 2009; Bernanke, 2009; Simkovic, 2011). According to Bernanke (2009), the U.S. Federal Reserve Chairman, financial institutions used their high liquidity in the early 2000s to lend money to customers (individuals and firms) with low or bad credit. At the same time, mortgage-loan regulations were not sufficiently developed to fulfill the gaps in lending activities, especially lending to people with low or bad credit. After admitting that the housing and credit crises were the main reasons for the economic crisis of 2008, Bernanke (2009), in his speech in Morehouse College, argued that "regulators did not do enough to prevent poor lending, in part because many of the worst loans were made by firms subject to little or no federal regulation" (par. 5).

Although the economic crisis began mainly in the United States, it quickly spread to become a global crisis. Globalization and connections among financial institutions around the world causes the economic crisis to hit all countries at various levels (Baily & Elliott, 2009; Simkovic, 2011; UNCTD, 2009). According to Baily and Elliot (2009), "the U.S. economy has been spending too much and borrowing too much for years and the rest of the world depended on the U.S. consumer as a source of global demand" (p. 21). As a result of the economic downturn in the United States and other countries, such as the European countries, the global economy faced a decline in GDP and other

economic indicators. For example, in the first quarter of 2009, GDP declined 14.4% for Germany, 15.2% for Japan, 7.4% for the United Kingdom, 9.8% for the European Union (Euro area), and 21.5% for Mexico (Baily & Elliott, 2009). Thus, high unemployment rates, decline in GDP and international trade, among other economic indicators, are signs of global economic crisis.

In the following section, changes in GDP per capita were used to identify economic downturns across time and across countries. Other indicators (e.g., Foreign Direct Investment (FDI)), information sources (e.g., official statements by countries' officials and international financial institutions), and research papers are also used to determine when the U.S. economic crisis went global. In addition, political and administrative reforms introduced by governments in response to the current economic crisis are presented in drawing an economic crisis timeline.

Countries' economic downturn. Officials in many countries, such as Denmark, Estonia, and Ireland, announced in 2008 that their economies had entered a recession period (two consecutive quarters of decline in GDP). Denmark was the first European country to make such an announcement; according to Denmark Statistics (2009), in 2008, the GDP of the Danish economy shrank 0.2% in the fourth quarter of 2007, followed by a 0.6% decline in the first quarter of 2008. Other economies followed Denmark in recording negative growth in 2008. Estonia reported 0.9% in the second quarter and 3.3% in the third (Statistics Estonia, 2012), Ireland reported 0.3% in the first quarter and 0.5% in the second (Central Statistics Office, 2009), and Singapore reported 5.7% in the second quarter and 6.3% in the third (Balakrishnan, 2008).

Table 2 shows the 10 largest economies (countries) by GDP per capita (current international $). With the exception of China, India, and Brazil, all countries faced changes in their GDP before and after the onset of the economic crisis of 2008.

Table 2

Ten Largest Economies by GDP Per Capita (2005–2010)

Economy	2010	2009	2008	2007	2006	2005
United States of America	46,653	45,361	46,350	46,590	46,114	45,293
China	7,206	6,536	5,971	5,506	4,898	4,413
Japan	33,649	32,774	34,129	34,352	33,553	32,878
India	3,354	3,106	2,946	2,815	2,616	2,419
Germany	34,743	34,053	35,374	34,864	33,981	32,967
Russia	15,719	14,903	15,923	15,062	13,894	12,843
Brazil	10,847	10,306	10,304	9,902	9,468	9,209
U.K	34,342	33,888	35,468	35,455	34,642	33,898
France	33,103	32,550	33,058	33,102	32,661	32,209
Italy	30,080	29,837	31,283	31,855	31,595	31,141

Source: World Bank Group (2012a).

Most countries have responded to the financial crisis in some way, including political and administrative reforms and bailouts to private companies (Bell & Blanchflower, 2011). Countries such as the United States and those located in Europe and Asia have enacted legislation and regulations to support their national economies. In the United States, the Emergency Economic Stabilization Act (2008), Wall Street Reform and Consumer Protection Act of 2009, the Consumer Protection Act of 2009, and the Restoring American Financial Stability Act of 2010 were created by the U.S. government as a response to the financial crisis of 2008 (NBER, 2012). In the Philippines, for example, the government issued the Economic Resiliency Plan (ERP) as a response to the

economic crisis of 2008. The ERP is "geared towards stimulating the economy through a mix of government spending, tax cuts, and public-private partnership projects" (Yap et al., 2009, p. 19). In contrast, central banks and regulatory authorities in countries with strong economies, such as China and other oil-based economies, used monetary policies such as reducing interest rates, and passed regulations to reduce the influence of the global economic crisis on the national economy (IMF, 2010; Khamis & Semlali, 2010; Tong & Yang, 2009).

In addition, less-developed countries (LDCs) were hit hard by the economic crisis of 2008. Economic growth in LDCs was reduced as a result of the economic crisis. Aid that usually came from IOs and developed countries was at its lowest point in 2008 and beyond compared to pre-crisis (Acha, 2011; Andersen, Jones, & Tarp, 2008; Gressani & Kouame, 2009; Harrison & Cline-Cole, 2009; Repucci, 2011). According to Acha (2011), "as the inter-linked developed economies and emerging markets were suffering the effects of this crisis [the economic crisis of 2008], it was believed in certain quarters that the crisis will be confined there" (p. 211). According to the South Center, an independent research center, growth in LDCs declined from 7.6 % in 2007 to 3.5 % in 2009. In addition, investment in Sub-Saharan Africa countries (as LDCs), for example, declined in 2009 by 12 % compared to pre-crisis (Acha, 2011). Consequently, in 2009 and beyond, LDC governments were forced to cut spending on education, health, and other major social services because of shortage of revenues and international aid (Acha, 2011; Gressani & Kouame, 2009; Harrison & Cline-Cole, 2009).

Global economic downturn. Although the current economic crisis started in the United States and European countries, it quickly spread across the globe (Gressani &

Kouame, 2009; Sirimanne, 2009). According to Sirimanne, (2009), "by the third-quarter of 2008, what started as a housing-sector crisis in the United States has turned into a full-blown global financial crisis with far reaching and still unfolding consequences" (p. 2). In this section, measures for identifying the global economic downturn in the current economic crisis across time will be presented.

According to the IMF (2010), the world GDP per capita declined 0.5% in 2009, from $60,917 billion to $60,495 billion, the first decline in world GDP in 60 years. In addition, the European Union GDP declined sharply in 2009 compared to 2008. The EU GDP declined 13.6 % in 2009, from $18,387 billion to $15,886 billion. (Note that the decline of world GDP and EU GDP was presented in the fiscal year of 2009 because the economic crisis started in 2008.)

Additionally, world trade volume of goods and services declined 4.38 % in 2008 from 2007 values and, in 2009, the world trade volume changed negatively (-11.89 %) compared to 2008 levels (IMF, 2010). Global trade, another economic indicator, declined 2.1 % in 2009, representing its first decline in three decades according to the World Bank (World Bank, 2012a). Job creation and global poverty have also been affected as a result of the financial crisis (Gressani & Kouame, 2009).

In addition, annual economic reports from countries and international organizations in 2008 and 2009 show declines in Foreign Direct Investment (FDI) and exports and imports between countries. According to United Nations Conference on Trade and Development (UNCTD) (2011), the average global FDI (outflow and inflow) dropped sharply in 2008 and early 2009. The average global FDI inflows for 2005–2007 totaled $1,472 billion and, in the peak of 2007 (the point at which inflows were the

highest in 2007), global FDI inflows increased 33.9% to reach $1,971 billion. In 2008 and 2009, global FDI inflows declined sharply (37 %), falling to $1,185 billion in 2009. Global FDI outflows had the same declining trend in 2008 and 2009. According to UNCTD (2011), "at $1,323 billion, global FDI outflows in 2010, while increasing over the previous year, are still some 11 per cent below the pre-crisis average, and 39 per cent below the 2007 peak" (p. 6).

Consequently, IOs such as the IMF and the World Bank Group issued more loans in 2008 and beyond than in previous years to countries hit hard by the economic crisis. According to the World Bank (2012b), assistance to developing and less-developed countries has increased sharply since the financial crisis of 2008 began. According to the World Bank (2012a), financial assistance such as loans and credits given to countries by international organizations reached $125,952 billion in 2008, an 18 % increase from the 2005-2007 period average of $106,548 billion. In 2011, the World Bank Group committed $57 billion to countries in need of financial help, an amount double compared to pre-crisis values. This assistance includes both financial and non-financial help and covers fields such as education and health (World Bank, 2012b). According to World Bank (2012b),

> IBRD [International Bank for Reconstruction and Development] commitments, at $26.7 billion, are nearly double the FY08, pre-crisis level of $13.5 billion, and follows record commitments of $44.2 billion in FY10 and $32.9 billion in FY09, as the crisis peaked in developing countries. (par. 6)

Therefore, although signs of economic turbulence existed prior to 2008 and some nations did not officially request financial help—as a sign of facing economic crisis—

until 2009, we could argue confidently that 2008 is the year that the national and global financial crisis began. Thus, adopting 2008 as the turning point of the national and global economies and as a financial crisis year has strong support from global and nations' economic indicators, international organizations' publications, researches, and from country officials' announcements and requests for financial help.

As discussed earlier, the economic indicators for 2005-2010 and various governments' actions in response to the crisis support including the 2008 data as part of the pre-crisis period. Additionally, removing a year's data from a time series analysis may negatively affect the accuracy and reliability of the results (Enders, 1995; Honaker & King, 2010). Finally, other studies similar in structure to the current study (Gros & Alcidi, 2010; Labonte, 2012; Ma & Cheng, 2005; Schneider, 2010) did not remove the crisis year's data from their analysis. Thus, in the interest of analytical consistency and reliable and meaningful results, the current study includes 2008 as part of the pre-crisis period rather than either removing the year's data from the analysis or including them as part of the post-crisis period.

Contributions of the Current Study

Existing literature on the relationship between economic growth and quality of governance demonstrates the need for more studies to explore and clarify the relationship between growth and governance and to contribute to the debate among policy makers and researchers on the level and direction of this relationship (Acemoglu et al., 2001; Arndt & Oman, 2006; Daly, 2003; Pradhan & Sanyal, 2011). Additionally, the sample size and methodology used by researchers, among other reasons, can greatly influence the study findings (Arndt & Oman, 2006; Grindle, 2007). Grindle (2007) states that the results of

studies that address the relationship between economic growth and quality of governance vary in the governance literature, as different techniques and sample sizes give different results. According to Grindle (2007), "methodological choices about how to study the issue of governance and development have considerable impact on findings" (p. 555).

Many researchers have studied the relationship between quality of governance, economic growth, and human development, but have said little regarding the influence of times of crisis on these relationships. In addition, during economic crises, governments and IOs concentrate more on economic recovery and economic growth than on developing good governance practices by governments (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009). Thus, in addition to filling a gap in the literature on the subject, studying the influence of the economic crisis on the relationship between governance and economic growth may help IOs and governments develop strategic plans to promote economic growth without sacrificing good governance practices. Also, the result of the current research may help politicians and decision makers to better understand the influence of crises on the governing process and to respond more efficiently to crises. In addition, the results may help distinguish the aspects of the governing process that are most important for supporting economic growth during times of crisis.

As discussed earlier, throughout history, economic crises have influenced the relationship between different aspects of the governance process and economic growth. The crises have impacted the relationship between growth and governance, which include voice and accountability (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009), political stability and absence of violence (Gasiorowski, 1995; Haftel & Thompson, 2006;

Przeworski et al., 2000), government effectiveness (Aikins, 2009; Comfort, 1988; MacIntyre, 1999; Ndulu & O'Connell, 1999), regulatory quality (Kim, 2000; Krishnamurthy, 2010; Levi-Faur, 2010; Repucci, 2011), rule of law (Haftel & Thompson, 2006; Repucci, 2011), and control of corruption (Davidoff & Zaring, 2008; Heckelman & Powell, 2007; Mironov, 2005). On the other hand, it has been argued that the current global economic crisis is not different from previous crises in influencing the relationship between quality of governance and economic growth (Davidoff & Zaring, 2008; Gorton & Metrick, 2012; Krishnamurthy, 2010; Levi-Faur, 2010; Kaufmann et al., 2009b; Reinhart & Rogoff, 2009; Peters et al., 2010).

Accordingly, the first research question in this dissertation studied the influence of the global economic crisis on the relationship between governance and growth. Therefore, six governance indicators measuring various aspects of the governing process were used to provide an understanding of the influence of the economic crisis on shaping the relationship between economic growth and each aspect of the governing process. Consequently, the relationship between governance indicators including voice and accountability (VA), political stability and absence of violence (PS), government effectiveness (GE), rule of law (RL), regulatory quality (RQ), control of corruption (CC), and GDP have been analyzed.

On the other hand, the measure of GDP per capita can be high in both complex, developed countries as well as simple, raw extraction economies like those of the MENA region (mainly oil-rich countries), where this similarity may affect the accuracy of the findings of the current research. For that reason and to add depth to the current research, human development level of nations (four groups) were used to measure the influence of

the human development factor on the relationship between governance and growth during times of crisis. Answering both research questions should clarify the influence of the global economic crisis on the relationship between governance and growth since comparing quality of governance in nations to GDP per capita by itself may not be a fair measure.

In addition, analyzing the development impact may help us to understand the role that the level of human development plays in shaping the relationship between governance and growth during times of crisis. North (1990) argues that an institution's structure and design influence economic and political outcomes. Thus, the current study may provide an understanding of the relationship between institutions and human development on one hand, and economic and governance development on the other.

Chapter Summary

The influence of the global economic crisis on the relationship between governance and economic growth is the main subject of this dissertation. In addition, the human development level of four groups of nations were used to analyze the influence of human development in shaping the relationship between governance and growth during times of crisis. As discussed in this chapter, many factors shape the relationship between governance and growth during times of crisis, including globalization and the response of governments and international institutions. Thus, studying whether the economic crisis has affected the relationship between governance and growth, and the impact of the human development level of nations on shaping this relationship during times of crisis should help in understanding the relationship between quality of governance, economic growth, and human development during times of crises.

Chapter 5: Research Questions and Data Sources

Chapters 2 through 4 discussed the concept of governance and how it impacts the way governments govern. Also, research addressing the relationship between governance and economic growth was discussed. This discussion sheds light on the relationship between governance and economic growth during times of crisis. As discussed earlier, there are two attitudes regarding the relationship between quality of governance and economic growth: one group argues that governance is a precondition for economic growth, while the other group suggests that governments need to first have economic growth in order to adopt good governance practices. However, scholars do agree that there is a strong correlation between quality of governance and economic growth.

New institutionalism theory, discussed in chapter 3, argues that high institutional quality leads to economic growth (North, 1991; Powell & DiMaggio, 1991). New institutionalists argue that high quality of rules of the game that organizes the way organizations' work will facilitate and enhance economic growth. Thus, new institutionalists agree that there is a strong correlation between governance and economic growth. In contrast, economic growth that is not combined with a high level of institutional' quality will be unstable and unsustainable according to new institutionalism theory.

Although many studies have addressed economic crises throughout history, little has been said regarding the influence of economic crises on the relationship between

governance and growth. In addition, even though the current economic crisis started in 2007, government officials, scholars, and economists show that 2008 is considered the year of crisis.

This paper focuses not on whether there is a relationship between quality of governance and economic growth nor the direction of this relationship, but rather on the influence of the global economic crisis in shaping the relationship between governance and economic growth. To that end, this paper studies the relationship between governance and economic growth before and after the onset of the global economic crisis in 2008 to evaluate whether this relationship has been affected by the crisis. In addition, this paper investigates the influence of the economic crisis on shaping the relationship between governance and growth without studying whether the crisis is the reason behind changes in this relationship. Furthermore, the development status of nations and its effect on the relationship between quality of governance and growth during times of crisis will be examined.

The research design and methodology will be presented in this chapter to provide an understanding of how data will be collected and analyzed, and how research questions will be addressed. In this section, measures of governance, economic growth, and human development will be presented. In addition, the sources of data and the way data are collected will be discussed.

Measuring Economic Growth

Economic growth is measured by the change of gross domestic product (GDP) per capita or other measurements of aggregate income, while change in GDP per capita from year to year can be used to measure economic growth over time (Ignatiuk, 2009; Taylor

& Taylor, 2004; Vachris & Thomas, 1999). According to Arestis, Baddeley, and MCombie (2007), "economic growth involves the expansion of real output per capita and per worker over time" (p. 14). Consequently, GDP per capita has been used in many studies, countries, international organizations such as the International Monetary Fund (IMF) and the World Bank, and indices such as the human development index (HDI) to measure economic growth (Arndt & Oman, 2006; Kaufmann & Kraay, 2002;Mehanna et al., 2010; Przeworski et al., 2000).

According to the UNDP (2010):

> From time immemorial, and indeed throughout the history of economic thought, Gross Domestic Product has always been considered the most important indicator of development. A nation's wealth and, therefore, the welfare of its citizens was determined in terms of per capita income. (p. 11)

As a measure of economic growth in nations, GDP has been criticized for giving an inaccurate picture of the status of an economy (Constanza, Hart, Posner, & Thalbert, 2009; Shostak, 2001). According to Shostak (2001), "[T]he GDP framework cannot tell us whether final goods and services that were produced during a particular period of time are a reflection of real wealth expansion, or a reflection of capital consumption" (par. 6). Shostak (2001) agrees and argues that, while injecting money into an economy might lead to an increase in the GDP without indicating that the economy is growing. The same argument is raised by Constanza et al. (2009), who argue that real GDP is a misleading measure of the well-being of nations. According to Constanza et al. (2009), "the continued misuse of GDP as a measure of well-being necessitates an immediate,

aggressive, and ongoing campaign to change the indicators that decision makers are using to guide policies and evaluate progress" (p. 1).

According to Islam (1998), "Economic growth is usually measured by real GDP per capita" (p. 416, note 5). Kentor (1998) examined the impact of a country's dependence on foreign investment on economic growth in 36 selected countries over a period of 50 years. GDP per capita was used as a measure of economic growth, while debits in investment income and countries' balance of payments were used as measures of foreign investment. Although the study found that dependence on foreign capital had a positive effect on economic growth in the short term, it found the opposite in the long term. Additionally, the study showed that "peripheral countries with relatively high dependence on foreign capital exhibit slower economic growth than… less dependent peripheral countries" (Kentor, 1998, p. 1024).

Another example of researchers using GDP per capita as a measure of economic growth is a study by Calderón and Liu (2002) examining the direction of causality between financial development and economic growth in 109 countries from 1940 to 1994. The study used GDP per capita as a measure of economic growth and used the ratio of broad money (M2) to GDP and the ratio of credits provided by financial intermediaries to the private sector to GDP to measure financial development. The study found a causal relationship between financial development and economic growth, which appeared more evident in developing countries than in industrial countries.

Accordingly, GDP per capita, PPP (current international $) will be used in the current research to measure economic growth. The concept of purchasing power parity (PPP) has been variously defined as "the rate of currency conversion that equalizes

purchasing power of different currencies and so has the dimensions of an exchange rate as well as a price index" (Vachris & Thomas, 1999, p. 4) or "the nominal exchange rate between two currencies should be equal to the ratio of aggregate price levels between the two countries, so that a unit of currency of one country will have the same purchasing power in a foreign country" (Taylor & Taylor, 2004, p. 135). For the current research, the definition and explanation provided by Ignatiuk (2009) is used. According to Ignatiuk (2009):

> Purchasing Power Parity (henceforth PPP) theory describes the relationship between currency exchange rate and price level in two countries. The exchange rate of two currencies is positively related to the price level in foreign country and negatively related to price level in home country. Equilibrium is reached when the ratio of the two countries' price levels of fixed basket of goods equals the exchange rate between two countries. (p. 5)

There are some benefits to using GDP per capita at PPP over other measures of GDP per capita. First, GDP per capita at PPP enables us to make economic comparisons between countries over time, which can help us to study the relationship between the governance and economic growth over time. While acknowledging the controversy among scholars and economists regarding different measures of GDP, Nguyen (2005) argues that "it is important to understand that purchasing power parity is a powerful tool that provides us a common lens by which to view the economic health and condition of different countries" (p. 8). Second, GDP per capita at PPP has an advantage in that it is based on dividing the GDP total of each country by its population in any point of time and thus takes population increase into account. Third, GDP per capita at PPP takes into

account a nation's cost of living and productivity (Nguyen, 2005; Vachris & Thomas, 1999). According to Vachris and Thomas (1999), "because exchange rate movements, in general, tend to be more volatile than changes in national price levels, the purchasing power parity approach provides the proper basis for comparing living standards and examining productivity levels over time" (p. 3).

Purchasing power parity (PPP) is calculated based on countries' price levels of fixed basket of goods. PPP uses market exchanges rate and a basket of goods across countries as a basis for comparisons among countries. According to the World Bank (2012a):

> GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. (par. 1)

Simply put, PPP is calculated by adjusting and standardizing the prices of a particular basket of goods and services across countries for comparison. Although there are many ways to adjust the prices, the World Bank uses the international dollar as a basis for adjustment.

Although PPP has some shortages, such as differences in the goods commonly consumed by different countries, using a specific set of goods makes PPP more accurate and comparable across countries than other methods. Thus, PPP is used as an adjustment to the potential bias of GDP when comparing various countries' performance (Ignatiuk, 2009; Taylor & Taylor, 2004; Vachris & Thomas, 1999).

Measuring Governance

As discussed in Chapters 2 and 4, governance as a concept has been a concern of scholars and policy-makers in recent decades (Arndt & Oman, 2006; de Ferranti et al., 2009; Rhodes, 2007). Although measuring the quality of governance can be problematic because there is no agreement among academics on the definition of governance, it is clear that governance quality plays an important role in a state's decision-making processes, foreign investors' decisions, and international donors' willingness to provide aid (Arndt & Oman, 2006; Kaufman et al.,2010a; Mimicopoulos et al., 2007; Thomas, 2008).

Politicians and decision-makers have discussed many reasons for the importance of measuring governance quality. As noted previously, a number of scholars have discussed the need for a scientific mechanism to evaluate governments' work, in order to develop a tool to help policy-makers assess governing processes (Arndt & Oman, 2006; Kaufmann et al., 2010a; Langbein & Knack, 2010; Mimicopoulos et al., 2007; Thomas, 2008). According to Mimicopoulos et al. (2007), "measuring governance quality is thus of great significance" (p. iii).

In addition, governments use quality of governance as a guide to develop their governing practices (Arndt & Oman, 2006). Thus, decision-makers at the local and global level "seek to quantify the quality of governance" (Arndt & Oman, 2006, p. 11) in order to have a tool to assess the governing process (Kaufmann et al., 2009b). Also, international investors use governance indicators in evaluating different aspects of markets, such as risk of investments and political stability (Adams & Mengistu, 2008; Arndt & Oman, 2006). Accordingly, Thomas (2008) states that "as policymakers and

researchers focus more on the impact of governance in economic development, they have required measures of the quality of governance to set policy or to conduct analyses" (p. 1).

This recognition of the importance of the quality of governance by local and international policy-makers makes measuring governance quality an important tool for evaluating the way governments work. Consequently, many indices and measures of governance have been developed to measure countries' quality of governance. According to World Bank Institute (2006), more than 140 sets of governance indicators were available to users as of 2006.

In their study on indices that measure quality of governance, Arndt and Oman (2006) argue that many indices are not comprehensive, not accurate, and have been misused. Despite this, they state that "a significant and rapidly growing number of international business and policy decisions directly rely on such indicators. A growing amount of analysis that influences broader perceptions, and often directly or indirectly shapes future decisions, does likewise" (p. 13).

The International country risk guide (ICRG) by Political Risk Services, the freedom house index by Freedom House, the corruption perception index (CPI) by Transparency International, and the worldwide governance indicators (WGI) by the World Bank Group are examples of indices that attempt to measure the governance process. Although all of these governance indices measure one or more aspect of governance, each one has different methodologies and covers a different number of countries. In addition, different users use different sets of governance indices based on the purpose for their research (Arndt & Oman, 2006; de Ferranti et al., 2009). For

example, business entrepreneurs concentrate on business risk aspects of governance, while policymakers and IOs concentrate on governance development aspects, such as democracy and human rights factors.

Worldwide Governance Indicators (WGI)

Although 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" (Arndt & Oman, 2006, p. 28). In addition, Kaufmann et al. (2009a) argue that WGI was introduced as comprehensive set of indicators which combined the major elements of other indices in one indicator. Kaufman et al. (2009a) do not claim that WGI was introduced to be an alternative to other indices but an order of indices.

The current research will use the worldwide governance indicators (WGIs) as a measure of governance quality for several reasons. First, the index has 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 (Arndt & Oman, 2006; de Ferranti et al., 2009; Langbein & Knack, 2010; Thomas, 2008). Accordingly, in the current research, each indicator will be used as a unique variable by itself in order to have better understanding of the relationship between each aspect of the governance process and GDP.

In addition, 31 sources of data were used to construct the WGI indicators, thus enriching their quality (Kaufmann et al., 2010a, 2009a). The WGI, which used more than 441 variables in formulating and measuring the six indicators of governance, covers over 213 countries and territories, making this the only set of indicators to cover all member states of the United Nations (Arndt & Oman, 2006). The WGI has been an annual indicator since 2004; however, it was biannual from 1996–2003.

According to Kaufmann et al. (2010a), "In the WGI project we rely exclusively on perceptions-based governance data sources" (p. 5). Accordingly, two primary broad data sources contributed to building the WGI indicators: expert opinions as well as citizen and entrepreneur surveys. Data from a variety of sources such as governmental and nongovernmental organizations, business, and international and regional organizations have contributed to constructing the WGI. New sources were added to recent versions of WGI; for example, democracy index was introduced to WGI in 2006 and then used in the 2008 index as part of the voice and accountability (VA) indicator (Kaufmann et al., 2009, 2010a).

The WGI project classifies six categories of governance including voice and accountability, political stability and absence of violence, rule of law, regulatory quality, government effectiveness, and control of corruption. Accordingly, each indicator is constructed by using data collected from a number of different data sources. Although most data sources are publicly available, two data sources—the World Bank's country policy and institutional assessment (CPIA) and the corresponding assessments produced by the African Development Bank and the Asian Development Bank—are publicly

unavailable due to "the disclosure policy of these organizations" (Kaufmann et al., 2010a, p. 8).

Since different datasets were used to build the WGI, the authors revised many figures and indices to have the same pattern among them to be used in the WGI. Kaufmann et al. (2009a) claim that the revisions were minor and do not affect the final product. According to Kaufmann et al. (2009a):

> In all cases over the past 10 years, the correlation between the original and the revised indicators is 0.99 or higher, and in no cases are changes to scores for a single country due to revisions statistically significant at the 90 percent level. (p. 12)

The authors of WGI used an aggregation methodology to build the index. An aggregation method is a statistical method that combines different indices to make a single indicator, so the WGI combined different indices and information sources to construct each indicator of the six indicators that WGI has. Kaufmann et al. (2007) argue that because different sources are used, such as surveys and indices, aggregate methodology is the best method to construct valid and reliable indicators because this method is uniting the attitude of figures that come from different datasets. In addition, the product of such an aggregate methodology is a helpful tool in comparing different data sources across time and across countries (Arndt & Oman, 2006; Kaufmann et al., 2007, 2010a). Furthermore, the governance process includes many aspects that cannot be combined in a single indicator, so combining many individual data sources into aggregate governance indicators makes an aggregate methodology the best method of constructing indicators that measure different aspect of the governing process (Arndt & Oman, 2006;

Kaufmann et al., 2007; Mimicopoulos et al., 2007). There are many models to perform aggregation and one of them is the unobserved components model (UCM), which is used in the WGI. According to Kaufmann et al. (2009a), "the main advantage of this approach is that the aggregate indicators are more informative about unobserved governance than any individual data source" (p. 12).

Additionally, confidence interval (90%) has been used to construct the worldwide governance indicators (WGI) to ensure that they show more accurate and comparable results among countries. According to the WGI, standard errors for measuring an indicator are used to show the extent to which the estimated value of a governance indicator for a country accurately measures what is supposed to be measured. According to Kaufmann et al. (2009a), "standard error [in the worldwide governance indicators project] reflects variability around the point estimate of governance" (par. 2). In other words, the number of data sources, such as surveys and expert opinions, that contribute to the calculation of the estimated values (i.e., governance scores) of indicators for countries varies; therefore, the more similar the value derived from sources is to the indicators' score, the smaller will be the margin of error and the more accurate will be the result. Thus, governance scores lie within a standardized scale ranging from -2.5 to +2.5 (Kaufmann et al., 2009a).

Kaufmann et al. (2010a) state that, "standard errors are essential to the correct interpretation of our estimates of governance, as they capture the inherent uncertainty is measuring governance" (p. 11). Thus, in comparison among countries, the designers of the WGI urge users of WGI indicators to use values of standard errors and estimated values (i.e., governance scores) together for a better understanding of each country's

performance in each governance indicator compared to other countries (Kaufmann et al., 2009a, 2010a). Finally, in their explanation of the existence of margins of error in the worldwide governance indicators project, Kaufmann et al. (2010a) deem that

> The presence of margins of error in our governance estimates is not a consequence of our use of subjective or perceptions-based data to measure governance. Rather, it simply reflects the reality that available data are imperfect proxies for the concepts that we are trying to measure. (p. 11)

All data presented in the indicators have been scaled to run from one to zero in order to have standardized measures. The authors of WGI use governance distribution (percentile of the distribution 5th, 10th, 15th, .etc.) for illustrative purposes. Also, they use "the standard normal units of the governance indicator, ranging from around -2.5 to +2.5, and in percentile rank terms ranging from 0 (lowest) to 100 (highest) among all countries worldwide" (Kaufmann et al., 2010a, p. 12). Finally, the authors argue that "…, one should not interpret the WGI data as signaling a statistically significant difference between the two countries" (Kaufmann et al., 2010a, p. 13), because they used a high confidence interval, 90 percent, which might cause overlap, and because of the level of margin of error that each indicator has. Thus, they think it is helpful to use each indicator by itself to have comparisons among countries or comparisons over a period of time for each country. Another suggested application of WGI is to use a governance scale (-2.5 - +2.5) to measure differences among countries regarding governance quality (Kaufmann et al., 2010a). Accordingly, a governance scale of quality of governance (-2.5 to +2.5), where -2.5 is low quality and +2.5 is high quality of governance, will be adopted in the current research.

The worldwide governance indicators (WGI) use margins of error to estimate each indicator's scores for each country. Thus, the governance scores presented in the current study are in fact *estimated* figures including margins of error. With each estimated governance score, standard errors and margins of error are reported in order to provide all necessary information to accurately compare either two countries or a single country over time when using the WGI. According to Kaufmann et al. (2010a), in the WGI:

> [W]henever we compare estimates of governance for two countries, or for a single country over time, we always report the 90 percent confidence interval associated with both estimates of governance, i.e. the estimate of governance +/- 1.64 times its standard deviation. (p. 11)

Manzetti (2003), for example, conducted a study to determine whether there is a relationship between major economic crises in the 1980s and 1990s and low scores in governance indicators. The study used data for sixteen countries during a single year, 2000-2001. Countries' percentile ranks from the World Bank Governance Research Indicators were used to compare countries' performance in the quality of governance indicators during times of crises. The study found that accountability played an important role in worsening the crises in the countries under study. Manzetti (2003) argues that bad performance in the accountability aspect of governance was more responsible for intensifying the economic crises in 1980s and 1990s than bad performance in other governance aspects. Manzetti (2003), in his case study of Argentina's performance in governance indicators during its 2002 crisis, found that a lack of accountability of government institutions and a high level of corruption played a more important role than

other governance aspects in deepening the Argentine crisis. According to Manzetti (2003), "lack of accountability in government action is associated with countries suffering severe economic crisis" (p. 360).

A study by Greg Barton provides another example of how researchers use countries' percentile rank from the worldwide governance indicators (WGI). Barton (2008) used countries' WGI percentile rank to compare Indonesia's performance to that of other Asian countries influenced by the Asian crisis in the 1990s. He also evaluated the Indonesian government's performance using the quality of governance indicators from 1996-2006. Even though Indonesia shows positive trends in some governance indicators compared to some of the Asian countries hit by the 1990s crisis, Barton (2008) argues that "Indonesia still has tremendous work ahead of it before it can be regarded as having reached even a modest level of good governance" (p. 143).

The WGI authors recommend using the standard errors along with the estimates scores when performing comparisons with the WGI (Kaufmann et al., 2010a). However, since the aim of this study is not to compare two countries' performance or to evaluate the performance of a single country over time, but rather to examine the influence of the economic crisis on the relationship between governance and growth, this study uses the WGI's estimated scores of governance but not the other figures reported by the WGI. In addition, using the estimated governance scores alone sufficiently serves the purpose of this study without affecting the quality of the results. Also, since data for 173 countries and four development groups (N= 42-46) are used in this study, using other figures presented by the WGI along with the estimated governance scores in analyzing data would unnecessarily complicate the analysis and could affect the results. In addition,

other researchers who discussed subjects similar to the current research and used WGI dataset, such as Arndt and Oman (2006), Abdellatif (2003), Mehanna et al. (2010), Kaufman and Kraay (2002), and Santiso (2001), used estimated values (i.e., governance scores) of indicators for countries in their data analyses.

Critiques of WGI

A number of researchers have questioned the validity of the WGI (Langbein & Knack, 2010), however, most studies agree on the popularity of the WGI among policymakers and in academia (Thomas, 2008). Thomas (2008) states that "these indicators [the WGI] have been used by researchers as explanatory variables and by United States policymakers to allocate aid packages of hundreds of millions of dollars" (p. 2).

In contrast, the aggregation methodology used in the WGI has been criticized for producing invalid and undependable indices (Apaza, 2009; Langbein & Knack, 2010). Accordingly, critics have suggested ways to utilize the WGI with more accuracy. Langbein and Knack (2010) for example, proposed using each of the six indicators of the WGI as an independent index. In addition, critics have asked for more testing of the accuracy of data collected through third parties (sub-indicators) (Langbein & Knack, 2010; Thomas, 2008). Finally, the methodology used by WGI has been challenged Apaza (2009), for example, who suggested using ordinary least squares (OLS) regression, rather than aggregate methodology, as the main methodology in the WGI to increase the validity and reliability of the indicators.

The construct validity of the WGI was the main concern for all studies that discussed and critiqued the WGI, such as Thomas (2008), Apaza (2009), and Langbein

and Knack (2010). According to Thomas (2008) "no evidence for construct validity has been presented; indeed, given the methodological choices, it is doubtful that it could be" (p. 15).

Kaufmann et al. (2007) explicitly discuss eleven critiques of WGI in an effort to "refute them as either conceptually incorrect or empirically unsubstantiated" (p. 1). Kaufmann et al. (2007) conclude that the WGI has validity and reliability as a measure of governance quality. In addition, they argue that, contrary to the critiques raised by many authors, the methodology used in the WGI and its data collection does not affect its value as a measure of governance quality.

After acknowledging that the WGI has standard errors in its estimates, Kaufmann et al. (2007, 2010a, 2010b & 2010c) challenged and responded to most of the critiques introduced by authors such as Thomas (2008), Apaza (2009), and Langbein and Knack (2010). For example, Kaufman et al. (2010b) argue that "'construct validity' is not a useful tool to assess the merits of the WGI, and even if it were, Thomas [2008] provides no evidence of any practical consequences of failure to meet the criteria of construct validity" (p. 55).

Langbein and Knack (2010), on the other hand, argue that the WGI is lacking in 'causal' and 'measurement' relationships, which influence its results and make the outcome meaningless or tautological. Additionally, to avoid overlap among the six components (indicators) that were used to structure the WGI, they suggest using every component as a single index. According to Langbein and Knack (2010), "the separate WGI indicators, because they are by definition overlapping, if not equivalent, are tautological" (p. 364). In response, Kaufmann et al. (2010c) argue that aggregation

methodology is suitable for building the WGI since different indices were used to build a single data source. Also, they deem that testing the relationship between dimensions (components), as Langbein and Knack (2010) do to prove the meaninglessness of the outcome of the WGI, is not the purpose of the WGI, because all dimensions will create six indicators, not one final index (Kaufmann et al., 2010c).

Alternatively, Mimicopoulos et al. (2007) deem that the methodology used by the WGI to measure governance is successful and that the WGI has credibility among decision makers. The authors argue that objective data have predictability and acceptance in research and in academia but that subjective data, like those used by the WGI, also have advantages. They think that subjective data are helpful when objective data are irrelevant or not accessible, and they mention how difficult it is to collect objective data to measure something like corruption. Also, although aggregate indicators have some disadvantages, Mimicopoulos et al. (2007) think that the aggregate methodology that the WGI indicators use to measure governance quality has many advantages, such as the ability to combine many data sources with different methods in one indicator. According to Mimicopoulos et al. (2007), "aggregated governance scores are particularly useful to analyze the correlations of governance with or determinants of several over features such as development, income or corruption" (p. 29).

Therefore, Mimicopoulos et al. (2007) value the contribution that the WGI has made to researchers and policy makers:

> Governance indicators assess and compare the institutional quality of countries and can assist in research and policymaking. Initially these indicators were used by academics in analyzing economic growth and evaluating the performance of

the public sector. More recently however governance indicators are being used to evaluate decisions about conditional development assistance. Measuring governance quality is thus of great significance. (p. 3)

Measuring Human Development

The relationship between human development and governance has long been debated among scholars of social science and other fields (Arndt & Oman, 2006; Kaufmann & Kraay, 2002; Mehanna et al, 2010; Pradhan & Sanyal, 2011; Przeworski et al., 2000). In addition, human development shares some principals with good governance practices by governments, such as supporting free speech, human rights, and improving public services (Alkire, 2010; Grindle, 2007; Sagar & Najam, 1998). Pradhan and Sanyal (2011) argue that good governance practices such as the rule of law and transparency are conditions for high levels of education and health systems. According to Pradhan and Sanyal (2011), high quality of governance resulted in more efficient and effective governments work that lead to high levels of human and economic development.

Economic growth has been linked to human development such as health and education (Alkire, 2010; Kaufmann & Kraay, 2002; Ndulu & O'Connell, 1999; Przeworski et al., 2000). The United Nations Development Program (UNDP) deems that economic growth is part of human development, where education and health are the other parts of human development; also, the UNDP argues that each one needs the others. According to UNDP (2000), "resources generated by economic growth have financed human development and created employment while human development has contributed to economic growth" (p. 7).

Smith (2007) argues that human development and economic development needs each other, so we cannot concentrate on one and forget the other. According to Smith, "there is in effect a virtuous circle of human development and economic development, each enhancing the other" (p. 14). Adams and Mengistu (2008) share the same thoughts and argue that there is a strong correlation between quality of governance, economic growth on one hand and human development on the other. Thus, they think 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.

Therefore, there is a strong correlation between governance, economic growth, and human development. This relationship makes nation's human development level the best candidate to be used in this study compared to other measures such as country's level of income and democracy level in analyzing the relationship between governance and growth during times of crisis. In addition, using human development categories (four categories of human development in this research will be adopted) will help in understanding the influence of the country's level of human development on the relationship between quality of governance and economic growth during times of crisis.

Many indices and reports have been issued in measuring countries' human development level. Human development index (HDI), human rights index (HRI), and human development reports (HDRs) are example of indices and reports that studied the level of human development between countries (Desai, 1993; Haq, 1995; McGillivray, 1991; Ranis, Stewart, & Samman, 2006; Streeten, 1994).

HDI has been favored over gross national product (GNP) (Streeten, 1994) and gross domestic product (GDP) (Desai, 1993) in capturing "many aspects of human development" (Haq, 1995, p. 54). Noorbakhsh (1998) studied HDI and analyzed critiques that have risen against the index. He argued that HDI has construct validity and he thinks that most criticisms that have been raised against HDI are based on miss reading of the structure of the index. Thus, he concluded that HDI is a well-designed index that captures and measures the majority of human development aspects.

Sagar and Najam (1998) conducted a study to evaluate indices that measure human development in countries such as HDI, HRI, and Democracy Index. They argue that HDI provides valuable information regarding economic and noneconomic development factors and its relationship to people. In addition, although HDI has it is shortcoming by not including other factors that might influence human development, such as globalization influences on nations' levels of development and wealth distribution influences on human development, Sagar and Najam (1998) deem that HDI "has become an important alternative to the traditional unidimensional measure of development (i.e., the gross domestic product)" (p. 249).

Ranis et al. (2006) studied human development and the way it is measured. After recognizing the importance of HDI in measuring human development, Ranis et al. (2006) argued that there are many human development factors have been neglected by HDI such as political freedom and social relations. In addition, they argued that human development is connected to governance and economic development, so to have clear understanding of human development we need to consider other factors such as empowerment and political freedom when attempting to measure human development.

Finally, they think that HDI is one of the best available measures of human development, even though it needs to be developed to be more comprehensive.

The Human Development Index (HDI). Human development index (HDI) is a product of the United Nations Development Program (UNDP). HDI is published annually since 1990. HDI is an index that ranks countries based on their human development level compared to other countries. HDI is based on four indicators (life expectancy at birth, mean years of schooling, expected years of schooling, and gross national income per capita), and three dimensions (health, education, and living standards) (UNDP, 2010).

Human development index (HDI) uses the three dimensions including adult literacy, life expectancy at birth, and standard of living in calculating human development index (UNDP, 2010). According to UNDP (2010), gross national income (GNI) is used to measure levels of standards of living, life expectancy at birth is used to measure level of health, and mean years of schooling and expected years of schooling are used to measure level of education. For every human development component there is a mathematical formula, and there is an aggregate formula that includes all three formulas to construct HDI (UNDP, 2010). HDI ranks countries into four groups: very high human development, high development, medium development, and low development. 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) (UNDP, 2010).

Therefore, the correlation between governance, economic growth, and human development (Adams & Mengistu, 2008; Alkire, 2010; Grindle, 2007; Kaufmann & Kraay, 2002; Smith, 2007) favored human development compared to other measures to

be included in this research. Accordingly, although there are criticisms of the way HDI is constructed and calculated (McGillivray, 1991; Ranis et al., 2006; Sagar & Najam, 1998), HDI is considered a creditable index that measures and ranks nations human development in a valid and creditable way (Desai, 1993; Hastings, 2009; Haq, 1995; Noorbakhsh, 1998; Streeten, 1994). In addition, having four groups of human development as HDI constructed (very high human development, high development, medium development, and low development), will help in answering the second research question to evaluate the influence of nations' human development levels on the relationship between governance and growth during times of crisis. For the current research, the 2010 issue of HDI will be used, because the HDI's rank of countries included in the current study did not change profoundly from 2005-2010 (UNDP, 2010), so 2010 issue of HDI will be adopted in the current dissertation.

Hypotheses

Two research questions underpinned this study. The first question is: Is the relationship between governance and economic growth affected by the economic crisis? This research question leads to the following hypotheses:

H1: The economic crisis has affected the relationship between the Voice and Accountability (VA) and GDP.

H2: The economic crisis has affected the relationship between the Political Stability and Absence of Violence (PS) and GDP.

H3: The economic crisis has affected the relationship between the Government Effectiveness (GE) and GDP.

H4: The economic crisis has affected the relationship between the Regulatory Quality (RQ) and GDP.

H5: The economic crisis has affected the relationship between the Rule of Law (RL) and GDP.

H6: The economic crisis has affected the relationship between the Control of Corruption (CC) and GDP.

The first research question analyzes whether the relationship between each aspect of the quality of governance and economic growth is different during times of crisis compared to times of non-crisis. Thus, each one of the six hypotheses stated above concentrates on the effect of the global economic crisis on the relationship between each governance indicator and GDP per capita.

For example, one of the hypotheses is whether the economic crisis has affected the relationship between voice and accountability (VA) and GDP. In contrast, the null hypothesis (Ho) would be that the economic crisis has not affected the relationship between voice and accountability (VA) and GDP. Based on this hypothesis, there are three possibilities: (a) the economic crisis has had no affect on the relationship between VA and GDP, (b) the economic crisis has had a positive effect (the relationship has become stronger), or (c) the economic crisis has had a negative effect (the relationship has become weaker). The same discussion applied to the rest of the hypotheses stated above.

The second research question is: Does the effect of the economic crisis on the relationship between economic growth and governance vary from country to country

based on each country's level of development? This research question leads to the following hypotheses:

H7: A country's level of development influences the effect of the economic crisis on the relationship between voice and accountability (VA) and GDP.

H8: A country's level of development influences the effect of the economic crisis on the relationship between Political Stability and Absence of Violence (PS) and GDP.

H9: A country's level of development influences the effect of the economic crisis on the relationship between government effectiveness (GE) and GDP.

H10: A country's level of development influences the effect of the economic crisis on the relationship between regulatory quality (RQ) and GDP.

H11: A country's level of development influences the effect of the economic crisis on the relationship between rule of law (RL) and GDP.

H12: A country's level of development influences the effect of the economic crisis on the relationship between control of corruption (CC) and GDP.

The second research question examines whether the impact of the economic crisis on the relationship between governance and economic growth varies among countries based on their level of development. Six hypotheses have been developed to address the second research question. Each hypothesis focuses on the influence of the development level of countries on the relationship between each of the six governance indicators and GDP per capita (economic growth) during times of crisis compared to times of non-crisis.

For example, one of the hypotheses based on the second research question is whether the nation's development level affects the relationship between voice and accountability (VA) and GDP during times of crisis. In contrast, the null hypothesis (Ho)

would be that a country's level of development does not influence the effect of the economic crisis on the relationship between voice and accountability (VA) and GDP. Based on this hypothesis, there are three possibilities: (a) level of development has no influence on the effect of the crisis on the relationship between VA and GDP, (b) level of development has a positive influence (the relationship has become stronger), or (c) level of development has a negative influence (the relationship has become weaker). The same discussion applies to the rest of the hypotheses stated above.

On the other hand, using partial least square (PLS) methodology in this dissertation (as will be discussed later) supports the purpose of this research, and helps in answering the research questions and analyzing the hypotheses. According to Garson (2012) PLS methodology is suitable "where the research purpose is prediction or exploratory modeling" (par. 3). This study focuses on the influence of the economic crisis on shaping the relationship between governance and growth rather than on the cause of changes in these relationships. Furthermore, even though the hypotheses assumed relationships between each one of the independent variables and the dependent variable, the structured models (discussed later) did not operate in isolation but were linked together as part of an integrated system of complex relationships functioning simultaneously within a global economic network. Consequently, the PLS path analysis tested not 12 simple hypotheses, assuming 12 completely separate and disconnected bivariate relationships, but instead only one hypothesis, assuming the existence of more complex multivariate relationships, based on partial correlations.

Research Design

This dissertation focuses on the influence of the global economic crisis on the relationship between governance and growth. In order to answer the first research question, the relationship between each aspect of the quality of governance and economic growth will be studied. Accordingly, the relationship between each of the six indicators of governance and economic growth will be computed before and after the onset of the global economic crisis of 2008. If the relationship after the crisis occurs differs from the relationship before the crisis occurs, the research can conclude that the global economic crisis has affected the relationship between governance and economic growth.

The same method used to address the first research question will be used to answer the second research question, with nations' level of human development added to the analysis. Accordingly, the relationship between governance and economic growth before and after the onset of the economic crisis among the four categories of HDI will be studied to analyze whether the impact of the economic crisis on the relationship between governance and growth varies among different levels of development of countries. If the relationship between each of the six governance indicators and economic growth varies among the four human development groups after the crisis began compared to before the crisis, it can be concluded that the effect of the economic crisis on the relationship between economic growth and governance varies from country to country based on each country's level of development.

Data: Sources and Screening

For the study, we have six independent variables including 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) will be used to measure quality of governance. According to Kaufmann et al. (2009a), VA is used to measure the level of citizen participation in the political and decision-making process. Also, VA measures to what extent free media and free speech are practiced in countries. PS is another independent variable, and it is used to measure stability of the political system in countries. GE is used to measure the quality of civil services introduced to the public. In addition, GE measures the quality of policy formulation and there implications for countries. The fourth independent variable is RQ, which is used to measure the quality level of policies and regulation that governments adopt to promote the private sector in countries. RL is used to measure to what extent rules have been applied and the equality of people before the law. Also, RL measures the confidence of people on the government agencies to apply laws and regulations that adopted by governments. Finally, CC as the sixth independent variable, is used to measure the public power in holding bureaucrats and elected officials accountable for their actions in countries under study.

In contrast, gross domestic product (GDP) per capita at purchasing power parity (PPP) in the current international dollar, as the dependent variable will be used in this dissertation to measure economic growth. In addition, the human development index (HDI) will be used in the current research to analyze the affect of the nation's human development level on the relationship between governance and growth during times of crisis.

Data for the independent variables (worldwide governance indicators—World Bank, 2011) and dependent variable (GDP per capita—World Bank, 2012) were

collected from the World Bank Group, and they cover 173 countries from 2005 to 2010. The variables were continuous, both positive and negative, measured at the interval level, and were coded alphanumerically, with an abbreviated name (CC, GDP, GE, PS, RL, RQ, or VA) followed by the year (05, 06, 07, 08, 09, or10).

In addition, Human Development Index (HDI) data will be collected from the United Nations Development Program (UNDP, 2010). The countries for which both GDP and worldwide governance indicators were obtained for the years 2005 to 2010 were classified into four groups, depending upon their Human Development Index (HDI) recorded in 2010 (UNDP, 2010), as shown in Table 3: Group 1 = very high development (42 countries); Group 2 = high development (42 countries); Group 3 = medium development (46 countries); and Group 4 = low development (43 countries). The analytical strategy was to first construct a model based on the 173 countries, and subsequently to construct four different models, one for each group of countries, according to their development index.

Table 3

Countries Classified by Human Development Index

Group 1 (N = 42)	Argentina, Australia, Austria, Belgium, Canada, Chile, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, South Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Arab Emirates, United Kingdom, United States
Group 2 (N = 42)	Albania, Antigua and Barbuda, Armenia, Azerbaijan, Bahamas, Belarus, Belize, Bosnia and Herzegovina, Brazil, Bulgaria, Colombia, Costa Rica, Dominica, Ecuador, Georgia, Grenada, Jamaica, Kazakhstan, Lebanon, Macedonia, Malaysia, Mauritius, Mexico, Montenegro, Palau, Panama, Peru, Romania, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent, Saudi Arabia, Serbia, Seychelles, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Uruguay, Venezuela

(table continues)

Table 3 *(continued)*

Group 3 (N= 46)	Algeria, Bhutan, Bolivia , Botswana, Cambodia, Cape Verde, China, Congo, Dominican Republic, Egypt, El Salvador, Equatorial Guinea, Fiji, Gabon, Ghana, Guatemala, Guyana, Honduras, India, Indonesia, Iraq, Jordan, Kiribati, Kyrgyzstan, Laos , Maldives, Micronesia, Moldova, Mongolia, Morocco, Namibia, Nicaragua, Paraguay, Philippines, Samoa, Sao Tome and Principe, South Africa, Sri Lanka, Swaziland, Syrian Arab Republic, Tajikistan, Thailand, Turkmenistan, Uzbekistan, Vanuatu, Vietnam
Group 4 (N= 43)	Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Timor-Leste, Togo, Uganda, Yemen, Zambia.

Source: UNDP (2010).

The database was screened for missing values. Four missing values were imputed by conjecture. Smart-PLS, the software used in the current research, deals with missing data by replacing missing cells with notable number such as 0.000 to be recognized when the calculation is computed. Then, these missing values are omitted from calculation when the model is computed. This method called casewise deletion (Ringle, Wende, & Will, 2005a). In the current research, the same process has been followed.

Chapter Summary

As stated in this chapter, six indicators will be used to measure the quality of governance. Also, gross domestic product (GDP) per capita at purchasing power parity (PPP) in the current international dollar will be used to measure economic growth. In this chapter, data sources that will be used to answer whether the global economic crisis has affected the relationship between quality of governance and economic growth were explored. In addition, measurement of governance, economic growth, and human development were presented. As discussed in this chapter, data covered 173 countries

from 2005-2010 were collected from the World Bank Group and United Nations Development Program in order to answer the research questions.

Chapter 6: Choice of Model and Data Preprocessing

In this chapter, various statistical models were evaluated to choose the best-analytical model to analyze the current data to study the effect of the global economic crisis on the relationship between governance and growth and whether or not the nation's development level has influence on the relationship between quality of governance and economic growth during times of crisis. In addition, data preparation of applying the selected statistical model and limitations of the current analysis are discussed.

Four types of model were considered for the purposes of study: (a) an interrupted time series model (ITSD); (b) an ordinary least squares (OLS) multiple linear regression model, (c) a structural equation model (SEM), and (d) a partial least squares (PLS) path model. Because the choice of an optimal model was critical for this study, a review of the literature concerning the four different types of model is presented, and the choice of the model to address the research questions is then discussed.

Interrupted Time Series Design

The interrupted time series design (ITSD) is a quasi-experimental strategy for evaluating the impact of a defined event on target variables, which fluctuate over time (Chatfield, 1996; Hamilton, 1994). In its simplest form, an ITSD involves constructing a plot of a target variable versus time, and dividing the plot into pre-event and post-event segments. If a visual trend is observed (e.g., if the target variable increases rapidly before

the event, but decreases substantially after the event) then it could be concluded that the event had an impact.

There are a number of methodological limitations associated with the use of an ITSD design, including: (a) the analysis of one set of data does not predict the exact cause of an observed shift in a time series at one point in time, because the shift may be coincidentally linked to multiple causal events, and (b) the specification and calibration of the equations and the quantity of available data are often problematic. Also, it is recommended that at least 30 data points are necessary to construct a valid ITSD model (Chatfield, 1996). It was not justified to construct an ITSD model in this study because (a) no definitive model has previously been specified to define the theoretical or empirical relationships between governance and economic growth and (b) the time series used in this study contained only six data points, from 2005 to 2010.

OLS Multiple Regression

OLS multiple regression is a regression analysis with multiple dependent and independent variables. OLS regression is a parametric method, implying that the variables must be normally distributed. The dependent variable in this study, however, was not normally distributed, reflected by the high skewed frequency distributions of the GDP from 2005 to 2010 (Figure 1). In contrast, the six independent variables were not highly skewed, but tended towards symmetrical bell-shaped normal frequency distributions (Figure 2).

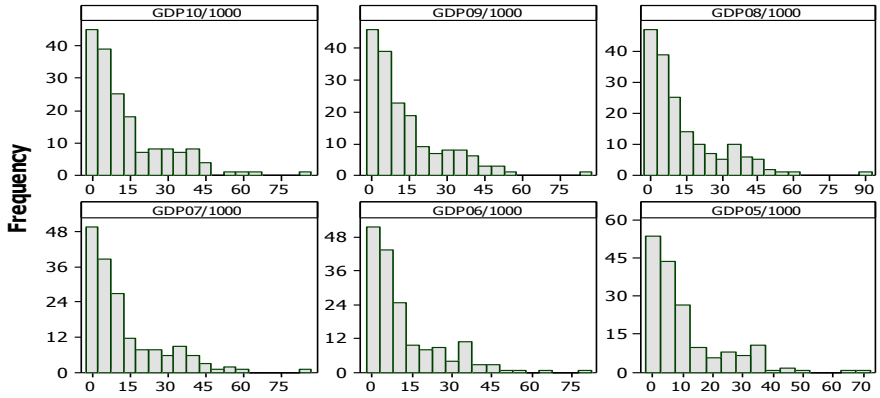


Figure 1. Distribution of GDP in 173 countries from 2005 to 2010.

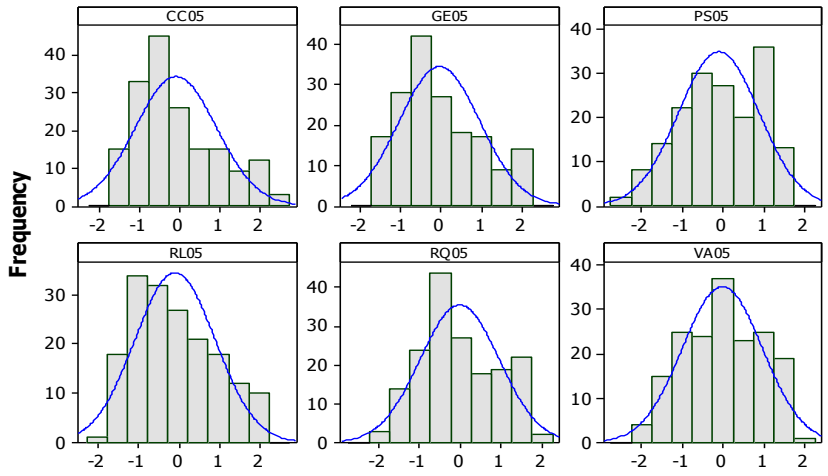


Figure 2. Distribution of CC, GE, PS, RL, RQ, and VA in 173 countries in 2005 and 2010.

Although the independent variables do not violate the normality assumption, for OLS it is essential that the independent variables are not dependent on each other. That is must not have any kind of functional or statistical relationship with each other as suggested previously. In statistical terms, they must not be inter-correlated, i.e., there must be no multicollinearity (Chatterjee et al., 2007; Cohen, Cohen,West, & Aiken, 2007). There was, however, a statistically significant inter-correlation between the six governance indicators. A matrix of Pearson's *r* coefficients was constructed using SPSS

to determine the relationships between CC, GDP, GE, PS, RL, RQ, and VA in 2005 and 2010 (Table 4). All the correlation coefficients (Pearson's r (N = 173) = .596 to .969) were statistically significant ($p < .01$) reflecting strong multicollinearity. Consequently, OLS regression was not justified for the purposes of this study.

Table 4
Correlations Between Six Worldwide Governance Indicators in 173 Countries in 2005 and 2010

	CC05	CC10	GE05	GE10	PS05	PS10	RL05	RL10	RQ05	RQ10	VA05	VA10
CC05	1											
CC10	.965**	1										
GE05	.945**	.921**	1									
GE10	.925**	.929**	.971**	1								
PS05	.748**	.750**	.717**	.680**	1							
PS10	.702**	.725**	.658**	.651**	.918**	1						
RL05	.943**	.922**	.943**	.916**	.808**	.751**	1					
RL10	.946**	.949**	.946**	.947**	.773**	.749**	.969**	1				
RQ05	.913**	.884**	.954**	.940**	.707**	.663**	.923**	.934**	1			
RQ10	.851**	.856**	.915**	.936**	.602**	.586**	.852**	.901**	.943**	1		
VA05	.826**	.810**	.841**	.809**	.711**	.681**	.848**	.848**	.864**	.823**	1	
VA10	.790**	.792**	.798**	.776**	.694**	.687**	.812**	.825**	.827**	.787**	.970**	1

Note: ** Significant correlation at $p < .01$.

Another major limitation of OLS regression is that the statistical inferences are a function of the sample size. The larger the sample size, then the greater is the statistical power (Cohen, 1992). According to Cohen's power analysis, if there are six independent variables in a multiple regression model, and the effect size (i.e., the proportion of variance explained) is moderate, then the sample size should be at least 97 cases to make correct statistical inferences at the conventional .05 level of significance. According to

Hair, Anderson, Babin, Tatman, and Black (2010) there should be at least 20 cases for each independent variable in a multiple regression model. With six independent variables, the minimum sample size should be at least 20 x 6 = 120 countries. The sample sizes for Groups 1 to 4 *(N* = 42 to 46) used in this study were insufficient to justify the construction of OLS regression models with respect to each group of countries classified by their Human Development Index. Consequently OLS regression was not justified for the purposes of this study.

Structural Equation Modeling

SEM aims to explain the functional relationships between variables by exploring patterns in the covariance matrix (Kline, 2010). SEM is much more powerful than OLS regression, because it takes into account the modeling of relationships between multiple dependent and independent variables.

The main limitation of SEM in practice is that it is very sensitive to the model specification. SEM will fail to produce a solution if the model is not extremely well designed (Hair et al., 2010). For example, models with less than three indicators per latent variable are likely to fail. For this reason, SEM is often used as a confirmatory method (i.e., to measure the relationships between variables in a model which is very well specified and underpinned by a sound theoretical framework). The utility of SEM as an exploratory method (i.e., to construct a new model which is not well defined, and has no theoretical framework, as in this study) is restricted. SEM is also very sensitive to the distributions and measurement levels of the data. An SEM model assumes that all variables are continuous and measured at the scale/interval level, and the statistics are biased if the data deviate from normality (e.g., the GDP data in Table 1). The sample size

requirements for SEM are extremely stringent. Most SEM models are constructed with sample sizes over 300; however, Westland (2010) asserted that over 80% of the articles he reviewed concerned with research applications based on the use of SEM drew false conclusions due to insufficient sample sizes. It is suggested that a minimum of 10 cases for each individual measurement is necessary to conduct SEM effectively. In this study there were seven variables (GDP, VA, PS, GE, RL, RQ, and CC) each of which was measured six times (from 2005 to 2010) making 42 measurements. SEM was therefore not justified in this study, because it would require a minimum of 42 x 10 = 420 cases to avoid the drawing of false conclusions.

Partial Least Squares (PLS) Path Analysis

It is evident that an alternative modeling technique is necessary to test the hypotheses of this study. This technique must not, unlike ITSD, OLS, and SEM, be sensitive to small samples sizes, and it must not fail to produce a solution if the model is not well specified, or not underpinned by a sound theoretical framework. PLS path analysis was chosen, mainly because according to Hair et al. (2010) "PLS is insensitive to sample size considerations. PLS path modeling is particularly useful in generating estimates even with very small sample sizes (as low as 30 observations or less)" (p. 776). The grouped sample sizes of 42 to 46 countries used in this study were therefore adequate to construct PLS path models.

PLS path analysis is a technique which has become increasingly more popular, particularly in business research (Anderson & Swaminathan, 2011; Chin, 1998; Henseler, Ringle, & Sinkovics, 2009; Temme, Kreis, & Hildebrandt, 2006; Wetzels, Odekeren-Shroder, & van Oppen, 2009;). The main reason for its popularity is that, unlike OLS and

SEM, which are "hard" methods because they often frustrate the researcher by failing to produce a solution, PLS is a "soft" method because it always converges on a solution, irrespective of the way that the model is specified (Hair et al., 2010). PLS path analysis, like SEM, involves the use of factor analysis to construct latent variables from manifest indicator variables measured by the researcher; however, the mathematics underpinning SEM and PLS path analysis are different, so that PLS models can be constructed with less than three indicators per latent variable.

SEM extracts latent variables based on patterns in the covariance matrix in order to explain causal relationships; however, PLS path analysis constructs predictive relationships by constructing a system of simultaneous equations to maximize the partitioning of the multivariate variance between the variables (Haenlin & Kaplan, 2004; Hair et al., 2010). A PLS path model assumes that all of the variance is useful, and can be explained. In contrast, in OLS regression and SEM, the residual error must be computed to reflect the unexplained variance. Unlike SEM and OLS regression, PLS path analysis does not involve the computation of standard errors, test statistics, or *p* values. Consequently, PLS path modeling is not biased by multicollinearity, and it is not possible to produce biased statistical inferences due to the inflation of standard errors. PLS path analysis is robust, meaning that it can operate on a large number of variables with minimal assumptions about their distributional or measurement characteristics. A PLS path model is not so sensitive to deviations of the variables from normality as an OLS and SEM model, although PLS is more stable if the variables are normal.

PLS path analysis, like ITSD and SEM, is a specialized technique, requiring the use of dedicated software, and so it is not supported by general statistics packages which

include a very limited range of modeling options such as SPSS. Smart-PLS software was chosen for this study, because it user friendly, imports data directly from Microsoft Excel, and uses a simple GUI (graphic user interface) to display the relationships between the variables in the form of a path diagram (Ringle et al., 2005a). Smart-PLS enables the researcher to perform path analysis quickly and more easily than with other more complex modeling packages (Temme et al., 2006). The program used in this study, which has more than 25,000 registered users, was downloaded free of charge from (Ringle, Wende, & Will, 2005b; http://www.smartpls.de/forum/). An example of a path diagram displaying the hypothesized relationships between governance indicators and economic growth from 2005 to 2010 is illustrated in Figure 3.

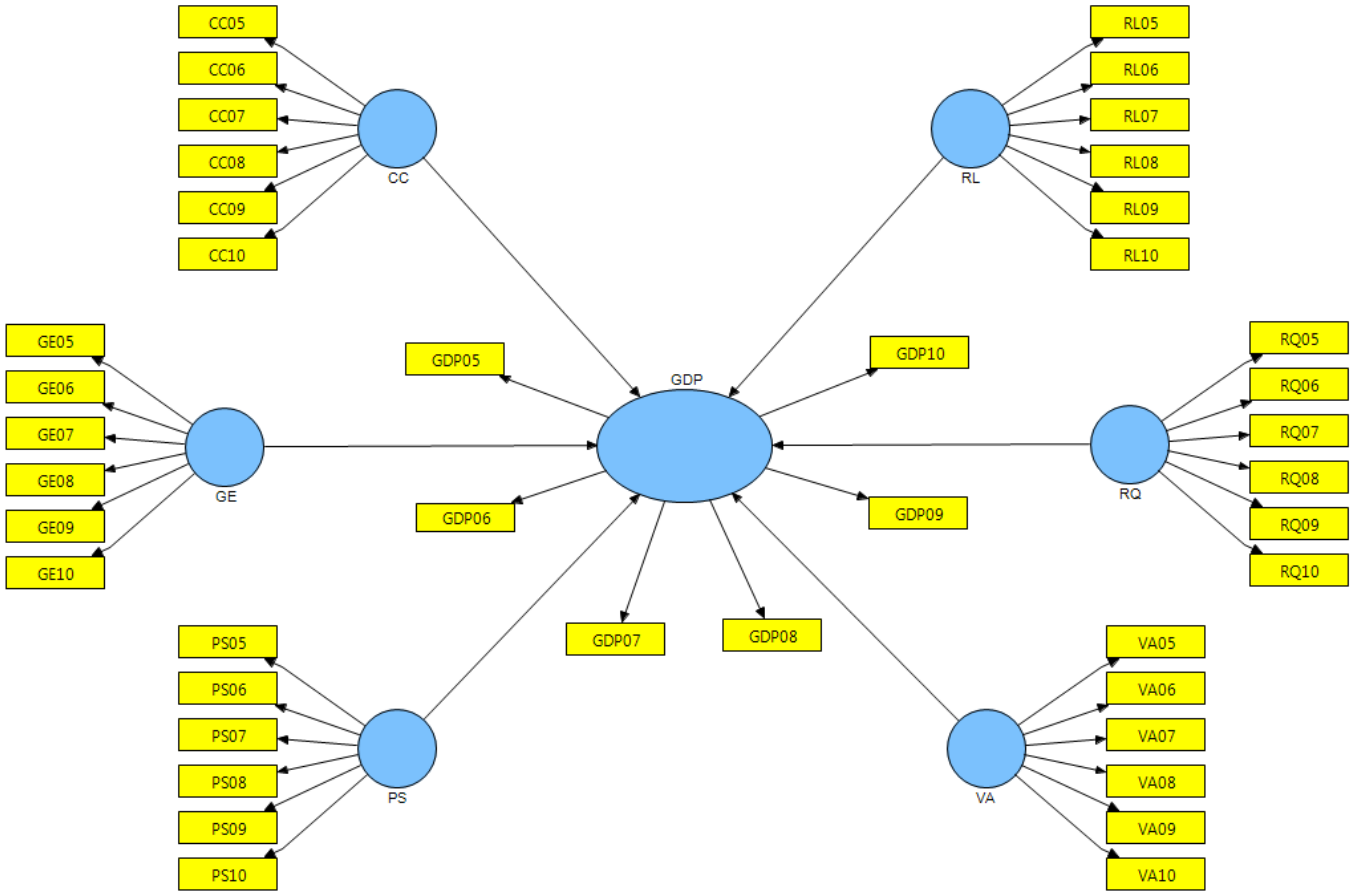


Figure 3. Partial Least Squares (PLS) path diagram drawn using the GUI interface of SmartPLS.

The variables in a PLS path diagram must be functionally defined as either indicator variables or latent variables. In this study, the indicator variables, represented by yellow rectangular symbols, were the six worldwide governance indicators, collected from 2005 to 2010 inclusively (see Table 1) and the GDP variable, also collected from 2005 to 2010 inclusively. The indicator variables were alphanumerically coded so that they could be identified in the path diagram. The latent variables computed by the Smart-PLS algorithm using principal components factor analysis were represented in the path diagram by blue circular symbols. The seven latent variables (GDP, VA, PS, GE, RL, RQ, and CC) were constructed from the specified clusters of time-varying indicator variables measured between 2005 and 2010. A fan of arrows pointing out from a latent variable into a cluster of indicators represented a reflective relationship. This meant that SmartPLS operated on the assumption that the latent variable was the theoretical common cause/source of the variance, and the indicator variables were assumed to be the inter-correlated effects/ outcomes. An arrow pointing out from an indicator into a latent variable represented a formative relationship, implying that the indicator was an integral component of the latent variable but it did not reflect or reveal its common source. All the relationships in the PLS path model used in this study were reflective.

An arrow pointing out of one latent variable into another latent variable represented a predictive relationship. The arrow implied that the variance in one variable explained the variance in another variable. In this study, the multivariate variance in the six independent variables (VA, PS, GE, RL, RQ, and CC) was assumed to explain the multivariate variance in the dependent variable (GDP). Consequently, all the arrows flowed unidirectionally from VA, PS, GE, RL, RQ and

CC into GDP. No inter-relationships between VA, PS, GE, RL, RQ and CC were assumed, so the governance indicators were not connected by arrows.

Limitations

There are two main limitations to this method. Firstly, empirical models based on economic/financial time series data do not have the power to prove the existence of causes and effects, nor can they determine if a defined event actually caused a shift in the time series data (Enders, 1995). Statistically derived correlative relationships may be interpreted to infer but not to prove the existence of causes and effects (Granger, 1988). Consequently, the results of this study cannot in any way prove definitively that the economic crisis was the root cause of the changes in the relationships between the governance indicators and the economic growth of 173 countries between 2005 and 2010. The results of this study can only be used to provide statistical evidence to infer that it is likely that such relationships occurred, but the exact reasons why they occurred cannot be explained. Secondly, it was not possible to conduct an inferential statistical test at a prescribed level of significance to determine if the path coefficients varied significantly across time. Consequently, the impact of the economic crisis on the relationships between economic growth and governance before and after 2008 could only be evaluated subjectively.

Transformation

A logarithmic ($\log_{10}$) transformation was performed to normalize the GDP data, reflected by the bell-shaped frequency distribution histograms in Figure 4. Normalization was necessary to construct stable PLS path models, in which that the statistics were not biased by the skewed frequency distributions of the GDP data (see Figure 1).

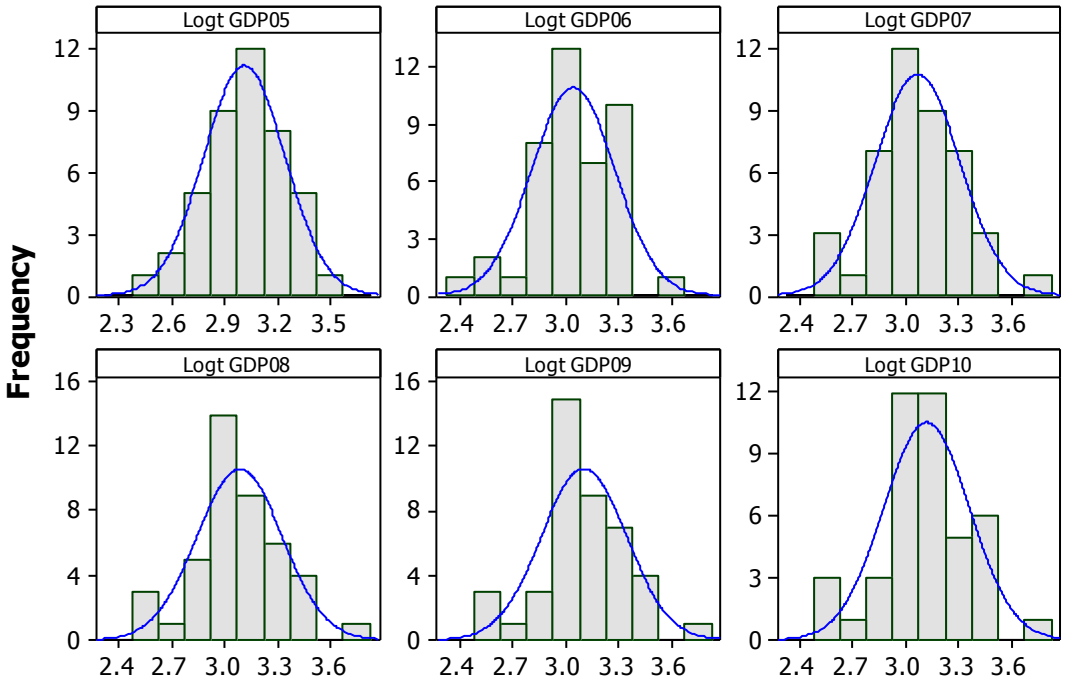


Figure 4. Distribution of $\log_{10}$ GDP in 173 countries from 2005 to 2010.

Standardization

Prior to the analysis, all the variables were automatically standardized (mean = 0 and variance = 1) using the data metric procedure included in SmartPLS. Standardization was necessary, because GDP, VA, PS, GE, RL, RQ, and CC were measured using different scales. Standardization facilitated the direct numerical comparison of the magnitudes of the statistics computed for each latent variable. Without standardization, the PLS path analysis statistics could not be directly compared. Importantly, SmartPLS formats all data to three decimal figures, even though the calculations are performed using 6 decimal points. All the data in SmartPLS files are formatted by default and this format cannot be changed by the user. The rounding procedures are completely automatic (Hair et al., 2010; Henseler, et al., 2009; Ringle et al., 2005a, 2995b; Temme et al., 2006).

Research Models: Design and Strategies

As discussed earlier, in order to answer the two research questions (the impact of the global economic crisis on the relationship between governance and growth, and the influence of the nation's development level on this relationship during times of crisis), an advanced statistical technique needs to be adopted because of the nature of the current data. Thus, partial least square (PLS) path analysis is chosen to analyze the data in the current research. This section will start by presenting the Smart-PLS software, the way it is running and the output structure. In addition, the strategy of constructing analysis models that will be applied in this dissertation using Smart-PLS are discussed.

After the path diagram had been constructed by the author, the Smart-PLS algorithm was executed to compute the model statistics without intervention or manipulation by the researcher (Ringle et al., 2005a). Four types of model statistics were computed: (a) The factor loadings, printed next to the arrows between the indicators and the latent variables; (b) The average variance explained (AVE) by each latent variable; (c) The path coefficients, printed next to the arrows between the latent variables; and (d) The R^2 value, printed inside the blue symbols represented the latent variables. By default, Smart PLS printed an R^2 value of 0.000 if the latent variable had no arrow flowing into it; consequently, the only R^2 value interpreted in this study was printed inside the symbol representing GDP. The factor loadings estimated the strengths of the individual relationships between a latent variable or factor and each of its prescribed indicator variables. Because they were based on standardized data, the factor loadings ranged from -1 to +1. According to Hair et al., (2010) "standardized loading estimates should be .5 or higher, and ideally .7 or higher" (p. 709) to indicate a well specified model.

The AVE is a summary measure of convergent validity among a set of items representing a latent construct or factor. Convergent validity is defined as extent to which a set of indicator variables collectively measures the latent construct that they are supposed to measure. An AVE of 50% or higher indicates good convergent validity (Chin, 1998).

If all the factor loadings for each latent variable were > .7, and the AVE for each latent variable was greater than 50%, then the construct validity of the model was assumed to be good, and it was justified to interpret the model statistics for the purposes addressing the research questions. Construct validity is defined as the extent to which a model accurately and precisely reflects the theoretical/conceptual framework that it is supposed to represent. In contrast, if the factor loadings were consistently < .5, and the AVE was consistently < 50% then the model construct validity of the model was inadequate, and it was not feasible to interpret the model statistics to address the research questions.

Assuming that the PLS path model was well specified, the path coefficients were interpreted to indicate how much of the multidimensional variance was partitioned between each latent variable. The path coefficients measured the strengths of the partial correlations between the six governance indicators and the GDP. It was assumed that the individual relationships between VA, PS, GE, RL, RQ, CC, and GDP did not operate in isolation (as implied by 12 individual hypotheses) but were linked together as part of an integrated system of complex relationships functioning simultaneously within a global economic network. Consequently, the PLS path analysis did not in practice test 12 simple hypotheses, assuming 12 completely separate and disconnected bivariate relationships, but tested only one hypothesis,

assuming the existence of more complex multivariate relationships, based on partial correlations. The hypothesis tested by PLS path analysis was:

The economic crisis affected the relationship between economic growth (indicated by GDP) and governance, reflected by a combination of 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).

The magnitude of each path coefficient measured the relative strength and direction (positive or negative) of the relationship between each governance indicator and the GDP. The path coefficients were interpreted like the standardized regression coefficients in an OLS regression model. A positive path coefficient indicated that the higher the governance indicator, then the higher the GDP. A negative path coefficient in contrast, reflected the inverse relationship, i.e., the higher the governance indicator, then the lower the GDP.

The path coefficients (r_p) were all based on standardized data so they ranged from -1 to +1. The simple subjective interpretation of the path coefficients was $r_p <$ .25 = weak relationship and $r_p \geq .5$ = strong relationship (Chin, 1998). SmartPLS does not, however, compute significance levels for the path coefficients. The strength of each path coefficient was evaluated by bootstrapping. In bootstrapping, the mean value for each path coefficient in each model was computed by random sampling the data for 200 times. Multiple t tests were performed, to determine if the mean value of each path coefficient was significantly different from zero at the conventional $\alpha = .05$ significance level.

Smart-PLS also computed the R^2 value, a measure of the proportion of the multivariate variance in the GDP explained by a combination of VA, PS, GE, RL, RQ

and CC. The relative size of the effect of the variance in the governance indicators on the variance in the GDP was given by Cohen's $f^2 = R^2/(1 - R^2)$. Applying Cohen's (1992) interpretation, effect sizes of 0.02, 0.15, and 0.35 were interpreted as small, medium, and large, respectively.

Strategy. PLS path models were constructed for all 173 countries combined, and separately for each of the four groups of countries classified by their Human Development Index, for three time periods (a) From 2005–2010 (entire period); (b) From 2005–2008 (pre-crisis); and (c) From 2009–2010 (post-crisis). Consequently a total of 15 PLS path models were constructed, as outlined in Table 5.

Table 5

Specifications of 15 PLS Path Models

Model	Time period	Countries
1	2005-2010	All
2	2005-2008	All
3	2009-2010	All
4	2005-2010	Group 1
5	2005-2008	Group 1
6	2009-2010	Group 1
7	2005-2010	Group 2
8	2005-2008	Group 2
9	2009-2010	Group 2
10	2005 -2010	Group 3
11	2005-2008	Group 3
12	2009-2010	Group 3
13	2005 -2010	Group 4
14	2005-2008	Group 4
15	2009-2010	Group 4

For each of the 15 models constructed in this study, Smart-PLS output a bitmap file containing a calibrated path diagram (displaying the factor loadings, path coefficients, and R^2 values) and an HTML file (containing the tabulated statistics,

including the AVE). The statistics computed by Smart-PLS for each model were tabulated. A comparison of the statistics between the three time periods and the four groups of countries facilitated the answering of the research questions:

1. Is the relationship between governance and economic growth affected by the economic crisis?

2. Does the effect of the economic crisis on the relationship between economic growth and governance vary from country to country based on each country's level of development?

A change in the statistics between one time period and another, or between one group of countries and another, was assumed to reflect the impact of the economic crisis.

Chapter Summary

As discussed in this chapter, an advanced technique needs to be adopted to analyze the current data. Thus, partial least square (PLS) path analysis was chosen because of the relaxing assumptions that PLS has compared to other techniques such as OLS regression and generalized linear models. Also, PLS is best-fit model in analyzing time series data, which is the case of the current datasets. In addition, Smart-PLS software was used here because of its useful characteristics to utilize current data such as user friendly and its ability to deal with complex modeling packages compared to other software such as PLS-Graph. Also, this chapter explained the mechanisms of Smart-PLS and how it works. In addition, strategies of path analysis were presented in this chapter.

Chapter 7: Findings

This dissertation discusses whether the global economic crisis affected the relationship between governance and economic growth. As outlined in Chapter 5, PLS path analysis is the best-fit methodology to analyze the current data. In addition, as discussed in Chapter 6, three models need to be applied to explain the effect of the global economic crisis on addressing this relationship. Also, 12 models will be applied to the current data to analyze the influence of the nation's development level on the relationship between governance and growth during times of crisis.

Studying the relationship between governance indicators and GDP before (2005–2008) and after (2009–2010) the start of the economic crisis will contribute to an understanding of the influence of the crisis on the relationship. If the relationship between governance indicators and GDP changed after the crisis began, this shows that the economic crisis impacted the relationship; however, this study does not claim that the change was caused solely by the crisis.

In this chapter, 15 models (3 for all countries and 12 for group analysis) will be computed using Smart-PLS software to study the relationship between each governance indicator and GDP before and after the beginning of the global economic crisis. The first three models will use all 173 countries included in the study, and it will be computed before and after the beginning of the global economic crisis to answer the first research question. Then, each of the four groups of countries classified by their Human Development Index will be calculated for three time periods (a) From 2005–2010 (entire period); (b)

From 2005–2008 (pre-crisis); and (c) From 2009–2010 (post-crisis), to answer the second research question.

Research Questions

To address the research questions, data for each country's worldwide governance indicators, GDP per capita, PPP (current international $), and four groups of development based on HDI classification were collected from the World Bank Group and United Nations Development program. The data include 173 countries and cover the period of time from 2005 to 2010. PLS-path analysis was conducted to help in answering the research questions.

First research question. The first research question studies the relationship between governance and economic growth during times of crisis and whether it differs from times of non-crisis. The first research question is stated as:

- Is the relationship between governance and economic growth affected by the economic crisis?

To assess this question, the relationship between each of the six governance indicators and GDP per capita is analyzed. Figures 6 and 7 illustrate these relationships. Figure 6 shows the relationship between governance indicators and GDP before the onset of the global economic crisis, and Figure 7 shows the relationship after the crisis began. The result illustrates that the relationship between each of the six indicators and economic growth has changed after the crisis began compared to before the crisis. In addition, the level of change varies between each of the governance indicators and their relationship with GDP.

Second research question. The second research question studies whether a country's level of development influences the effect of the economic crisis on shaping

the relationship between governance and growth. The second research question is stated as:

- Does the effect of the economic crisis on the relationship between governance and economic growth vary among countries based on each country's level of development?

This question is answered by using four categories of human development (very high development, high development, medium development, and low development). Models 4 to 15 illustrate this question by measuring the relationship between governance indicators and GDP for each human development group before and after the beginning of the global economic crisis. The results indicate that the relationship between each of the six indicators and GDP has changed after the global economic crisis began compared to before the crisis for all four groups. In addition, from the models 4 to 15 (see Appendix), the level differs from one human development group to another. Thus, human development level affects the relationship between governance and growth during times of crisis. Both questions will be discussed in-depth in Chapter 8.

Overview

The solutions to the PLS path analysis for Models 1, 2, and 3 (using the data for all 173 countries) are reproduced in Figures 5, 6, and 7. These figures are unedited screenshots of the SmartPLS output, and they illustrate the way in the software prints the factor loadings, path coefficients, and R^2 values directly into the path diagram. The symbolic structure of Models 4 to 15 was exactly the same as in Models 1 to 3. Only the input data were different. Consequently, the path diagrams for Models 4 to 6 (Group 1); Models 7 to 9 (Group 2); Models 10 to 12 (Group 3) and Models 13 to 15 (Group 4) are not illustrated (see Appendix). After the factor loadings, AVEs, path

coefficients, and R^2 values are presented, the two research questions and 12 hypotheses are addressed.

Factor loadings. The factor loadings for the latent variables in Models 1 to 15 ranged from a minimum of .851 to a maximum 1.000. All the factor loadings were above the minimum value of .7, which is necessary to formulate a well specified model with reliably measured latent variables (Garson, 2012; Ringle & Sinkovics. 2009). The consistently high factor loadings indicated that the variables used to formulate each latent variable hung together as a group, and were reliable reflectors of the factors measured by each of the latent variables.

Average variance explained. Average variance (AVE) is a method used by Smart-PLS to measure the convergent validity of any two (or more) Partial Least Squares (PLS) path models. Convergent validity tests to what extent two measures of a construct that are theoretically related are related in actuality (Wahr, Gray, & Radloff, 2009). Thus, in the current study, higher values of AVE refer to higher levels of partial least squares (PLS) path models' construct validity that design by the author to study the relationship between the variables.

Table 6 lists the average variance (AVE) explained in each of the latent variables. The AVE values for each latent variable ranged from 84.2% to 99.9%. Among the total of 105 AVE values (15 models x 7 variables) computed in this study, only three were less than 90%. The average variance explained in all of the latent variables consistently exceeded the 50% minimum required to reflect a model with good convergent validity.

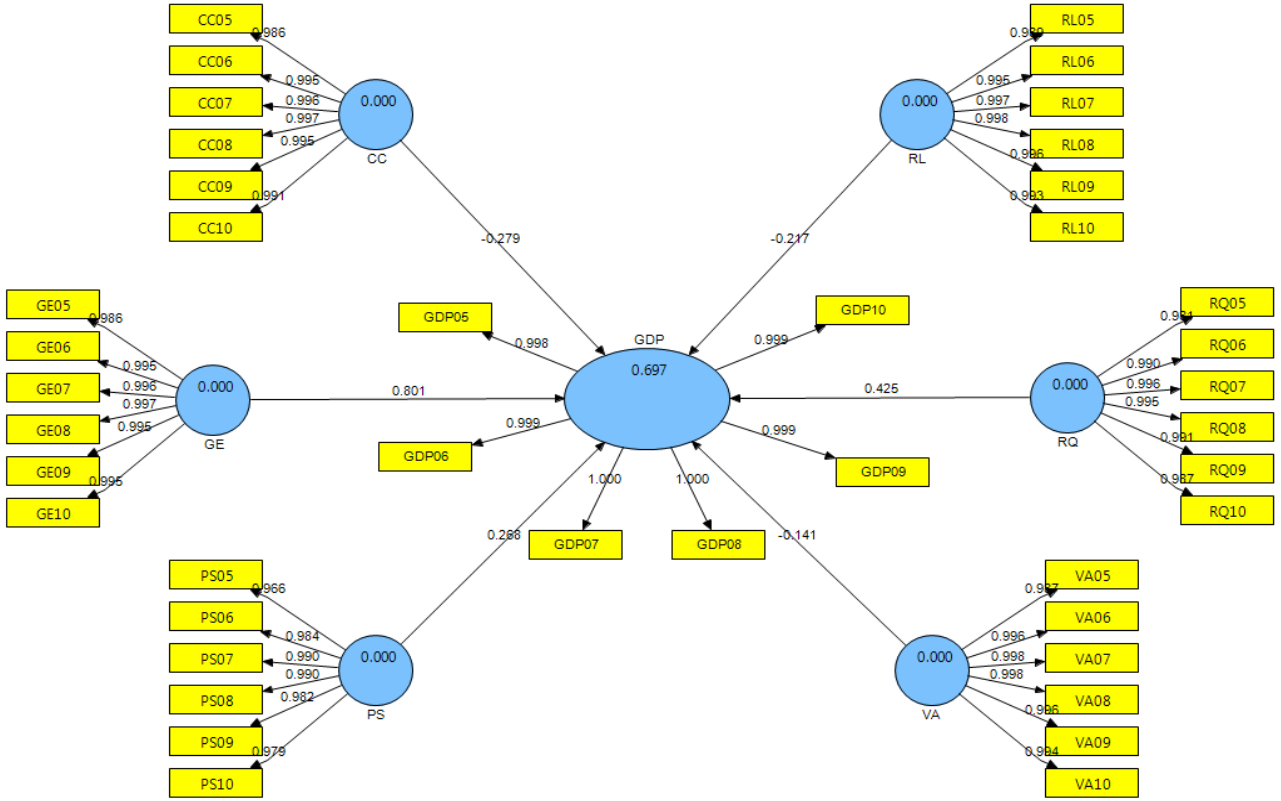


Figure5. PLS path model solution computed by SmartPLS for 173 countries from 2005 to 2010.

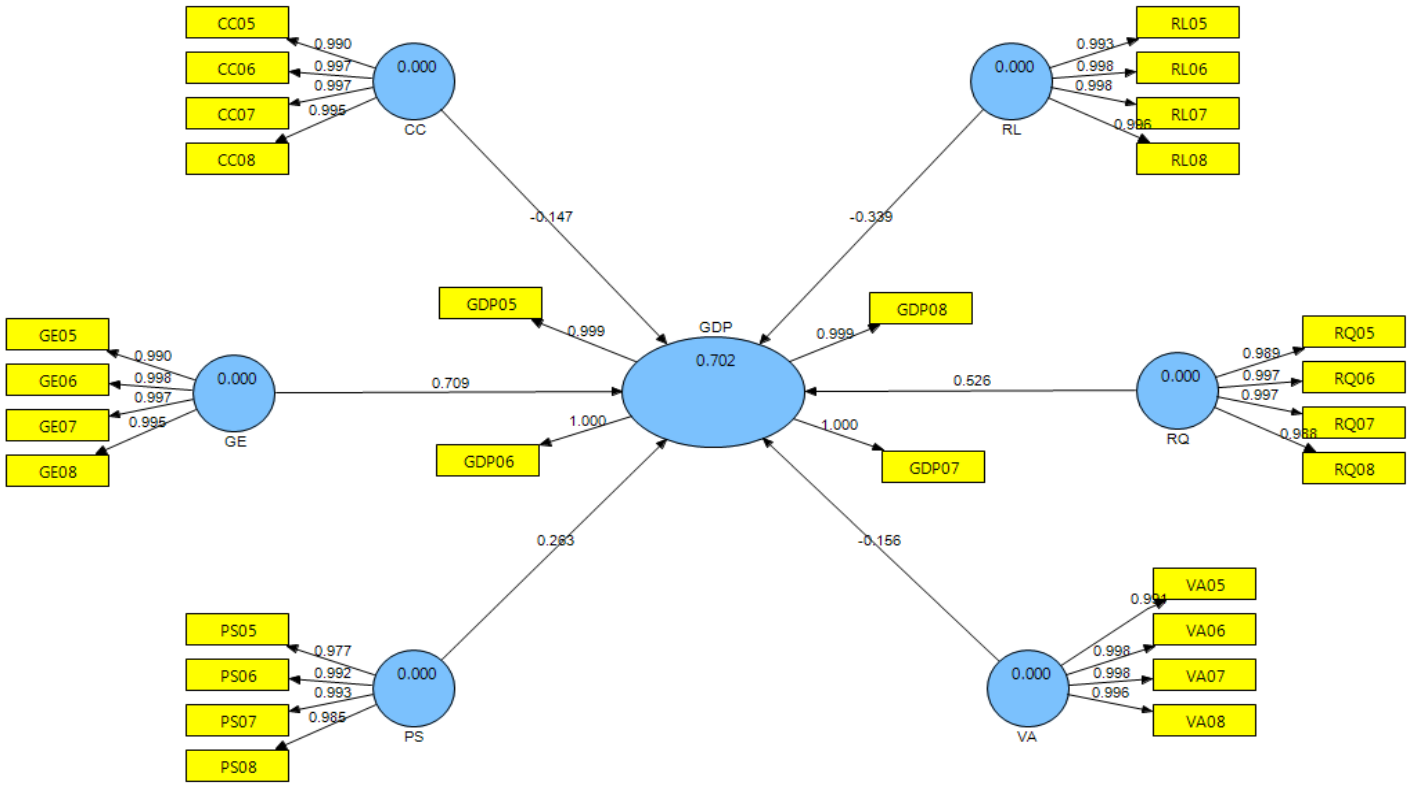


Figure6. PLS path model solution computed by SmartPLS for 173 countries from 2005 to 2009.

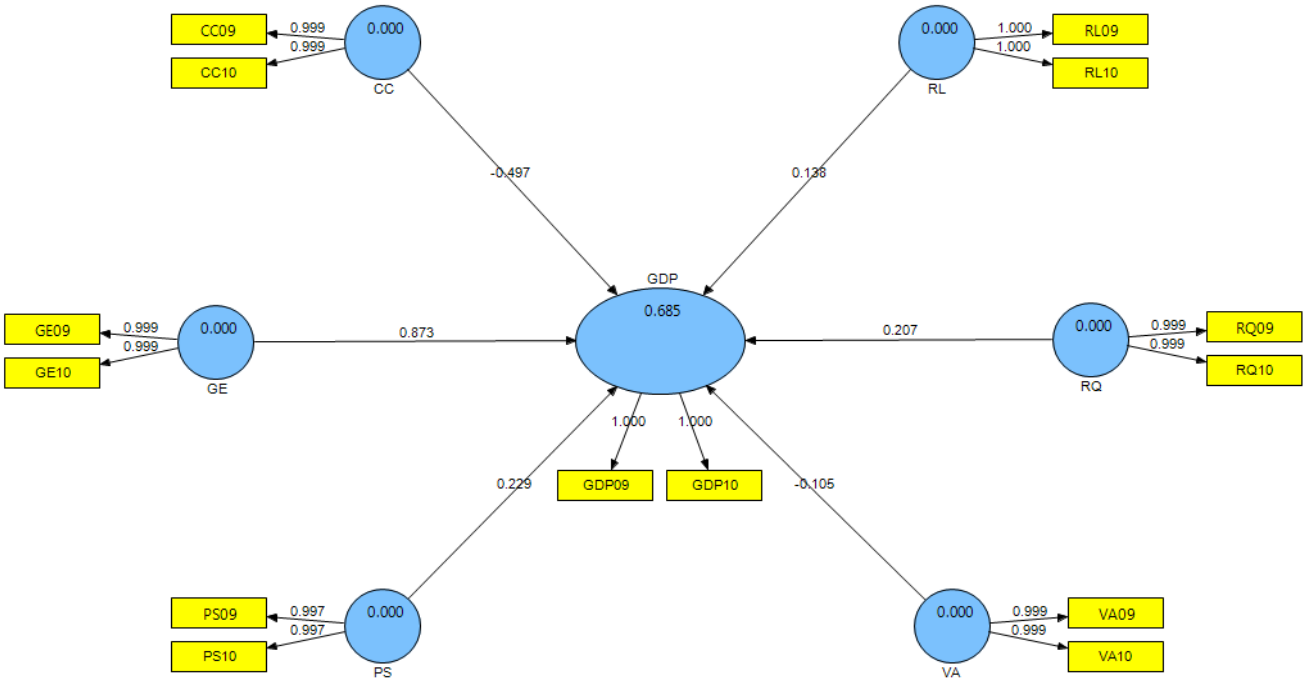


Figure 7. PLS path model solution compared by SmartPLS for 173 countries from 2009 to 2010.

Table 6

Average Variance Explained (%) by Each Latent Variable in 15 PLS Path Models

Model	Time period	Countries	Latent Variable						
			CC	GDP	GE	PS	RL	RQ	VA
1	05-10	All	98.7	99.8	98.8	96.4	98.9	97.9	98.9
2	05-08	All	98.9	99.9	98.9	97.4	99.2	98.6	99.2
3	09-10	All	99.8	99.9	99.8	99.4	99.9	99.9	99.9
4	05-10	Group 1	98.4	98.5	96.9	95.1	98.9	96.9	98.6
5	05-08	Group 1	99.2	98.9	97.1	95.7	99.2	98.2	98.4
6	09-10	Group 1	99.7	99.6	99.6	99.4	99.9	99.4	99.8
7	05-10	Group 2	96.8	98.2	96.9	95.8	97.2	89.4	99.1
8	05-08	Group 2	97.6	98.7	97.3	96.3	98.0	92.7	99.2
9	09-10	Group 2	99.6	99.8	99.2	98.5	99.8	99.5	99.8
10	05-10	Group 3	95.9	99.4	94.4	95.8	97.2	92.3	97.8
11	05-08	Group 3	96.3	99.7	95.7	96.8	98.2	94.8	98.4
12	09-10	Group 3	99.5	99.9	99.1	99.3	99.5	99.6	99.8
13	05-10	Group 4	90.3	99.2	92.7	90.6	92.8	95.9	89.6
14	05-08	Group 4	90.5	99.5	92.9	94.4	93.3	97.2	84.2
15	09-10	Group 4	98.7	99.9	99.3	98.9	99.5	99.6	99.5

Because all the factor loadings for each latent variable were > .7, and the AVE for each latent variable was greater than 50%, the construct validity of the model was assumed to be good, and it was justified to interpret the path coefficients and R^2 values (Table 6) in order to address the research questions.

Effect size. The R^2 values, indicating the proportion of the variance explained in economic growth by the governance indicators varied with respect to the sample size (Table 7). The R^2 values tended to increase with respect to the sample size. Most of the variance in the temporal variations in GDP (68.5% to 70.2%) was explained in Models 1 to 3 when data for 173 countries were included. Smaller R^2 values reflected the smaller sample sizes, when the data were partitioned into groups, especially for the two years of

post-crisis data (2009 and 2010) in Model 9 (18.3%); Model 12 (15.3%); and Model 15 (23.0%).

Table 7

Path Coefficients and R^2 between GDP and Governance Indicators in 15 PLS Path Models

Model	Time period	Countries	Path Coefficients for Governance Indicators						R^2 (%)	f^2
			CC	GE	PS	RL	RQ	VA		
1	05-10	All	-.279	.801*	.268*	-.217	.425*	-.141	69.7	2.30
2	05-08	All	-.147	.709*	.263*	-.339*	.526*	-.156	70.2	2.35
3	09-10	All	-.497*	.873*	.229	.138	.207	-.105	68.5	2.17
4	05-10	Group 1	-.116	.169	.026	.798*	-.091	-.422*	37.1	.59
5	05-08	Group 1	-.094	.219	.042	.644*	.000	-.420*	38.1	.62
6	09-10	Group 1	-.138	.162	-.093	.951*	-.247	-.399*	34.6	.53
7	05-10	Group 2	.682*	-.012	.061	-.126	.102	-.308*	26.5	.36
8	05-08	Group 2	.687*	-.037	.053	-.078	.128	-.319*	29.9	.43
9	09-10	Group 2	.426*	.149	.035	.045	-.100	-.261*	18.3	.22
10	05-10	Group 3	.338*	-.343*	.259*	-.152	.647*	-.568*	21.4	.27
11	05-08	Group 3	.405*	-.383*	.250*	-.262*	.699*	-.520*	22.6	.29
12	09-10	Group 3	.054	-.105	.246*	.145	.320*	-.503*	15.3	.18
13	05-10	Group 4	-.588*	.566*	.350*	-.259	.207	-.133	27.4	.38
14	05-08	Group 4	-.442*	.625*	.321*	-.491*	.215	.029	26.3	.36
15	09-10	Group 4	-.652*	.338*	.198	.130	.191	-.183	23.0	.30

Note: * Significantly different from zero at $\alpha = .05$

According to Cohen (1992), effect sizes of 0.02, 0.15, and 0.35 were interpreted as small, medium, and large, respectively. Applying these criteria, five of the effect sizes were medium (f2 = .18 to .30), ten were large (f2 = .36 to 2.35), and none were small. The medium to large effect sizes indicate that the proportion of the multivariate variance in the GDP that can be explained by a combination of VA, PS, GE, RL, RQ, and CC is medium to high; thus, the relationships between governance indicators and economic growth identified in this study are substantive and have significant theoretical and

practical implications. This result adds reliability to the analysis and findings of the current study.

Significance of the path coefficients. The path coefficients varied inconsistently across the three time periods and between the groups of countries, providing evidence to indicate that the relationships between economic growth and governance varied widely with respect to both time and countries. The most consistently strong path coefficients (r_p >.5) in all time periods and in all the countries were for GE (r_p = .709 to .873). The fact that the path coefficient is positive implies a positive relationship between GDP and government effectiveness (i.e., quality of public services, quality of the civil service and the degree of its independence from political pressures, quality of policy formulation and implementation, and credibility of the government's commitment to such policies). The path coefficients were consistently strong and negative for Voice and Accountability (VA) in medium development nations (rp = -.503 to - .568). The negative sign of the path coefficients implies an inverse relationship between GPD and VA (freedom of expression, freedom of association, and free media, as well as the extent to which a country's citizens are able to participate in selecting their government). This inverse relationship was not very strong in very high development nations (rp = -.399 to - .422) or high development nations (rp = -.261 to - .319) and was not significantly different from zero in low development nations (rp = .029 to -.133). In low development nations, the strongest relationship found was between control of corruption (CC) and GDP (rp = -.442 to -.652). The negative sign of the path coefficients implies an inverse relationship between GDP and CC (the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by

elites and private interests). Unlike in low development nations, the relationship between CC and GDP was not significantly different from zero in very high development nations, but was positive in high and medium development nations. Finally, in medium development nations, positive relationships were found between political stability (PS) and GDP and between GDP and regulatory quality (RQ).

In Smart-PLS, multiple t tests are performed to determine whether the mean value of each path coefficient is significantly different from zero at the conventional $\alpha = .05$ significance level. To test this, t values are calculated using the bootstrapping method, in which the mean value for each path coefficient in each model was computed by randomly sampling the data 200 times. The aim of bootstrapping is to evaluate the strength of each path coefficient (Schuessler & Ibragimov, 2009). In the current study, the most consistently weak path coefficients for all time periods (r_p less than about .25) which (according to the t tests conducted after bootstrapping, were not significantly different from zero at $\alpha = .05$) included VA in all countries and Group 4; CC, GE, PS, and RQ in Group 1; GE, PS, and RQ in Group 2, and RL in Group 3.

Hypotheses

The distribution patterns of the PLS path coefficient between the three time periods and across the five groups of countries are illustrated using bar charts (Figures 8 to 13) constructed with MINITAB. The observed patterns were interpreted to address the 12 hypotheses, as follows:

Control of corruption. The hypotheses that: (a) the economic crisis has affected the relationship between control of corruption (CC) and GDP, and (b) a country's level of human development influences the effect of the economic crisis on the relationship

between control of corruption (CC) and GDP are tested by observing the patterns of the PLS path coefficients (Figure 8). An inverse correlation between CC and GDP was identified in all countries, very high development nations and low development nations, implying that the relationship between GDP and CC is an inverse relationship; however, in high and medium development nations the opposite occurred, because the path coefficients were positive, i.e., the relationship between GDP and CC is positive relationship. There was a general tendency after the economic crisis began (09-10) for the relationship between CC and GDP to become more negative in all countries, very high and low development nations, but declined and became less positive in high and medium development nations.

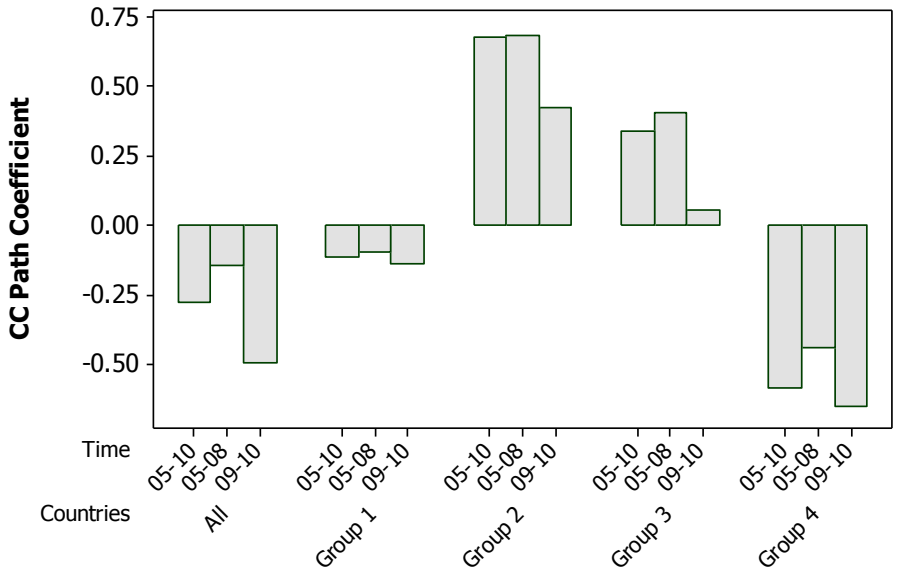


Figure 8. PLS path coefficients between CC and GDP.

Government effectiveness. The hypotheses that: (a) the economic crisis affected the relationship between government effectiveness (GE) and GDP, and (b) a country's level of human development influences the effect of the economic crisis on the

relationship between government effectiveness (GE) and GDP are tested by observing the patterns of the path coefficients in Figure 9. A consistent positive correlation between GE and GDP was identified in all countries and low development nations, implying that the relationship between GDP and GE is a positive relationship. However, in very high and high development nations, the relationship between GDP and GE were not significantly different from zero, and in medium development nations the path coefficients were consistently negative, i.e., the relationship between GDP and GE is an inverse relationship. After the economic crisis began (09-10), the correlation between GE and GDP increased in all countries and high development nations; decreased in very high and low development nations, and became less negative in medium development nations.

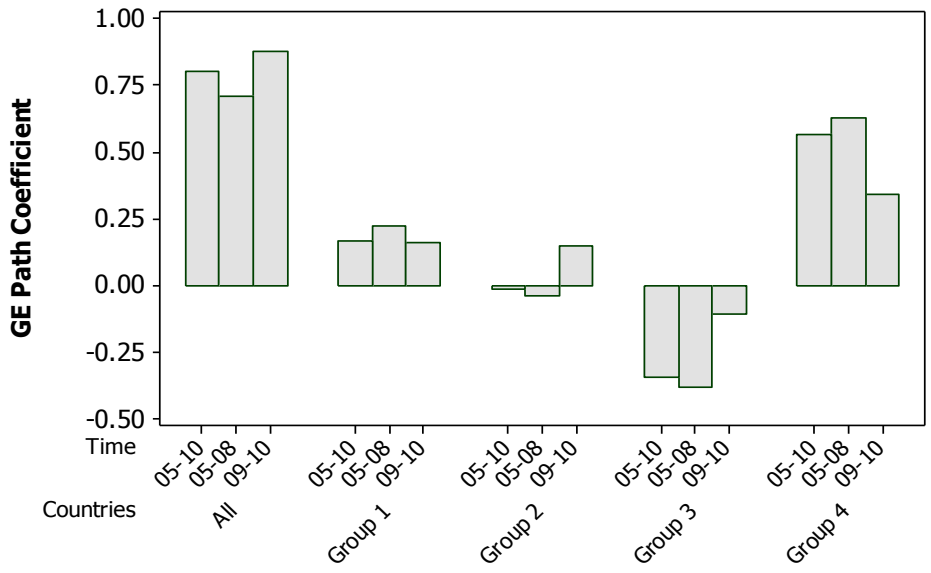


Figure 9. PLS path coefficients between GE and GDP.

Political stability and absence of violence. The hypotheses that: (a) the economic crisis affected the relationship between Political Stability and Absence of Violence (PS) and GDP, and (b) a country's level of human development influences the

effect of the economic crisis on the relationship between Political Stability and Absence of Violence (PS) and GDP are tested by observing the patterns of the path coefficients in Figure 10. Before the economic crisis, a positive correlation between GDP and PS was identified in all countries, implying that the relationship between GDP and PS is a positive relationship; however, in very high and high development nations, the path coefficients were not significantly different from zero. In medium and low development nations, the path coefficients were consistently positive, i.e., the relationship between GDP and PS is a positive relationship. After the economic crisis began (09-10), the correlation between GDP and PS decreased in all countries, high and low development nations, but became negative in very high development nations implying an inverse relationship between PS and GDP. In medium development nations, the path coefficient was less consistency positive.

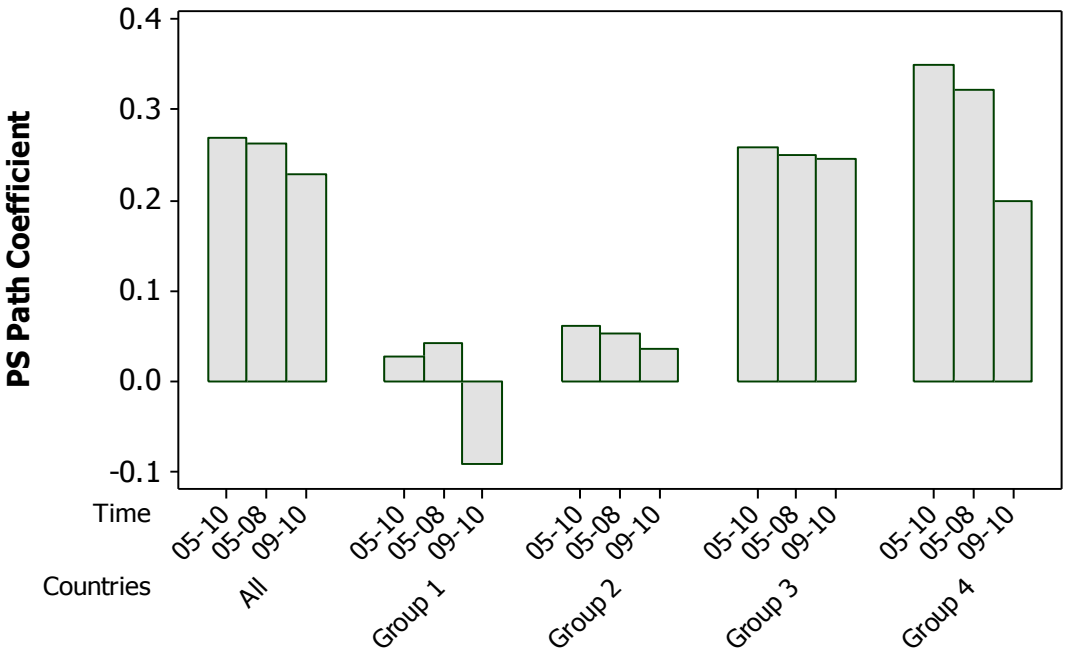


Figure 10. PLS path coefficients between PS and GDP.

Rule of law. The hypotheses that: (a) the economic crisis affected the relationship between rule of law (RL) and GDP, and (b) a country's level of human development influences the effect of the economic crisis on the relationship between rule of law (RL) and GDP are tested by observing the patterns of the path coefficients in Figure 11. Before the economic crisis, path coefficients between GDP and RL were weak and negative for all countries, high development nations, medium development nations, and low development nations, implying that the relationship between GDP and RL is an inverse relationship; however, in very high development nations there was a strong positive correlation between GDP and RL. After the economic crisis began (09-10), the correlation between GDP and RL increased in all countries and very high development nations. After the economic crisis began, the signs of the path coefficients were reversed for high, medium, and low development nations, so that relationships switched to positive, implying a positive relationship between GDP and RL.

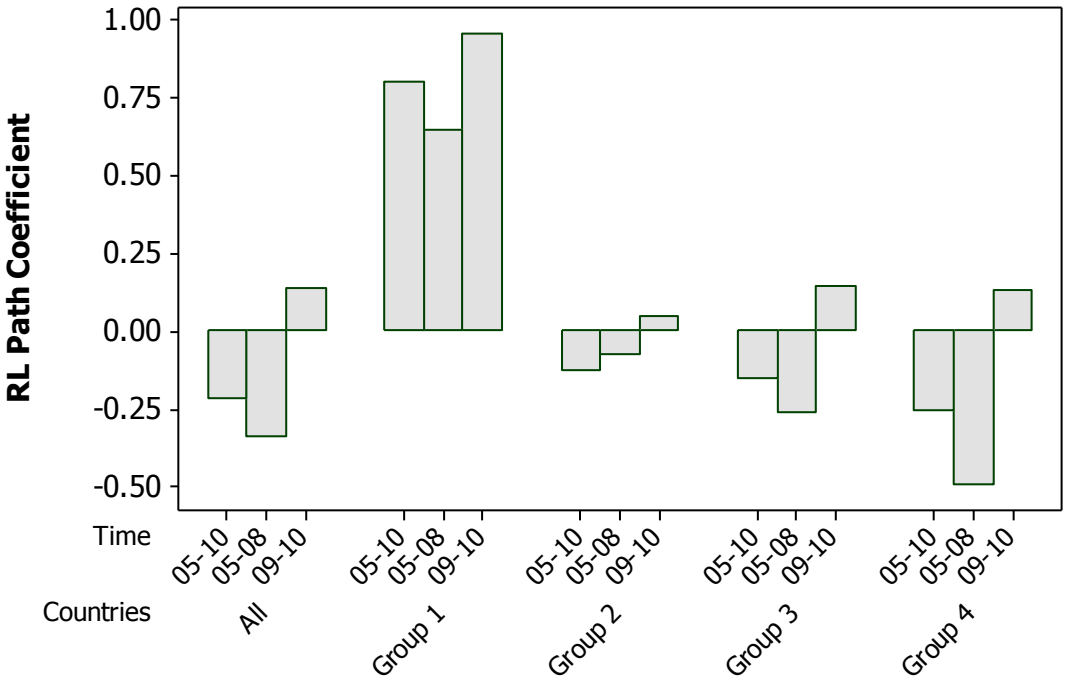


Figure 11. PLS path coefficients between RL and GDP.

Regulatory quality. The hypotheses that: (a) the economic crisis affected the relationship between Regulatory Quality (RQ) and GDP, and (b) a country's level of human development influences the effect of the economic crisis on the relationship between regulatory quality (RQ) and GDP are tested by observing the patterns of the path coefficients in Figure 12. Before the economic crisis, a significant positive correlation between GDP and RQ was identified in all countries and medium development nations, implying that the relationship between GDP and RQ is a positive relationship. In very high, high, and low development nations, the weak correlations between GDP and RQ were negative, implying an inverse relationship between GDP regulatory. After the economic crisis began (09-10) the path coefficients between GDP and RQ all declined to values < .25, which were not significantly different from zero at $\alpha = .05$.

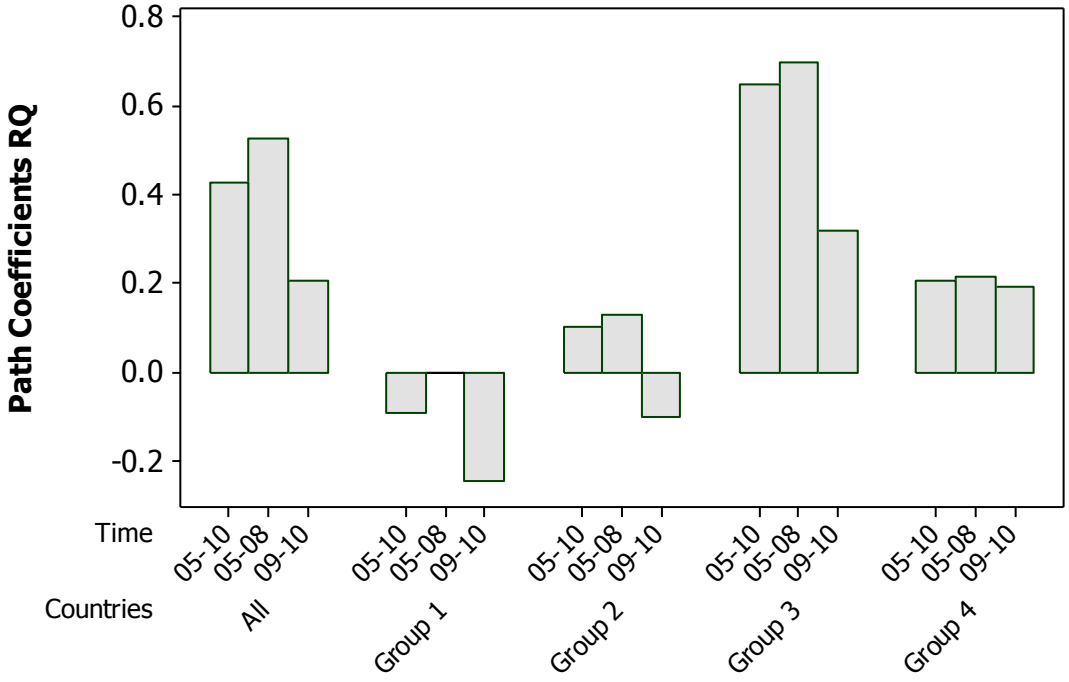


Figure 12. PLS path coefficients between RQ and GDP.

Voice and accountability. The hypotheses that: (a) the economic crisis affected the relationship between voice and accountability (VA) and GDP, and (b) a country's level of human development influences the effect of the economic crisis on the relationship between voice and accountability (VA) and GDP are tested by observing the patterns of the path coefficients in Figure 13. Negative correlations between GDP and VA were consistently observed, implying an inverse relationship between GDP and VA; however the path coefficients were very weak (< .25) and not significantly different from zero in all countries and low development nations. After the economic crisis began (09-10), the negative correlation between GDP and VA tended to decrease in magnitude in all the groups of countries apart from low development nations, when it became more negative.

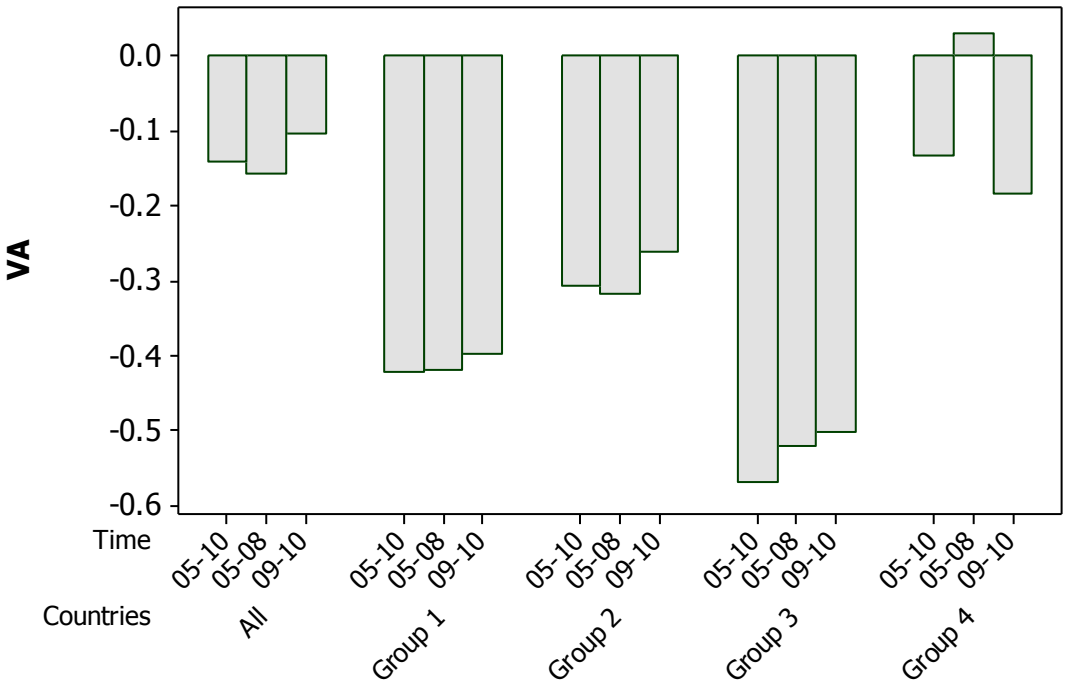


Figure 13. PLS path coefficients between VA and GDP.

Chapter Summary

In this chapter, fifteen models were computed to answer the research questions. In this chapter, evidence was provided using PLS path analysis to indicate the existence of complex multivariate relationships between GDP and worldwide governance indicators, which in most cases changed after the economic crisis began. Also, the level of the impact of the economic crisis on the relationship between quality of governance and economic growth varies from one governance indicator to another. In addition, nation's development level has influenced the relationship between governance and growth during times of crisis. These results showed that both research questions (the economic crisis has affected the relationship between governance and economic growth, and the nation's

development level has influenced this relationship during times of crisis) are answered positively.

Chapter 8: Discussion

The issue of governance quality has been discussed extensively in the social science literature. International organizations and countries use governance quality as a tool for measuring and evaluating government performance. Meanwhile, economic growth has been and continues to be an important goal for countries seeking to promote human and economic development. In addition, the desire to support economic and human development helps to explain the importance of governance quality and economic growth in the agendas of governments and IOs.

As discussed earlier, the relationship between governance and growth has been discussed by scholars in numerous studies (Arndt & Oman, 2006; Davidoff & Zaring, 2008; Kaufmann & Kraay, 2002; Reinhart & Rogoff, 2009). This dissertation examined the relationship between governance and growth during the global economic crisis of 2008. Two research questions addressed in the current research are, first, did the global economic crisis impact the relationship between governance and economic growth. Second, whether or not a country's level of development influences the effect of the economic crisis on shaping the relationship between governance and growth.

In this chapter, the findings presented in Chapter 7 are discussed, and analyses of the research questions and hypotheses are presented. In addition, implications of the research presented in this dissertation for the real world are also discussed and explained.

Governance and Economic Growth

According to Reinhart & Rogoff (2009), the global economic crises influence economic growth and government work. The current research examines the influence of the current economic crisis on the relationship between governance and growth. Governance indicators from the worldwide governance indicators project of the World Bank Group are used to measure quality of governance (World Bank, 2011), and GDP per capita is used to measure economic growth (World Bank, 2012). This study examined 173 countries over the period from 2005-2010.

Data analysis in this dissertation suggests the influence of the current economic crisis on shaping the relationship between governance and economic growth. The analysis in Chapter 7 found that this relationship had changed in 2009–2010 (after the crisis began) compared to the period from 2005–2008 (before the crisis). In addition, the numbers showed that each indicator has different level of relationship with GDP over the two periods (before and after the crisis began) compared to other indicators.

Table 8

The Path Coefficients Between GDP and WGIs Before and After the Crisis Began (All Countries)

	CC & GDP	GE & GDP	PS & GDP	RL & GDP	RQ & GDP	VA & GDP
(05-10)	-0.279	0.801*	0.286*	-0.217	0.425*	-0.141
Before (05-08)	-0.147	0.709*	0.263*	-0.339*	0.526*	-0.156
After (09-10)	-0.497*	0.873*	0.229	0.138	0.207	-0.105
After – Before	-0.350	0.164	-0.054	0.477	-0.319	0.050

Note. * Significantly different from zero at $\alpha = .05$.

The current analysis, which confirms the influence of the economic crisis on shaping the relationship between governance and growth, found three clusters (groups) in describing the relationships between governance and growth. In the first cluster, the relationship between governance and growth became stronger (positive) after the beginning of the crisis. In this cluster, the positive trend of the relationships after the crisis began makes these aspects of governance critical elements in the road to economic recovery. In the second cluster, the relationships became weaker (sometimes negative) after the crisis began, suggesting that these indicators have a negative influence on economic growth during times of crisis. Finally, in the third cluster, no significant differences in the relationships between governance and growth before and after the beginning of the economic crisis were suggested. However, changes in the relationships after the crisis began compared to before the crisis were suggested in some cases. However, it can be concluded that there was insufficient evidence in the third cluster to show that the economic crisis has influenced the relationship between governance and growth.

In the following section, a more robust analysis of the relationship between governance indicators and GDP during times of crisis will be presented. The analysis shows that government effectiveness (GE) has the most significant and positive relationship with economic growth of all countries in all of the indicators. The change in the crude statistical relationship between government effectiveness (GE) and GDP after the crisis began compared to before the crisis confirms the hypothesis that the economic crisis has influenced this relationship. Importantly, this result demonstrates the importance of GE (policy formulation and implementation by governments) in supporting

economic growth before and after the beginning of the economic crisis. In addition, GE is the only indicator that have positive and significant relationship with GDP after the beginning of the economic crisis. Thus, government effectiveness will play an important role in the road to recovery.

Another expected result of the current research involves the influence of the economic crisis on shaping the relationship between control of corruption and GDP in that the result supports the hypothesis stated earlier, that the economic crisis has influenced the relationship between control of corruption (CC) and GDP. The control of corruption (CC) indicator measures the extent to which the public is able to hold elected officials and bureaucrats accountable for their actions and the extent to which public power is exercised to fight private gains by the country's elite and public officials. Although the relationship between CC and GDP is insignificant before the crisis, this relationship gains significance after the crisis began. The results of this study demonstrate that control of corruption has a significant negative relationship with GDP. The strong negative correlation between control of corruption (CC) and economic growth makes control of corruption (CC) another critical element governments should enhance if they want to recover from the economic crisis as measured by GDP.

Although regulatory quality (RQ), rule of law (RL), and political stability (PS) indicators had significant relationships with GDP before the crisis began, their relationships with GDP are not significant after the crisis began. Although the relationship between voice and accountability (VA) indicator and GDP changes during times of crisis for all countries, this relationship is not significant at all times. Studying

longer periods of time and including additional factors in the study might yield different results.

Even though regulatory quality (RQ) and rule of law (RL) do not have a significant relationship with GDP after the crisis began, it is nevertheless important to analyze their results to gain a better understanding of the influence economic crisis has on shaping the relationship between governance and growth. Although the relationship between regulatory quality (RQ) and GDP became less positive after the beginning of the economic crisis in all countries, this relationship is not significant to growth after the crisis began. One possible explanation of the decreased relationship between RQ and growth during times of crisis is the fact that government response to economic crises follows an emergency style, which leads to low regulatory quality, which may, in turn, negatively influence the economy rather than support recovery (Levi-Faur, 2010; Reinhart & Rogoff, 2009). Additionally, fast responses by governments to the crises result in less time spent by regulators and specialists discussing such regulations, which affects the quality of those regulations (Davidoff & Zaring, 2008). Accordingly, indicators such as voice of accountability (VA) (public participation in the political and decision-making process) do not have a significant relationship with economic growth during times of crisis, at least in the short-term.

In addition, although rule of law (RL) had a negative significant relationship with GDP before the crisis, this relationship became positive (though not significant) after the crisis began. This relationship between rule of law (RL) and GDP shows the greatest change of all the indicators from before to after the onset of the crisis. The change in the direction of the relationship between rule of law (RL) and GDP demonstrates the

important role that rule of law (the public's confidence in government institutions in applying rules and laws as well as people's equality before the law) plays in supporting economic growth during times of crisis. Public confidence in government institutions to apply rules and laws positively impacts the way people react to government recovery plans after crises. The public tend to be more willing to support government plans for recovery when rule of law is adopted and applied by the government (Repucci, 2011; Haftel & Thompson, 2006, Kaufmann et al., 2009b). Also, when people are treated as equal before the law, their confidence in government institutions is enhanced, and it is easier for governments to fight corruption and maintain political stability (Box, 1998; Pradhan & Sanyal, 2011).

Accordingly, the relationships of all of the governance indicators to GDP have changed after the crisis began compared to before the crisis; however, consistent with the literature discussed in Chapter 2, not all of these relationships are significant. The result of the current study rejects the null hypothesis (the economic crisis has not affected the relationship between governance and growth) of H3 (GE and GDP) and H6 (CC and GDP). In contrast, the result fails to reject the hypothesis of H1 (VA and GDP), H2 (PS and GDP), H4 (RQ and GDP), and H5 (RL and GDP), at the 0.05 level of significance.

To summarize, the results of analyzing all countries show that, although some indicators—political stability (PS), regulatory quality (RQ), and rule of law (RL)—had a significant relationship with economic growth before the beginning of the economic crisis, these relationships became close to zero after the crisis began, with no significant relationship with GDP. Also, government effectiveness (GE) is the only indicator whose relationship with growth is significant and positive both before and after the onset of the

crisis. In contrast, control of corruption (CC) had significant relationship with GDP only after the crisis began. Finally, voice and accountability (VA) and political stability (PS) are the only two indicators whose relationship with GDP changed only slightly (close to zero) after the crisis began. Thus, voice and accountability (VA) and political stability (PS) have little to no influence on shaping the relationship between governance and growth during times of crisis.

These results showed that the relationship between governance and growth is affected by the global economic crisis. With the assumption that governments work for economic recovery after a crisis, the results demonstrate that governments need to concentrate on some aspects of the governing process more than others. In addition, although other indicators may play an important role in shaping economic growth and the governing process during times of crisis, as the results of the current research indicate, during times of crisis, only two indicators—control of corruption (CC) and government effectiveness (GE)—have a significant relationship with GDP. Control of corruption (CC) has a negative relationship with GDP, and government effectiveness (GE) has a positive relationship with GDP. In addition, although the rest of the indicators have no significant relationship with growth after the beginning of the crisis, these indicators are important elements in increasing long-term governance quality to help countries recover from times of crisis and to minimize future risk (Davidoff & Zaring, 2008; Kaufmann et al., 2010; Reinhart & Rogoff, 2009).

Human Development Influences

Human development has been linked to governance and economic growth (Agere, 2000; Alkire, 2010; Kaufmann & Kraay, 2002; Ndulu & O'Connell, 1999; Smith, 2007).

The literature review in Chapters 4, 5, and 6 of this dissertation showed that there is a two-way relationship between human development on one hand and quality of governance and economic growth on the other. In addition, the discussion of the first research question shows that global economic crisis influences the relationship between quality of governance and economic growth. Consequently, the second research question discusses whether a country's human development level influences the relationship between governance and growth during times of crisis.

Analyzing the data from the United Nations Development Program (UNDP) illustrates that the influence of the global economic crisis of 2008 on the relationship between governance and growth varies among human development groups. Thus, each group of the four groups of human development (very high development-Group 1, high development-Group 2, medium development-Group 3, and low development-Group 4) affect the relationship between governance and growth differently during times of crisis, as illustrated in Table 9.

Table 9

The Path Coefficients Between GDP and WGIs Before and After the Crisis Began (Four Groups of Development)

	CC & GDP	GE & GDP	PS & GDP	RL & GDP	RQ & GDP	VA & GDP
Group 1 (05-10)	-0.116	0.169	0.026	0.798*	-0.091	-0.442*
Before (05-08)	-0.094	0.219	0.042	0.644*	0.000	-0.420*
After (09-10)	-0.138	0.162	-0.093	0.951*	-0.247	-0.399*
After-Before	-0.044	-0.057	-0.045	0.307	-0.247	0.021
Group 2 (05-10)	0.682*	-0.012	0.061	-0.126	0.102	-0.308*
Before (05-08)	0.687*	-0.037	0.053	-0.078	0.128	-0.319*
After (09-10)	0.426*	0.149	0.035	0.045	-0.100	-0.261*

(table Continues)

Table 9 (Continues)

After-Before	-0.261	0.190	-0.002	0.123	-0.245	0.058
Group 3 (05-10)	0.338*	-0.343*	0.259*	-0.152	0.647*	-0.568*
Before (05-08)	0.405*	-0.383*	0.250*	-0.262*	0.699*	-0.520*
After (09-10)	0.054	-0.105	0.246*	0.145	0.320*	-0.503*
After-Before	-0.351	0.278	-0.004	0.407	-0.379	0.017
Group 4 (05-10)	-0.588*	0.566*	0.350*	-0.259	0.207	-0.133
Before (05-08)	-0.442*	0.625*	0.321*	-0.491*	0.215	0.029
After (09-10)	-0.652*	0.338*	0.198	0.130	0.191	-0.183
After-Before	-0.210	-0.287	-0.123	0.621	-0.024	-0.212

Note. * Significantly different from zero at $\alpha = .05$.

As discussed in Chapters 2 through 4, there is a correlation between country's level of development and institutional quality (Hall & Taylor, 1996; Jansen, 2007; March & Olsen, 1984), which, in turn, will help shape the relationship between governance and growth during times of crisis. In other words, the economic crisis will influence the relationship between governance and growth differently based on a country's level of development. Consequently, as this study shows, different levels of development affect the relationship between governance indicators and growth differently during times of crisis, a result consistent with the literature. Thus, this study result rejects the null hypotheses (H7-H12)—that a country's level of development does not influence the effect of the economic crisis on the relationship between governance and growth. In the following section, deep analysis of the influence of a nation's development level on shaping the relationship between governance indicators and GDP during times of crisis will be presented.

The relationship between rule of law (RL) and GDP changed positively after the crisis began compared to before the crisis in all groups. Although the relationship between RL and GDP is only significant in very high development nations, the general

attitude of RL is positive in all groups after the crisis began. RL is assumed to install confidence in citizens and investors that laws are served, copyrights are protected, and a well-functioning judicial system is in place. From the analysis, we can see that RL seems to be a less important factor in supporting economic growth in high, medium, and low development nations when other governance indicators, such as control of corruption and voice and accountability, are not satisfied (not significantly related to GDP).

On the other hand, regulatory quality (RQ) and its relationship with GDP changed negatively in all groups, though this relationship is only significant in medium development nations. As the results show, RQ (the ability of governments to formulate and implement sound policies that enhance economic growth) does not have a strong relationship with GDP in countries with very high, high, and low levels of development. One possible explanation is that nations with a high level of development already have quality regulations prior to crisis. Even if this quality decreases during times of crisis, these countries have fundamental regulations that help in crisis recovery. Additionally, as discussed in Chapters 2 and 4, RQ is an important factor in the governing process and in minimizing future risk (Davidoff & Zaring, 2008; Reinhart & Rogoff, 2009). Therefore, another explanation for the weak relationship between RQ and GDP in Groups 1, 2, and 4 is the fact that regulations need time to make an impact on the economy. Consequently, the results of research covering a longer period may be different (Aikins, 2009; Davidoff & Zaring, 2008). In contrast, countries with medium levels of development (mainly transitional economies) rely heavily on RQ for enhancing economic growth (Aikins, 2009; Levi-Faur, 2010). Accordingly, a strong positive relationship exists between RQ

and GDP in Group 3, as shown in Table 9. Thus, RQ plays an important role in enhancing growth for medium-developed countries during times of crisis.

While the relationship after the crisis began compared to before the crisis has changed differently among development groups, the relationship between control of corruption (CC) and growth decreased in all groups. The relationship, however, is only significant in high and low development nations before and after the beginning of the crisis, and significant in medium development nations only before the crisis. Although the results may have been influenced by the short period of study after the crisis began, some scholars have argued that corruption is not always bad for economic growth (Heckelman & Powell, 2007; Mironov, 2005). Accordingly, some forms of corruption, such as black market activities and bribes, may positively contribute to economic growth, especially in countries with no free market or rule of law (Heckelman & Powell, 2007). However, even in these countries, there is a point at which too much corruption might destroy the economy. This turning point from benefiting to harming the economy depends on the structure of the economy and the level of a country's development and institutional quality (Heckelman & Powell, 2007). Accordingly, in low development nations, there is a significant negative relationship between CC and GDP, while in very high development nations; there is no significant relationship between CC and GDP. This result supports the ideas that corruption (a) is not always bad for economic growth, and (b) may be good or bad for growth depending on the country's level of development.

The changes in the relationship between voice and accountability (VA) and GDP varied among different development groups. Freedom of expression and people's ability to select their governments freely, as represented by VA, has a significant negative

correlation with economic growth in all groups except low development nations, where it is not significant. This is reasonable considering that low human development countries have fewer democratic principles and less freedom of speech, and thus people in those countries have little or no voice in the political and decision-making process. Thus, in all groups except low development nations, there is an inverse relationship between economic growth and the application of democratic principles and public participation in the political process. Although this relationship became less negative after the crisis began, as shown in Table 9, this change is not significant. Thus, the level of the relationship between VA and growth has not noticeably changed since the beginning of the crisis in 2008. Analysis of longer periods after the crisis may show that VA will play a greater role in the future, that it has more of an influence than has yet been seen.

Political stability (PS) is important for sustainable economic and human development, especially in countries with medium to low development. Although the relationship changed differently among development groups after the crisis began compared to before the crisis, the relationship between political stability and economic growth is only significant in medium development nations after the beginning of the economic crisis. Understandably, very high, high, and low development nations have a non-significant relationship between PS and GDP after the crisis began because, generally speaking, the political systems in high and very high developed countries are stable. In contrast, low-development countries (Group 4) often suffer from unstable governments, which may explain the argument that international donors and investors accept this situation of uncertainty as a reality (Agarwal, 2009; Harrison & Cline-Cole, 2009; Ndulu & O'Connell, 1999). In medium development countries (Group 3), as the

results of this study show, PS has a strong positive connection to economic growth, with no significant change in the level of this relationship before versus after the onset of the crisis. The stability of the relationship between PS and growth in medium development nations is supported by the argument that most countries in Group 3 are in a transitional period in their economy and governance, so political stability plays a major role in supporting sustainable economic growth for these countries (Osborne, 2004; Weiss, 2000).

Accordingly, the result confirms the six hypotheses (H7-H12) stated earlier regarding the influence of a country's level of development on shaping the relationship between governance and growth during times of crisis. The relationships of all indicators with GDP have changed differently among development groups after the crisis began compared to before the crisis; however, not all of these relationships are significant. These results are consistent with the governance literature: most studies agree that a nation's development level plays an important role in shaping a government's response to crisis and its preparedness to face economic turbulence.

To summarize, a country's level of development affects the relationship between governance and growth during times of crisis. In very high developed countries (Group 1), rule of law (RL) has a significant positive correlation with GDP, while voice and accountability (VA) has a significant negative correlation with GDP both before and after the beginning of the economic crisis. In high developed countries (Group 2), voice and accountability (VA) has a significant negative correlation with GDP, while control of corruption (CC) has a significant positive correlation with GDP both before and after the beginning of the economic crisis. In medium development countries (Group 3), voice and

accountability (VA) has a significant negative correlation with GDP both before and after the beginning of the economic crisis. In contrast, political Stability (PS) and regulatory quality (RQ) have significant positive correlations with GDP in medium development countries both before and after the beginning of the economic crisis. Finally, in low development countries (Group 4), there is a significant positive correlation between government effectiveness (GE) and GDP, while control of corruption (CC) has negative significant correlation with GDP. The remainder of the relationships are either not significant or exhibit no noticeable change after the beginning of the crisis compared to before the crisis.

Importantly, the results show that medium development countries (Group 3) have an interesting relationship between governance and growth, one that could be studied as a separate project. Compared to other groups, Group 3, which includes most of the transitional economies such as China and India, shows a moderate change before versus after the beginning of the economic crisis in the relationship of all indicators with economic growth. In fact, the positive changes in the relationship between governance indicators and growth after the crisis began are greater than the negative ones, which are small and not significant. From these results, we could argue that transitional economies are, in fact, in a transitional period in governance as well, and the economic crisis has had moderate influence on the relationship between governance and growth in these economies. Thus, for medium development countries to have sustainable human and economic development, they need to keep improving their governance quality in parallel with their high economic growth (Besley & Kudamatsu, 2007; Keefer, 2007; Weiss, 2000).

Implications of the Current Study

The global economic crisis has had an influence on the relationship between governance and economic growth. Consequently, the results of the current research show the unsteadiness in the relationship between indicators of governance and economic growth during the economic crisis; this instability is a sign of the need for long-term strategies to promote global and national good governance practices that are not adversely affected by crises. In fact, one of the important implications of the current research is that governments need to use long-term plans to support improvement of governance quality and to prepare for crises before they happen.

This study shows that economic growth has a relationship with the effectiveness of governments' work, high regulatory quality, public confidence in their government's work, efforts to fight corruption, and freedom of expression. These governance indicators help to create investors' confidence in the economy and people's confidence in the system and the governments' work, and all of these indicators support human and economic sustainable development. In addition, a country's development level plays an important role in shaping its response to and preparedness for crises. Therefore, countries with different levels of development have different level of relationship between growth and governance indicators during times of crisis; thus, different recovery measures need to be adopted by governments depending on their country's level of development.

International organizations and donors who support economic and human development in receiving countries can also benefit from the current study. The results of the current research show that a 'one-size-fits-all' strategy in improving governance and supporting economic growth in countries is not the appropriate approach. Although some

governance indicators play an important role in supporting economic growth in all countries regardless of their level of development, different groups have different needs and demands that need to be considered by IOs and countries seeking to develop effective and efficient public and private sectors, improve governance, and facilitate sustainable human and economic development in countries. For example, rule of law (RL) has significant correlations with economic growth in very high developed countries, while political stability (PS) and regulatory quality (RQ) have greater weight in connection with growth in medium developed countries.

Chapter Summary

The overall argument of this study is that the relationship between governance and growth has been affected by the global economic crisis of 2008 and that different countries' development levels have contributed significantly to shaping this relationship during the crisis. In the above discussion, both of the study's research questions have been answered; the economic crisis did affect the relationship between quality of governance and economic growth, and nations' human development level did affect the relationship between governance and growth during times of crisis. In this chapter, discussion of the results that were introduced in Chapter 7 were presented. Also, both research questions and the hypotheses of the current research were discussed. Finally, implications of the current study were presented and discussed.

Chapter 9: Conclusion and Future Research

Chapter 9 will recapitulate the ideas presented in this dissertation and discuss the main themes of the current research, including governance, economic growth, human development, and the relationships among them before and after the beginning of the global economic crisis of 2008. In addition, the major findings of the current research will be presented, and the results of addressing both research questions will be discussed. Finally, implications for future research based on the findings of the current research will be presented.

The notion of governance has been one of the most discussed and debated issues in recent years in the social sciences and other fields. In addition, governance has been associated with human and economic development. Economic growth, on the other hand, is a primary concern of nations, even more so during times of crises. Accordingly, the current global economic crisis has influenced all aspects of people's lives, one of which is the relationship between governance and economic growth.

The literature demonstrates that sustainable human and economic development cannot be achieved without improving governance quality. International organizations and countries rely heavily on governance to improve human rights, facilitate human development such as education and health, and support economic growth. In fact, IOs deem that quality governance is a condition for human and economic development. Furthermore, international donors such as the IMF, the World Bank, and other countries

use quality of governance as an important tool in evaluating the performance of aid receiving governments.

Despite its importance, governance as a concept has no universal definition among IOs, policy-makers, and scholars. Most definitions of governance concentrate on improving citizen participation in the political process, fighting corruption, supporting human rights such as freedom of speech and expression, and enhancing the efficiency and effectiveness of a government's work. Consequently, many indices such as worldwide governance indicators (WGI) are issued yearly to measure governance quality and the governance process in countries.

This dissertation studied the relationship between governance and economic growth during times of crisis. This study covers 173 countries over the period from 2005–2010. One of the promises of the current research is to study whether the relationship between governance and economic growth is different in times of crisis versus times of non-crisis. This research was undertaken with the belief that studying the relationship between governance and growth during times of crisis would aid in understanding this relationship at different times and under different circumstances. The conclusions of this research could be used by IOs and countries to help in improving governance and enhancing economic growth in countries.

The literature demonstrates the existence of the relationship between governance and economic growth, but says little about the influence of the economic crisis on that relationship. Accordingly, the first research question was designed to study the influence of the global economic crisis on shaping the relationship between governance and economic growth. To analyze the relationship before the crisis compared to after the

onset of the crisis, governance indicators from the worldwide governance indicators (WGI) project of the World Bank Group were used to measure governance, while change in GDP per capita, PPP (current international $) was used to measure economic growth.

This research found that the crisis has affected the relationship between governance and growth, and that the relationship of governance to economic growth was different before versus after the onset of the crisis. The relationships of all governance indicators with GDP have changed after the beginning of the global crisis compared to before the crisis. The results showed that, although other indicators might play an important role in shaping the relationship between governance and growth during times of crisis, two indicators have the most significant relationship with growth when analyzing all countries included in this study. Predictably, control of corruption (CC), the ability of the public to hold the government accountable for its actions, has a significant negative relationship with growth for all countries after the onset of the crisis (09-10). In contrast, government effectiveness (GE), the quality of public services and the quality of policy formulation and implementation by government, has the most significant positive relationship with economic growth for all countries at all times. These results describe the importance of the quality of government work and control of corruption indicators to growth during times of crisis. Thus, these results suggest that controlling corruption and increasing government effectiveness will enhance economic growth. However, as shown later, analyzing different levels of development of nations produce more insight to the relationship between governance and growth during times of crisis.

Although this result is consistent with the literature review, where most studies concluded that economic crises did influence the relationship between different factors of

governance and growth, this study raises an interesting point regarding theories such as new institutionalism theory. New institutionalists argue that there is a strong correlation between an institution's quality, effective government, and economic growth. The result of this study adds to the debate on the nature of the relationship between an institution's quality, quality of governance, and economic growth, especially during times of crisis.

In contrast, the literature demonstrates that human development is an important element in supporting economic growth and quality of governance. The literature suggests that human development aspects such as health and education have a two-way relationship with governance and economic growth. In addition, new institutionalism theory – as the framework of the current research—argues that high institutional quality will have a positive influence on political and economic outcomes. Thus, IOs and countries can facilitate the governance improvement process and enhance economic growth by realizing the different needs and demands of countries with different levels of development.

Consequently, the second research question addressed the influence of a nation's human development level on the relationship between governance and growth during times of crisis. The human development index (HDI), a product of the United Nations Development Program (UNDP), was used to answer the second research question. HDI's four development groups of countries—very high development, high development, medium development, and low development—were used to study whether the effect of the economic crisis on shaping the relationship between economic growth and governance vary from country to country based on each country's level of development.

This study found that different levels of development affect the relationship between governance and growth differently during times of crisis. In other words, a country's level of development influences the effect of the economic crisis on shaping the relationship between governance and growth. In addition, countries with different levels of development have different requirements and demands to improve governance and enhance economic growth during times of crisis. Thus, this result is consistent with governance literature discussing the influence of a country's level of development on shaping the relationship between governance and growth.

Accordingly, each development group has differently structured institutional configured that connect quality of governance to economic growth during times of crisis. For example, in very high developed countries, rule of law (RL), which refers to the public's confidence in government institutions in applying rules and laws as well as people's equality before the law, has the highest significant and positive relationship with growth. In contrast, voice and accountability (VA), which refers to the level of public participation in the political and decision-making process, has a significant negative relationship with growth in all groups except Group 4 (nations with low development). In high developed nations (Group 2), control of corruption (CC) has a significant positive relationship with growth; in contrast, in low development nations (Group 4), CC has a significant negative relationship with growth. In addition, political stability (PS) is found to have a significant positive relationship with growth in medium developed nations (Group 3). Government effectiveness (GE), which refers to the ability of government to adopt and implement sound policies, was found to have a significant positive relationship with growth in low developed nations.

These results show the diversity among different levels of development of nations in addressing the relationship between governance and growth during times of crisis. In addition, by illustrating which indicators impact economic recovery, these relationships suggest which aspects of the governing process require the most focus in each recovering group. Finally, these results support the idea that IOs and countries that support improvement in governance and the economy need to have different plans for different groups in order to help support their particular country's economic and governance development.

Limitations of the Current Study

Although this study has some limitations, which are to be expected, these limitations should not affect the quality of the contributions of the dissertation. One of the obvious limitations is the fact that only 2 years of data were available after the beginning of the economic crisis. Thus, further studies including more years in the analysis, especially after the onset of the crisis, would make a valuable contribution to understanding the relationship between governance and economic growth during times of crisis. Also, analyzing more years of data would help to clarify the role that human development plays in shaping the relationship between governance and growth during times of crisis.

Another limitation of the current research is the fact that only 4 years have passed since the onset of the global economic crisis, and some influences and consequences of the crisis may take longer to be felt. The same argument could be made in studying the governance process. For example, time is needed to evaluate whether adopting better quality regulations will actually help in the economic recovery process. Therefore, data

covering a longer period of time would be an important addition to the analysis of the relationship between governance and growth.

One limitation of this study is the use of estimated scores of governance to measure governance indicators without taking into account the margins of error for those scores. The WGI calculates an estimated (rather than an exact) score for each governance indicator by collecting data from many sources. Further research using measures of governance with no or low margins of error could provide a better understanding of the relationship between governance and growth.

In addition, the study concentrates, in part, on secondary data, as the analyses are based on indices derived from surveys and reports. Each of the six governance indicators was constructed based on data collected from indices, reports, and surveys, and the authors of the indicators used differing methodologies to construct them. This method of collecting data and building the indicators might influence the validity of the study.

Future Research

The current research contributes to the literature by studying the relationship between governance and growth during times of crisis. Much research could be built on the results of the current research. As in most research, using more variables will add more value to the research; however, some variables may contribute more than others in analyzing the influence of the economic crisis on shaping the relationship between governance and growth. For example, a country's type of political system may influence the way the economic crisis shapes the relationship between governance and growth in that country. Accordingly, studying whether governments govern differently during times

of crisis as a result of the structure of their countries' political systems is another suggested topic.

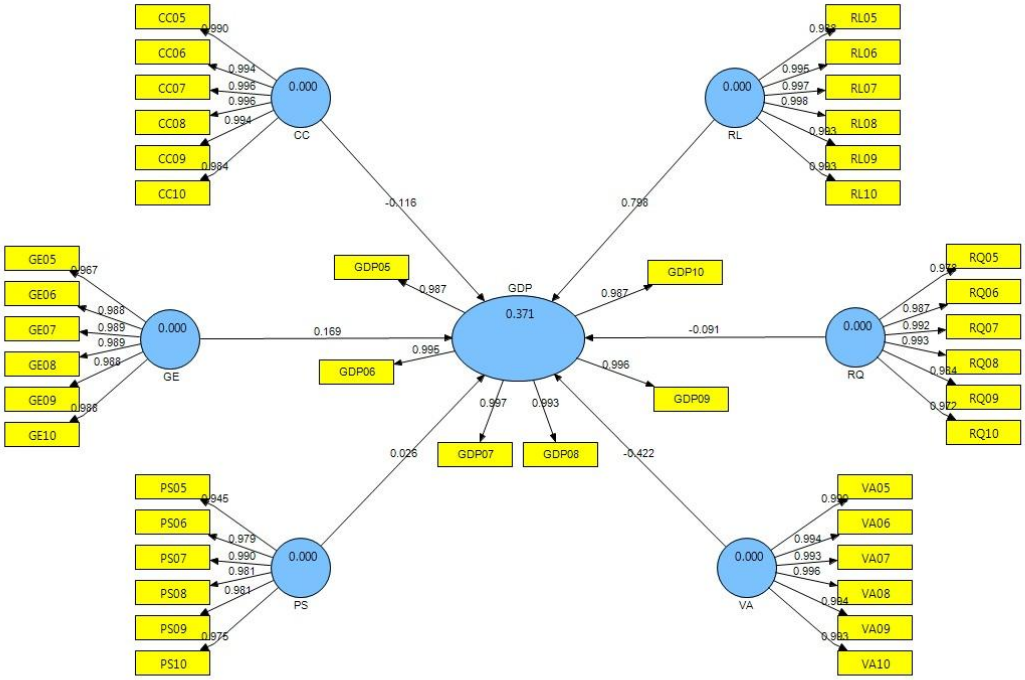
In addition, further research could study specific regions or economies. As discussed earlier, transitional economies such as China and India and oil-rich economies such as Saudi Arabia and Qatar have special characteristics that shape the relationship between governance and growth during times of crisis. Thus, studying the influence of the economic crisis on the relationship between governance and growth in these economies will contribute to our understanding of the governance process and its relationship to economic and human development.

To conclude, both research questions were answered positively, and 8 out of the 12 null hypotheses presented in this dissertation were rejected. This chapter summarized the current research regarding the relationship between governance and economic growth, and human development. In addition, the approach and methodology used in this dissertation were explained. Also, findings of the current research were presented. Furthermore, limititions of the current research were discussed. Additionally, future research considirations were introduced.

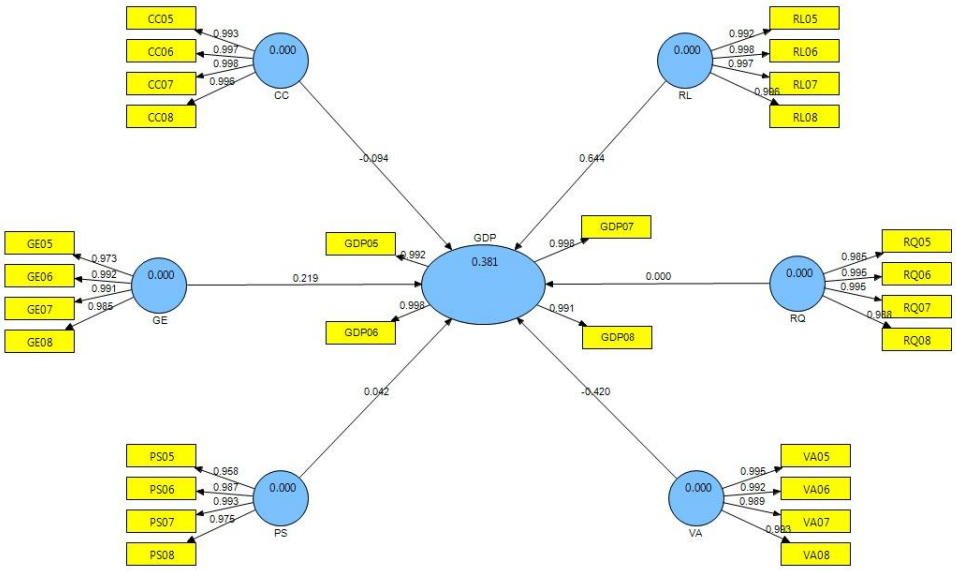
Appendix

Model Groups 4 Through 15

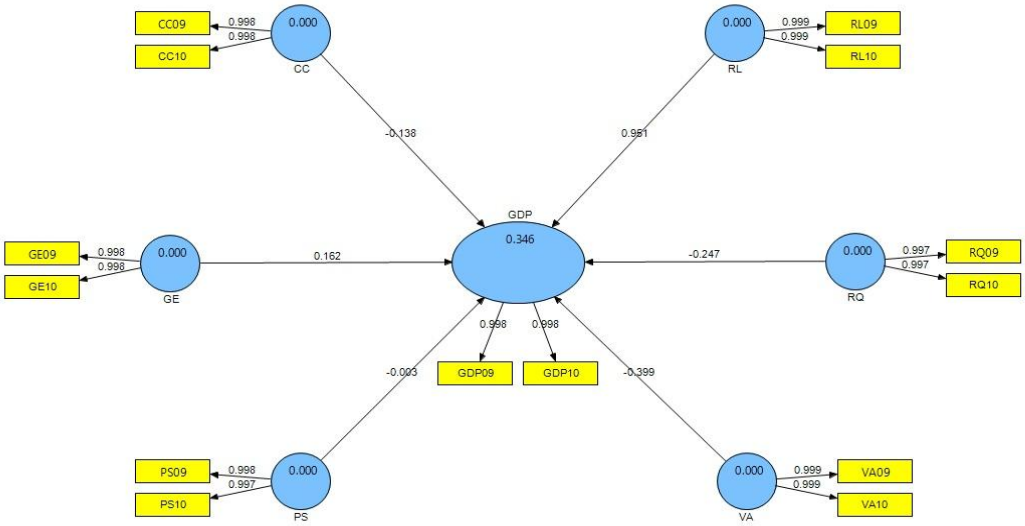
Model 4 Group 1 (05-10)



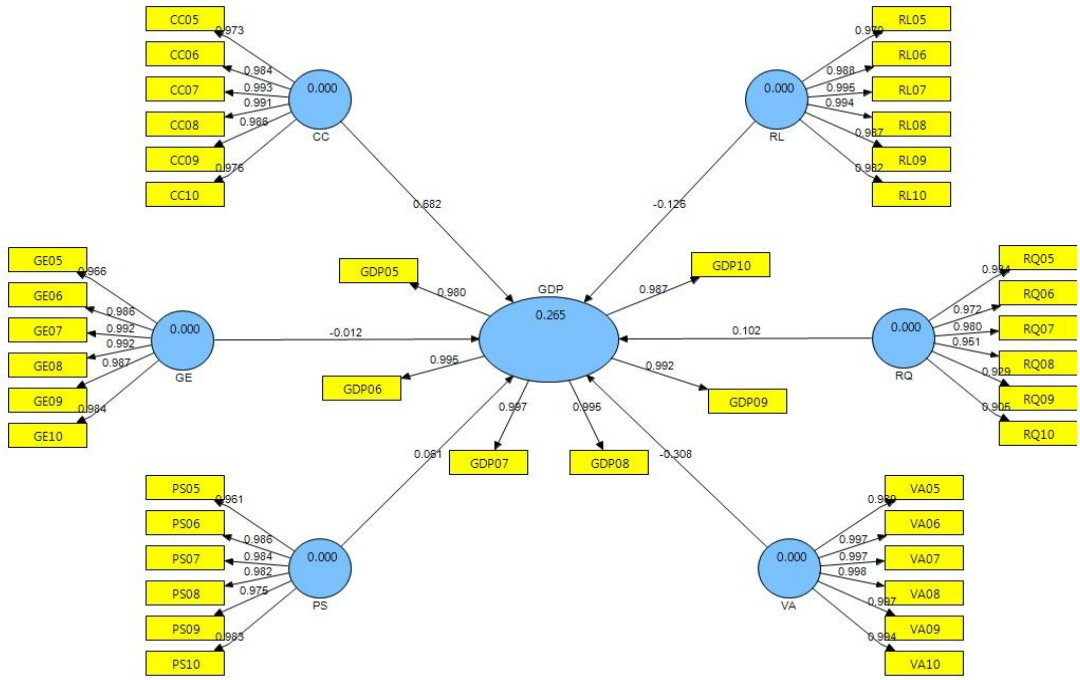
Model 5 Group 1 (05-08)



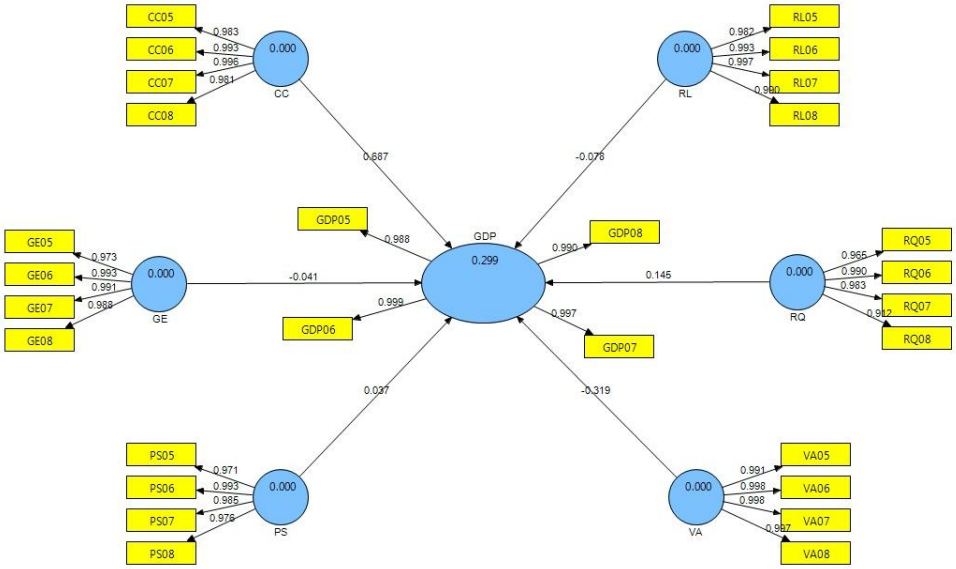
Model 6 Group 1 (09-10)



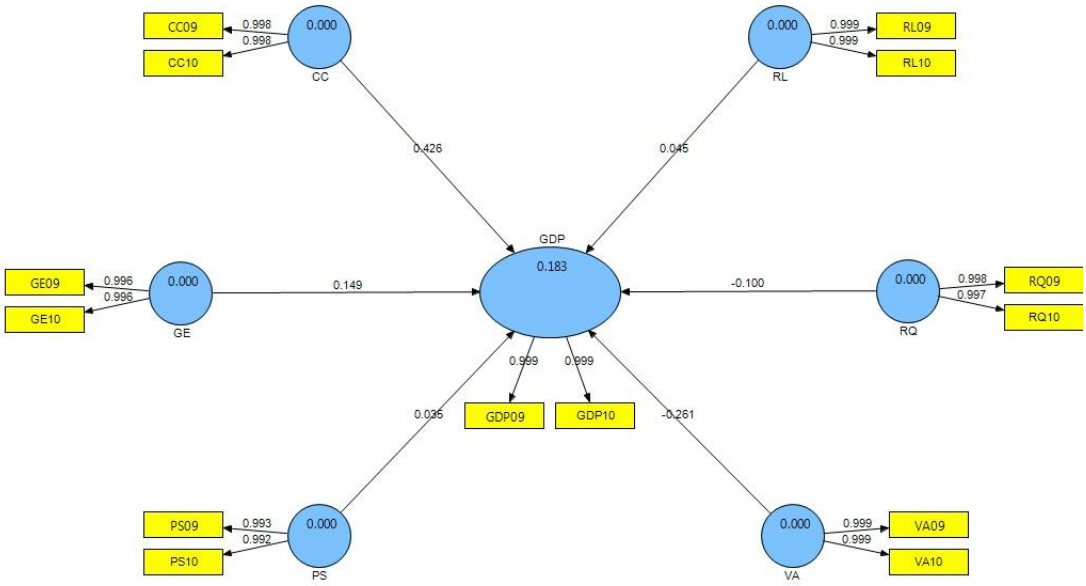
Model 7 Group 2 (05-10)



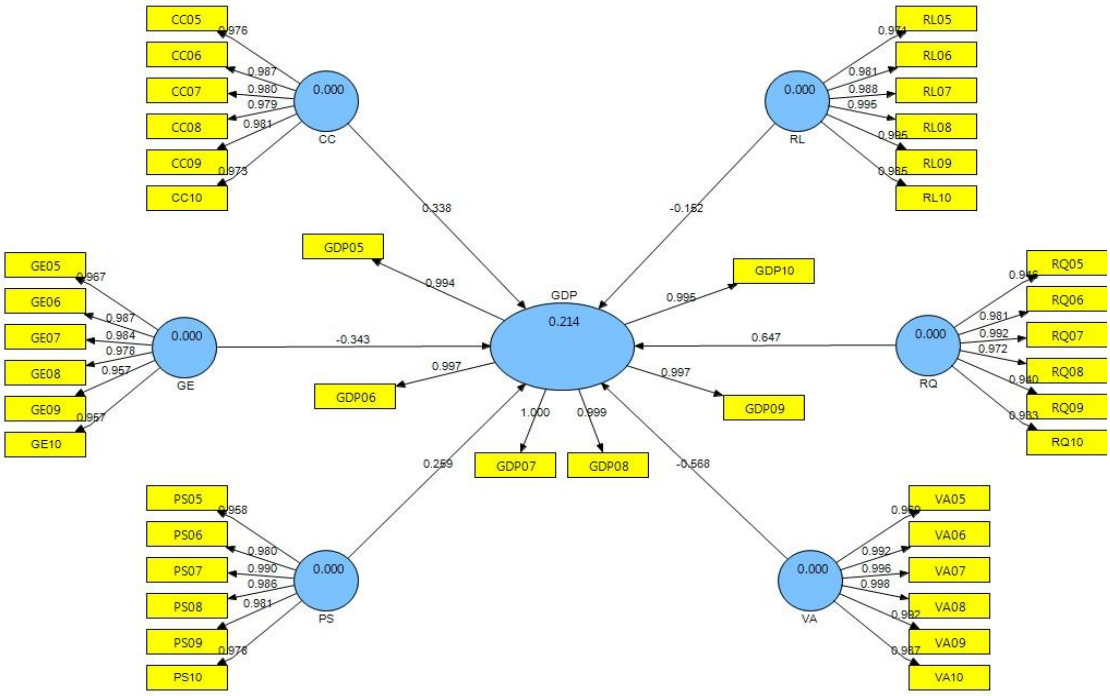
Model 8 Group 2 (05-08)



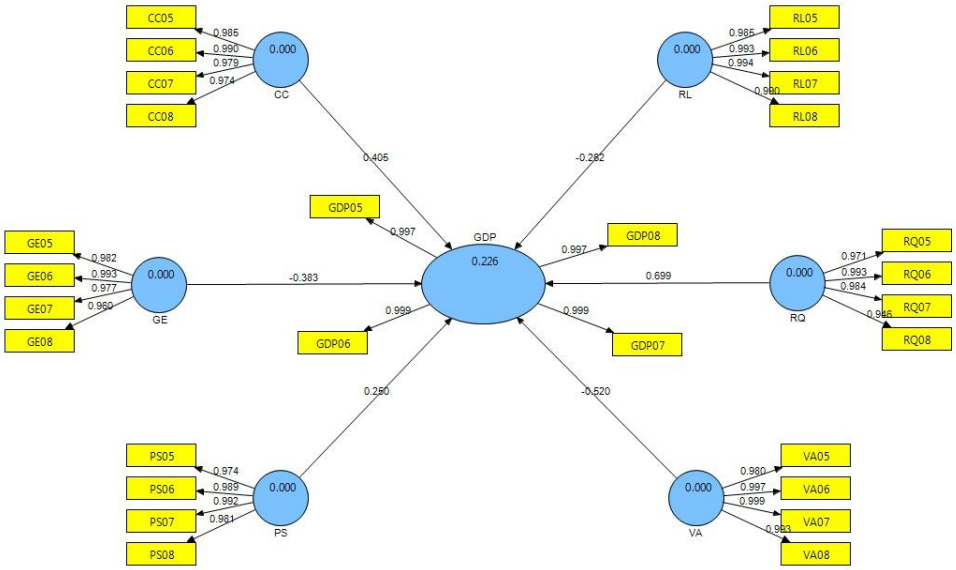
Model 9 Group 2 (09-10)



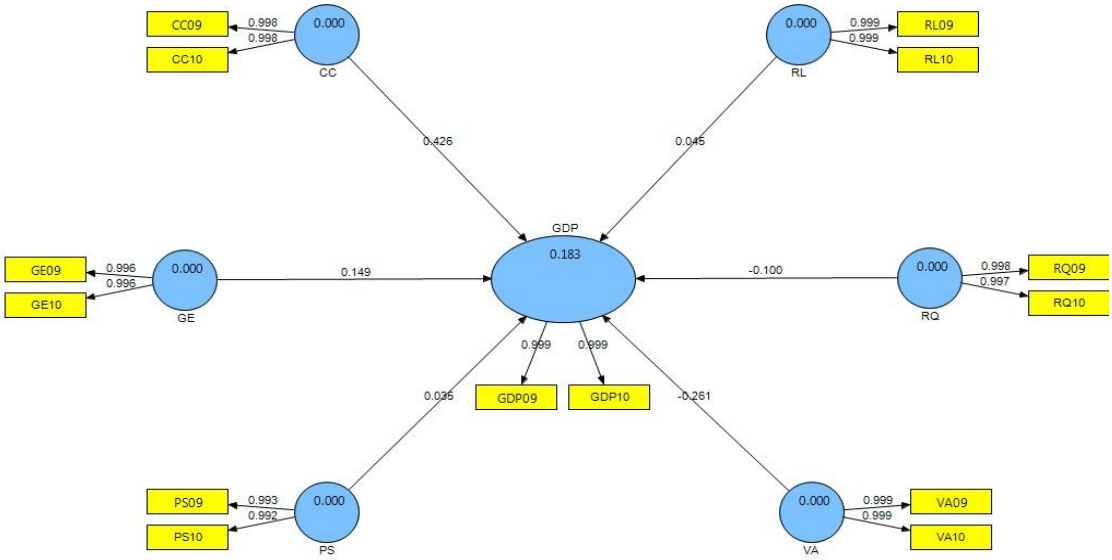
Model 10 Group 3 (05-10)



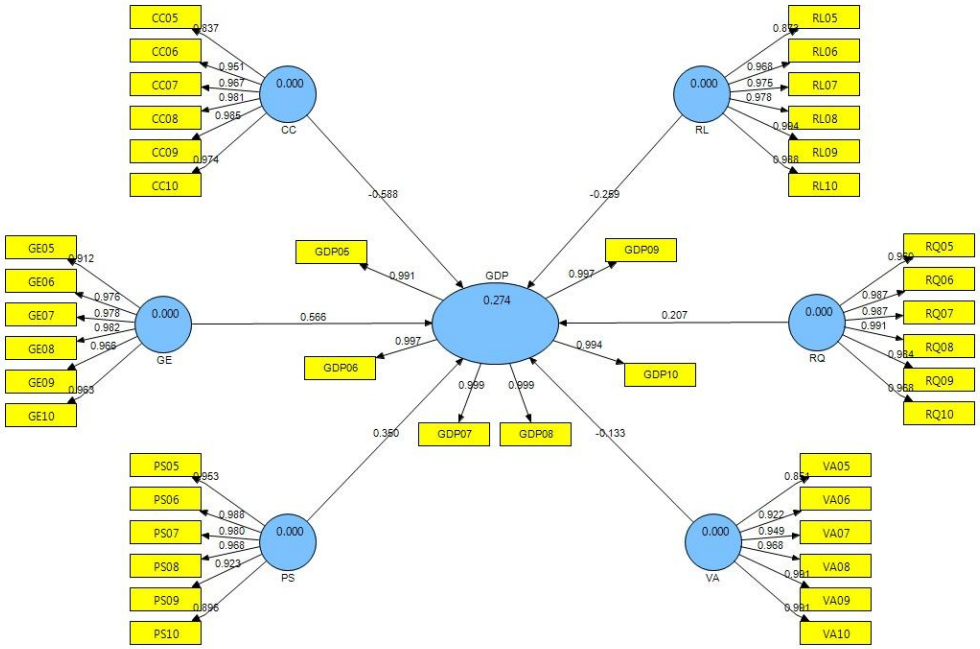
Model 11 Group 3 (05-08)



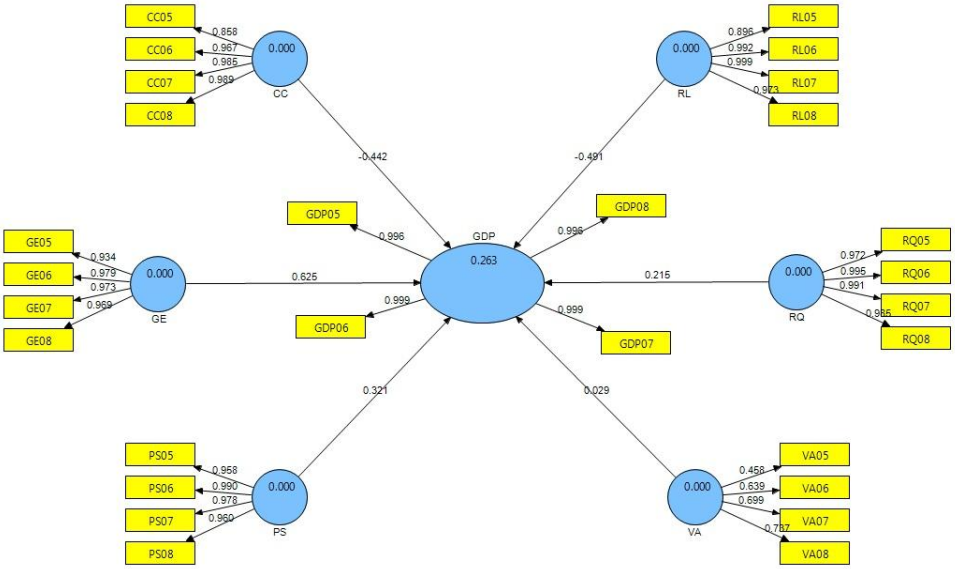
Model 12 Group 3 (09-10)



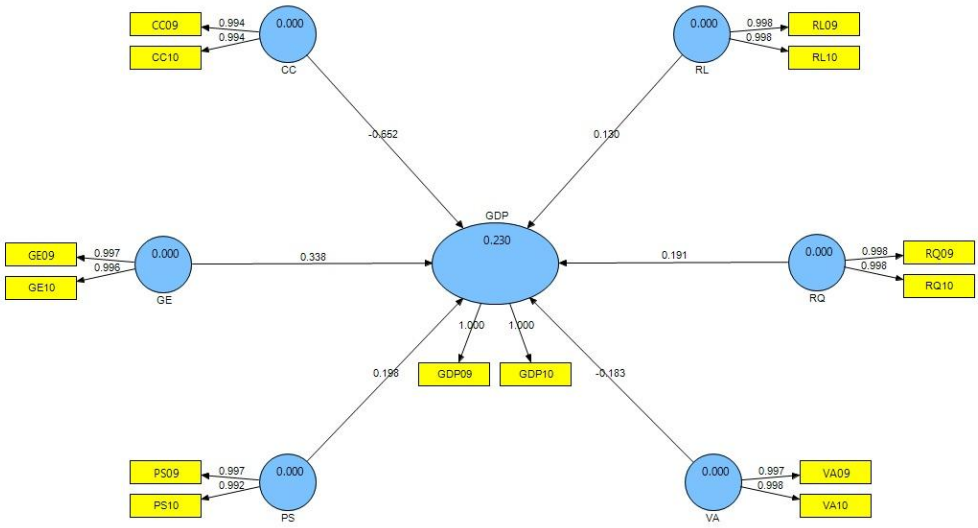
Model 13 Group 4 (05-10)



Model 14 Group 4 (05-08)



Model 15 Group 4 (09-10)



References

Abdellatif, A. (2003). Good Governance and Its Relationship to Democracy and Economic Development. Proceedings from: *Global Forum III on Fighting Corruption and Safeguarding Integrity*. Seoul, South Korea. Retrieved 09-21-2010 from http://www.pogar.org/publications/governance/aa/goodgov.pdf.

Acemoglu, D., Johnson, S. & Robinson, J. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91 (5), p. 1369-1401.

Acha, I. (2011). Financial Derivatives, Global Economic Crisis and Less Developed Countries (LDCs). *Journal of Economics and International Finance*, 2(9), 508-512.

Adam, R. (2003). Economic Growth, Inequality, and Poverty Findings from a New Data Set. The World Bank (Policy Research Working Paper No. 2972). Retrieved 10-30-2012 From http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/03/22/000094946_03030704153293/Rendered/PDF/multi0page.pdf

Adams, S., & Mengistu, B. (2008). Privatization, Governance and Economic Development in Developing Countries. *Journal of Developing Societies*, 2, p. 415-438.

Agarwal, M. (2009). Africa, the Economic Crisis, and International Economic Governance. *South Africa Journal of International Affairs*, 16 (1), 1-15.

Agere, A. (2000). *Promoting Good Governance: Principles, Practices and Perspectives (Managing the Public Service: Strategies for Improvement Series)*. London, UK: Commonwealth Secretariat.

Agranoff, R. (2003). *Leveraging Networks: A guide for Public Managers Working across Organizations*. Washington, DC: IBM Center for the Business of Government.

Aidt, T. (2009). Corruption, Institutions and Economic Development. *Oxford Review of Economic Policy*, 22 (2), 203-225.

Aidt, T., & Gassebner, M. (2010). Do Autocratic States Trade Less? *World Bank Economic Review*, 24 (1), 38-76.

Aikins, S. K. (2009). Global Financial Crisis and Government Intervention: A Case for Effective Regulatory Governance. *International Public Management Review*, 10 (2), 23-43.

Albassam, B. A. (2012). The New Role of the Nonprofit Sector. *Mediterranean Journal of Social Sciences*, 3 (13), 77-88.

Alkire, S. (2010). *Human Development: Definitions, Critiques, and Related Concepts*. Human Development Reports (Research Paper 2010/01). Retrieved 06-20-2011 from http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP_2010_01.pdf.

Andersen, T., Jones, S., & Tarp, F. (2008). *The Current Financial Crisis: Implications and Issues for Less Developed Countries*. Development Economics Research Group (DERG), University of Copenhagen. Retrieved 4-6-2012 from

http://www.econ.ku.dk/ftarp/miscellaneous/Docs/LDCs%20and%20financial%20crisis%20final_final_briefing_note.pdf.

Anderson R.E., & Swaminathan, S. (2011). Customer satisfaction and loyalty in e-markets: A PLS path modeling approach. *The Journal of Marketing Theory and Practice*, 19 (2), 221-234.

Ansell, C. & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18 (4), 543-571.

Apaza, C. (2009). Measuring governance and corruption through the worldwide governance indicators: Critiques, responses, and ongoing scholarly discussion. *PS: Political Science & Politics*, 42, 139-143, Cambridge University Press.

Arestis, P.; Baddeley, M., & McCombie J. (2007). *Economic Growth: New Directions in Theory and Policy (illustrated edition)*. Northampton, MA: Edward Elgar Publishing

Arndt, C., & Oman, C. (2006). *Uses and Abuses of Governance Indicators*. Paris, France: Development Centre Studies, OECD Publishing. Retrieved 06-20-2010 from http://www.worldbank.org/ieg/governance/oman_arndt_paper.pdf.

Arndt, H. W. (1987). *Economic Development: The history of an Idea*. Chicago: Universityof Chicago.

Austin, M. (2003). The Changing Relationship between Nonprofit Organizations and Public Social Service Agencies in Welfare Reform. *Nonprofit and Voluntary Sector Quarterly*, 32(1), 97–114.

Baily, M. N., & Elliott, D. J. (2009). *The U.S. Financial and Economic Crisis: Where Does It Stand and Where Do We Go From Here?* The Brookings Institution,

Fixing Finance Series (Working # 7). Retrieved 03-06-2012 from http://www.brookings.edu/papers/2009/0615_economic_crisis_baily_elliott.aspx.

Balakrishnan, A. (2008). Singapore slides into recession. *The Guardian*. Retrieved 03-07-2012 from http://www.guardian.co.uk/business/2008/oct/10/creditcrunch-marketturmoil.

Barton, G. (2008). Indonesia's Year of Living Normally: Taking the Long View on Indonesia's Progress. *Southeast Asian Affairs*, 2008(2008), 123-145.

Baumol, W. J. (1965). *Economic Theory and Operations Analysis* (2nd ed.). Englewood cliffs, NJ: Prentice-Hall.

Begg, D., De Grauwe, P., Canova, F., Fatas, A., & Lane, P. (2002). *Surviving the Slowdown (Monitoring the European Central Bank No.4)*. London, UK: Centre for Economic Policy Research.

Bell, D., & Blanchflower, D. (2011). *The crisis, policy reactions and attitudes to globalization and jobs.* Institute of the Study of Labor (IZA) (Discussion Paper No. 5680), Bonn, Germany. Retrieved 3-23-2012 from http://www.wto.org/english/res_e/booksp_e/glob_soc_sus_e_chap3_e.pdf.

Bell, S. (2011). *Institutionalism: Old and New*. Retrieved 11/17/2011 from http://espace.library.uq.edu.au/eserv.php?pid=UQ:9699&dsID=Institutionalism.pdf

Bernanke, B. S. (2009, April 14). *Four Questions about the Financial Crisis*. Speech presented At the Morehouse College, Atlanta, Georgia.

Besley, T., & Kudamatsu, M. (2007, May). *Making Autocracy Work*. The Suntory Centre and Toyota International Centers for Economics and Related Disciplines (The

Suntory Centre Working Paper DEDPS 48). London, UK. The Suntory Centre Working Paper Retrieved 4/4/2011 from http://sticerd.lse.ac.uk/dps/de/dedps48.pdf.

Bevir, M. (2010). *Democratic Governance*. Princeton, New Jersey: Princeton University Press.

Bevir, M. (2006). *Encyclopedia of Governance*. London, UK, Sage Publications, Inc.

Bevir, M., Rhodes, R., & Weller, P. (2003). Traditions of Governance: Interpreting the Changing Role of the Public Sector in Comparative and Historical Perspective. *Public Administration*, 81 (1), 1-17.

Bhagwati, J. (2005). Reshaping the WTO. *Far Eastern Economic Review*, 162 (22), 26-34.

Birkland, T. A. (1997). *After Disaster: Agenda Setting, Public Policy, and Focusing Events*. Washington, DC: Georgetown.

Birkland, T. A. (2006). *Lessons of Disaster: Policy Change After Catastrophic Events*. Washington, D.C.: Georgetown.

Blair, J. P., & Carroll, M. C. (2008). Local *Economic Development: Analysis, Practices, and Globalization*. Los Angeles: Sage.

Blakely, E. J. (1989). *Planning Local Economic Development: Theory and Practice*. Newbury Park, CA: Sage.

Blanco, I, Lowends, V., & Pratchett, L. (2011). Policy Networks and Governance Networks: Towards Greater Conceptual Clarity. *Political Studies Review*, 9 (1), 297–308.

Blundell-Wignall, A., Atkinson, P., & Lee, S. H. (2008). The Current Financial Crisis: Causes and Policy Issues. *OECD Financial Market Trends*, 95 (2), 1-21.

Box, R. (1998). *Citizen Governance: Leading American Communities into the 21st Century*. Thousand Oaks, CA: Sage Publication.

Brinton, M. C., & Nee, V. (Eds.). (1998). *The New Institutionalism in Sociology*. New York, NY: Russell Sage Foundation Publications.

Buchanan, J. M., & Tullock, G. (1962). *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor, Michigan: University of Michigan Press.

Calderón, C., & Liu, L. (2002). *The Direction of Causality between Financial Development and Economic Growth*. Central Bank of Chile (Working Papers No. 184). Retrieved 10-30-2012 From http://www.comisiondistorsionesdeprecios.cl/eng/studies/working-papers/pdf/dtbc184.pdf

Case, K. E., & Fair, R. C. (1999). *Principles of Economics* (5th ed.). Upper Saddle River: Prentice-Hall.

Central Statistics Office. (2009). *Measuring Ireland's Progress*. Dublin, Ireland: The Stationery Office. Retrieved 02-02-2011 from http://www.cso.ie/en/newsandevents/pressreleases/2011pressreleases/measuringirelandsprogress2010/.

Cerra, V., & Saxena, S. (2008). Growth Dynamics: The Myth of Economic Recovery. *American Economic Review*, 98 (1), 439-457.

Chatfield, C. (1996). *The Analysis of Time Series – an Introduction*. London: Chapman and Hall.

Chatterjee, S., Hadi, A., & Price, B. (2007). *Regression Analysis by Example*. New York: Wiley.

Cheema, G., & Rondinelli, D. (2007). *Decentralizing Governance: Emerging Concepts and Practices (Innovative Governance in the 21st Century)*. Washington, D.C.: Brookings Institution Press

Chin, W. (1998). The Partial Least Squares Approach for Structural Equation Modeling. pp. 47-50 In: *Modern Methods for Business Research* (Marcoulides, G. A. Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Chong, A., & Calderon, C. (2000). Casualty and Feedback Between Institutional Measurement and Economic Growth. *Economic and Politics*, 12 (1), p. 69-81.

Claessens, S., & Kose, M. A. (2009). What Is a Recession? *Finance and Development*, 46 (1), 52-53.

Clingermayer, J. C., & Feiock, R. C. (2001). *Institutional Constraints and Policy Choice: an Exploration of Local Governance*. Albany: SUNY.

Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, 112 (1), 155-159.

Cohen, J., Cohen P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Comfort, L. K. (1988). *Managing Disaster: Strategies and Policy Perspectives (Duke Press policy studies)*. Durham, Duke: Duke University Press.

Constanza, R., M. Hart, S. Posner, & J. Thalbert (2009). *Beyond GDP: The Need for New Measures of Progres*. The Pardee Papers (Technical Report 4). Retrieved 10/18/2010 from http://www.bu.edu/pardee/files/documents/PP-004-GDP.pdf.

Cooley, C.H. (1909). *Social organization: a Study of the Larger Mind*. NY, New York: C. Scribner's sons.

Dal Bo, E. (2006). Regulatory Capture: A Review. *Oxford Review of Economic Policy*, 22 (2), 203-225.

Daly, M. (2003). Governance and social policy. *Journal of Social Policy*, 32(1), 113–128.

Davidoff, S. M., & Zaring, D. (2008). *Regulation by Deal: The Government's Response to the Financial Crisis*. Retrieved 03-17-2012 from http://ssrn.com/abstract=1306342.

de Alcántara, C. (1998). Use and Abuse of the Concept of Governance. *International Social Science Journal*, 50 (155), 105–113.

de Ferranti, D. M., Jacinto, J., Ody, A., & Ramshaw, G. (2009). *How to Improve Governance: A New Framework for Analysis and Action*. Washington, D.C: Brookings Institution Press.

De Long, J. & Summers, L. (1991). Equipment Investment and Economic Growth. The Quarterly Journal of Economics, 106 (2), 445-502.

Denhardt, J. V., & Denhardt, R. B. (2007). *The New Public Service: Serving, not Steering*. Armonk, NY: M.E. Sharpe.

Desai, M. (1993). Income and alternative measures of well-being. In Westendorff, D. and Ghai, D. (1993). *Monitoring Social Progress in the 1990s*. Hants, UK: Avebury: UNRISD.

DiMaggio, P. J., & Powell, W. W. (1991). *The New Institutionalism in Organizational Analysis*. Chicago, IL: The University of Chicago Press.

Dixit, A. (2009). Governance Institutions and Economic Activities. *American Economic Review*, 99 (1), 5-24.

Dubnick, M., & Frederickson, H. (2009). Accountable Agents: Federal Performance Measurement and Third-Party Government. *Journal of Public Administration Research*, 20 (1), 43-59.

Egger, W. (2009). *Collaborative Governance: A new era of public policy in Australia?* Retrieved 11/19/2010 from http://epress.anu.edu.au/anzsog/collab_gov/mobile_devices/index.html.

Enders, A. (1995). *Applied econometric time series*. New York, NY: John Wiley.

Farazmand, A. (2004). *Sound Governance: Policy and Administrative Innovations*, (Ed.). New York, NY: Praeger.

Frahm, K. A., & Martin, L. L. (2009). From Government to Governance: Implications for Social Work Administration. *Administration in Social Work*, 33, 407–422.

Fredrickson, H. (2004). *Whatever Happened to Public Administration? Governance, Governance Everywhere*. Institute of Governance Public Policy and Social Research (Working Paper QU/GOV/3/2004). Retrieved 03-07-2012 from http://www.queens-belfast.com/schools/SchoolofLaw/Research/InstituteofGovernance/Publications/briefingpapers/Filetoupload,47649,en.pdf.

Friedman, A., & Miles, S. (2002). Developing Stakeholder Theory. *Journal of Management Studies*, 39 (1), 1-21.

Fry, B. R. (1989). *Mastering Public Administration: from Max Weber to Dwight Waldo*. Chatham, NJ: Chatham House.

Furubotn, E. G. & Richter, R. (2005). *Institutions and Economic Theory: the Contribution of the New Institutional Economics* (2nd ed.). Ann Arbor, Michigan: University of Michigan Press.

Garson, D. (2008). *Institutional Theory*. Retrieved 11/18/2011 from http://faculty.chass.ncsu.edu/garson/PA765/institutionalism.htm

Garson, G. (2012). *Partial Least Squares (Statistical Associates Publishers Blue Book Series) [Kindle Edition]*. Statistical Associates Publishers (http://www.statisticalassociates.com/)

Gasiorowski, M. J. (1995). Economic Crisis and Political Regime Change: An Event History Analysis. *The American Political Science Review*, 89 (4), 882-897.

Gerston, L. N. (2010). *Public Policy Making: Process and Principles* (3rd ed.). Armonk, NY: M.E. Sharpe.

Gorges, M. J. (2001). New Institutionalist Explanations for Institutional Change: A Note of Caution. *Political Studies Association*, 21(2), 137-145.

Gorton, G. & Metrick, A. (January 11, 2012). *Getting up to Speed on the Financial Crisis: A One "Weekend" Reader's Guide*. The National Bureau of Economic Research (NBER Working Paper No. 17778) Retrieved 07-04-2012 from http://www.nber.org/papers/w17778.

Granger, C.W. (1988). Some Recent Developments in a Concept of Causality. *Journal of Econometrics*, 21, 161-194.

Greif, A., & Laitin, D. D. (2004). *A Theory of Endogenous Institutional Change*. American Political Science Review, 98 (1), 633-652.

Gressani, D., & Kouame, A. T. (2009). *The Global Financial &Economic Crisis: Transmission Channels & Policy Response in the Arab World*. MENA Learning and Knowledge, (World Bank Quick Note No. 1). Retrieved09-21-2010 from http://siteresources.worldbank.org/INTMENA/News%20and%20Events/22073725/QuickNote_1.pdf.

Grindle, M. (2007). Good Enough Governance Revisited. *Development Policy Review*, 25 (5), p. 553-574.

Grindle, M. (2010). *Good Governance: The Inflation of an Idea*. (HKS Faculty Research Working Paper Series -Research Paper: RWP10-023), John F. Kennedy School of Government, Harvard University. Retrieved 10-09-2011 from http://dash.harvard.edu/bitstream/handle/1/4448993/Grindle_GoodGovernance.pdf?sequence=1

Gros, D., & Alcidi, C. (2010). The Impact of the Financial Crisis on the Real Economy. *Intereconomics*, 45(1), 4-20.

Gruenewald, S. (2010). Financial Crisis Containment and its Governance Implications. *Journal of Banking Regulation*, 12 (1), 69-90.

Haenlen, M., & Kaplan, A. (2004). A Beginners Guide to Partial Least Squares Analysis. *Understanding Statistics*, 3, 283-297.

Haftel, Y., & Thompson, A. (2006). The Independence of International Organizations: Concept and Applications. *Journal of Conflict Resolution*, 50 (2), 253-275.

Hair, J., Anderson, R., Babin, B., Tatman, R., & Black, W. (2010). *Multivariate Data Analysis*. New Jersey, NJ: Prentice Hall.

Hall, P. (1986). *Governing the Economy: The Politics of State Intervention in Britain and France*. New York, NY: Oxford University Press.

Hall, P., & Taylor, R. (1996). Political science and the three new institutionalisms. *Political Studies*, 44 (5), 936-957.

Hamilton, J. D. (1994). *Time Series Analysis*. Princeton, NJ: Princeton University Press.

Hammack, D. (2002). Nonprofit Organizations in American History: Research Opportunities and Sources. *American Behavioral Scientist*, 45 (11), P. 1638-1674.

Hansen, K. (2001). Local councilors: Between local 'government' and local 'governance.' *Public Administration*, 79(1), 105–123.

Haq, M. (1995). Reflections on Human Development. New York, NY: Oxford: Oxford University Press.

Harrison, G., & Cline-Cole, R. (2009). Global Crisis, African Governance and a Sense of De´ ja` vu. *Review of African Political Economy*, 36 (119), 1-7.

Harttgen, K., Klasen, S., & Vollmer, S. (2012). Economic Growth and Child Undernutrition in Africa. United Nation Development Program (Working Paper No. 2012-013). Retrieved 10-30-2012 From http://web.undp.org/africa/knowledge/WP-2012-013-Harttgen-klassen-economic-growth-undernutrition.pdf

Hastings, D. (2009). *Filling Gaps in the Human Development Index. United Nations Economic and Social Commission for Asia and the Pacific*. (Working Paper WP/09/02). Retrieved 07-01-2010 from http://www.unescap.org/pdd/publications/workingpaper/wp_09_02.pdf.

Heath, J., & Norman, W. (2004) Stakeholder Theory, Corporate Governance and Public Management: What can the History of State-Run Enterprises Teach us in the Post-Enron Era? *Journal of Business Ethics*, 53 (3), 247–265.

Heckelman, C., & Powell, B. (2007). *Corruption and the Institutional Environment for Growth. Department of Economics*. Suffolk University (Research Working Paper No. 2008-6). Retrieved 07-13-2012 from http://192.138.214.118/RePEc/docs/wpaper/2008-6.pdf.

Heinrich, C., Lynn, L., & Milward, H. (2009). A State of Agents-Sharpening the Debate and Evidence over the Extent and Impact of the Transformation of Governance. *Journal of Public Administration Research*, 20 (1), 3-19.

Henderson, H. (2000). Transnational Corporations and Global Citizenship. *American Behavioral Scientist*, 43 (8), 1231-1261.

Hendriks, F. (1999). *Public Policy and Political Institutions: The Role of Culture in Traffic Policy*. Cheltenham, UK: Edward Elgar.

Henseler, J., Ringle, C.M., & Sinkovics, R.R. (2009). The Use of Partial Least Squares Path Modelling in International Marketing. *Advances in International Marketing*, 20, 277-319.

Hira, A., & Hira, R. (2000). The New Institutionalism: Contradictory Notions of Change. *American Journal of Economics and Sociology*, 59 (2), 267-282.

Honaker, J., & King, G. (2010). What to Do about Missing Values in Time-Series Cross-Section Data. *American Journal of Political Science*, 54(2), 561-581.

Hood, C. (1995). Contemporary Public Management: A New Global Paradigm?. *Public Policy and Administration*, 10 (2), 104-17.

Hopcroft, R. L. (1999). *Regions, Institutions, and Agrarian Change in European History (Economics, Cognition, and Society).* Ann Arbor, MI: University of Michigan Press.

Hummel, R. (2008). *The Bureaucratic Experience: The Post-Modern Challenge* (5th ed). Armonk, NY: M.E.Sharpe Inc.

Hummel, R. (1998). Toward a New Administrative Doctrine: Governance and Management for the 1990's. *The American Review of Public Administration*, 19 (3), 175-197.

Hysing, E. (2009). From Government to Governance? A Comparison of Environmental Governing in Swedish Forestry and Transport. *Governance: An International Journal of Policy, Administration, and Institutions*, 22 (4), 647–672.

Ignatiuk, A. (2009). *The Principle, Practise and Problems of Purchasing Power Parity Theory*. Santa Cruz, CA: GRIN Verlag.

International Monetary Fund (IMF). (2010, October 13). *World Economic Outlook (WEO): Recovery, Risk, and Rebalancing*. Retrieved 03-11-2012 from http://www.imf.org/external/pubs/ft/weo/2010/02/index.htm.

Islam, M. (1998). Export Expansion and Economic Growth: Testing for Cointegration and Causality. Applied Economics, 30 (3), 415-425.

Islam, R. (2003). *Do More Transparent Governments Govern Better?* The World Bank (Policy Research Working Paper No. 3077). Retrieved 07-14-2010 from http://library1.nida.ac.th/worldbankf/fulltext/wps03077.pdf.

Jansen, D. (2007). Governance of Research – Working towards Interdisciplinary Concepts. In Jansen, D. (ed.) *New Forms of Governance in Research*

Organizations: Disciplinary Approaches, Interfaces and Integration, 109-133, New York, NY: Springer

Jones, K. (2009). *The Doha Blues: Institutional Crisis and Reform in the WTO*. Oxford, New York, NY: Oxford University Press.

Kaufmann, D., & Kraay, A. (2002). *Growth without Governance [with Comments]*. *Economía*, 3 (1), 169-229.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010a). *The Worldwide Governance Indicators: Methodology and Analytical Issues* (World Bank Policy Research Working Paper No. 5430). Washington, DC: The World Bank.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2010b). Response to "What Do the Worldwide Governance Indicators Measure?" *European Journal of Development Research*, 22 (1), 55 – 58.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2010c). *Response to: "The Worldwide Governance Indicators: Six, One, or None"*. Retrieved 29-9-2011 from http://info.worldbank.org/governance/wgi/pdf/ResponseKL.pdf

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2009a). *Governance Matters VIII: Aggregate and Individual Governance Indicators 1996–2008* (Policy Research Working Paper, No. 4978). Washington, DC: World Bank. Retrieved 4-21-2010 from http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan039285.pdf.

Kaufmann, D., Kraay, A. and Mastruzzi, M. (2009b). *Governance matters 2009: Learning From Over a Decade of the Worldwide Governance Indicators*. Retrieved 2/10/10 from http://info.worldbank.org/governance/wgi/index.asp.

Kaufmann, D., & Kraay, A. (2008). Governance Indicators: Where are we and Where Should we Go? *World Bank Research Observer*, 23(1):1-30.

Kaufmann, D., Kraay, A. and Mastruzzi, M. (2007). W*orldwide Governance Indicators Project: Answering the Critics*. Retrieved 2/10/10 from http://siteresources.worldbank.org/INTWBIGOVANTCOR/Resources/1740479-1149112210081/2604389-1167941884942/Answering_Critics.pdf

Keefer, P. (2007). Governance and Economic Growth. In L. Winters & S. Yusuf (Ed.), *Dancing with Giants: China, India and the Global Economy* (pp. 1-34). Washington, D.C: World Bank and Institute of Policy Studies.

Kemp. M., & Parto, S. (2005). Governance for Sustainable Development: Moving from Theory to Practice. *International Journal of Sustainable Development*, 8 (1/2), 12-30.

Kentor, J. (1998). The Long-Term Effects of Foreign Investment Dependence on Economic Growth 1940–1990. *American Journal of Sociology*. 103 (4), 1024-1046.

Kettl, D. (2002). *The Transformation of Governance: Public Administration for Twenty-First Century America (Interpreting American Politics)*. Baltimore, Maryland: The Johns Hopkins University Press.

Kettl, D. F. (2000). The Transformation of Governance: Globalization, Devolution, and the Role of Government. *Public Administration Review*, 60 (6), 488-497.

Khamis, M. Y., & Semlali, A. S. (2010). *Impact of the Global Financial Crisis on the Gulf Cooperation Council Countries and Challenges Ahead*. Washington, D.C:

International Monetary Fund (IMF). Retrieved 07-5-2011 from http://www.imf.org/external/pubs/ft/dp/2010/dp1001.pdf.

Kim, K. S. (2000). *The 1997 Financial Crisis and Governance: The Case of South Korea*. The Helen Kellogg Institute for International Studies (Working Paper No. 272), Norte Dame, IN: University of Notre Dame. Retrieved 09-11-2011 from http://kellogg.nd.edu/publications/workingpapers/WPS/272.pdf.

Kingdon, J. W. (1984). *Agendas, Alternatives, and Public Policies (Longman Classics Edition)* (2nd Ed.). Essex, UK: Longman.

Kjaer, A. (2004). *Governance (Polity Key Concepts in the Social Sciences series)*. Cambridge, UK: Polity Press.

Kline, R.B. (2010). Principles and practices of structural equation modelling (3rd ed.) New York: Guildford Press.

Knight, J. (1992). *Institutions and Social Conflict*. Cambridge, UK: Cambridge University Press.

Krishnamurthy, A. (2010). How Debt Markets Have Malfunctioned in the Crisis. *Journal of Economic Perspectives*, 24 (1), 3–28.

Kurtz. M., & Schrank, A. (2007). Growth and Governance: Models, Measures, and Mechanisms, *The Journal of Politics*, 69 (2), pp. 538–554.

Labonte, M. (2012). Monetary Policy and the Federal Reserve: Current Policy and Conditions. Retrieved 10-30-2012 from http://www.fas.org/sgp/crs/misc/RL30354.pdf

Lane, J. & Ersson, S. (1999). *Politics and Society in Western Europe*. (4 ed.). London, UK: Sage Publication.

Lane, J-E., & Nyen, T. (1992). Towards an Economic Organization Theory of the State. *Statsvetenskaplig Tidskrift*, 95 (4), 359-375.

Langbein, L., & Knack, S. (2010). The Worldwide Governance Indicators: Six, One, or None? *Journal of Development Studies*; 46 (2), 350–370.

Langmore, J., & Fitzgerlad, S. (2010). Global Economic Governance: Addressing the Democratic Deficit. *Development*, 53(3), 390–393.

Lecours, A. (2005). *New Institutionalism: Theory and Analysis (Studies in Comparative Political Economy and Public Policy)*. Toronto, Canada: University of Toronto Press.

Levi-Faur, D. (2010). *Regulation and Regulatory Governance*. The Hebrew University, Jerusalem Papers in Regulation and Governance (Working Paper No. 1). Retrieved 04-07-2012 from http://regulation.huji.ac.il/papers/jp1.pdf

Lovan, R., & Shaffer, R., & Murray, M. (2004). *Participatory Governance: Planning, Conflict Mediation and Public-Decision Making in Civil Society*. London, U.K: Ashgate Publishing.

Ma, Z., & Cheng, L. (2005, August). *The Effects of Financial Crises on International Trade*. In International Trade in East Asia, NBER-East Asia Seminar on Economics, 14, 253-286. University of Chicago Press.

MacIntyre, A. (1999). *Political Institutions and the Economic Crisis in Thailand and Indonesia*. The International Centre for the Study of East Asian Development (ICSEAD) (Working Paper NO. 99-8), Kitakyushu, Japan. Retrieved 09-21-2011 from http://file.icsead.or.jp/user04/749_186_20110622141659.pdf.

Mankiw, N. G. (2009). *Principles of Economics* (5th ed.). Mason, OH: South-Western Cengage Learning.

Mantzavinos, C. (2001). *Individuals, Institutions, and Markets*. Cambridge, UK: Cambridge University.

Manzetti, L. (2003). Political Manipulations and Market Reforms Failures. *World Politics*, 55 (3), 315-360.

March, J. G., & Olsen, J. P. (1984). The New Institutionalism: Organizational Factors in Political Life. *The American Political Science Review*, 78 (3), 734-749.

Marsh, D. & Stoker, G. (2010). *Theory and Methods in Political Science* (3rd Ed.). New York, Palgrave Macmillan.

Mateos-Aparicio, G. (2011). Partial Least Squares (PLS) Methods: Origins, Evolution, and Application to Social Sciences. *Communications in Statistics-Theory and Methods*, 40(13), 2305-2317.

Mayer-Foulkes, D. A. (2009). Long-Term Fundamentals of the 2008 Economic Crisis. *Global Economy Journal*, 9 (4), 1-24.

McGillivray, M. (1991). The Human Development Index: Yet Another Redundant Composite Development Indicator? World Development, 19 (10), 1461-1468.

Mehanna, R., Yazbeck, Y., & Sarieddine, L. (2010). Governance and Economic Development in MENA Countries: Does Oil Affect the Presence of a Virtuous Circle?. *Journal of Transnational Management*, 15 (2), p. 117-150.

Mimicopoulos, M., Kyj, L., & Sormani, N. (2007). *Public Governance Indicators: a Literature Review*. New York, NY: United Nations publications.

Mironov, M. (2005). *Bad Corruption, Good Corruption and Growth*. University of Chicago. Miméo. Retrieved 07-13-2012 from http://www.mironov.fm/research/corruption.pdf.

Moe, T. M. (1984). The New Economics of Organization. *American Journal of Political Science*, 28 (4), 739-777.

Morse, R. (May 31, 2007). Developing Public Leaders in an Age of Collaborative Governance. *Proceedings from Leading the Future of the Public Sector: The Third Transatlantic Dialogue*. University of Delaware, Newark, Delaware, USA.

Nafziger, E. W. (2006). *Economic Development* (4th ed.). Cambridge: Cambridge University.

Nagel, R. (2007). *Human Development Index - An elaborate means of evaluating a country's HD*. San Francisco, CA: GRIN Verlag.

National Bureau of Economic Research (NBER) (2012). *Determination of the December 2007 Peak in Economic Activity*. Retrieved 2012-03-04 from http://www.nber.org/dec2008.pdf

National Bureau of Economic Research (NBER). (2003, October 21). *Business Cycle Dating Committee*. Retrieved 03-08-2012 from http://www.imf.org/external/pubs/ft/fandd/2009/03/pdf/fd0309.pdf

Ndulu, B. J., & O'Connell, S. A. (1999). Governance and Growth in Sub-Saharan Africa. *The Journal of Economic Perspectives*, 13 (3), pp. 41-66.

Neumayer, E. (2003). *The Pattern of Aid Giving: The Impact of Good Governance on Development Assistance.* New York, NY: Rutledge.

Newman, J. (2001). *Modernizing Governance: New Labour, Policy and Society*. Thousand Oaks, CA: Sage Publications Ltd.

Nguyen, N. M. (2005). *Note: Purchasing Power Parity*. Washington, D.C: IMF. Retrieved 6/21/2011 from http://people.hbs.edu/mdesai/IFM05/PPP%20Nguyen.pdf.

Nijitin, A. (2009). Lessons to be Learned from Non-Proliferation Failures and Successes. Lansdale, PA: IOS Press.

Noorbakhsh, F. (1998). The human development index: some technical issues and alternative indices. *Journal of International Development*, 10 (5): 589–605.

North, D. C. (2009). *Institutions, Institutional Change and Economic Performance (Political Economy of Institutions and Decisions)*. Cambridge, UK: Cambridge University Press.

North, D. C. (1991). Institutions. *The journal of Economic Perspective*, 5 (1), 97-112.

North, D.C. (1990). *Institutions, Institutional Change and Economic Performance (Political Economy of Institutions and Decisions)*. Cambridge, UK: Cambridge University Press

North, D. C. (1989). Institutions and Economic Growth: An Historical Introduction. *World Development*, 17 (9), 1319-1332.

North, D. (1987). Institutions, Transaction Costs, and Economic Growth. *Economic Inquiry*, 25 (3), 419-428.

O'Toole, L. (1997). Treating Networks Seriously: Practical and Research-Based Agendas in Public Administration. *Public Administration Review*, 57 (1), 45-52.

Olson, M. (1996). Big bills left on the sidewalk: Why some nations are rich, and others are poor. *Journal of Economic Perspectives*, 10 (2), 3-24.

Osborne, D. ,& Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. New York, NY: Basic Books.

Osborne, E. (2004). Measuring Bad Governance. *Cato Journal*, 23 (3), 403-422.

Ostrom, E. (1990). *Governing the Commons" The Evolution of Institutions for Collective Action*. U.K, Cambridge: Cambridge University Press.

Peters, B., Pierre, J., & Randma-Liiv, T. (2010). Global Financial Crisis, Public Administration and Governance: Do New Problems Require New Solutions? *Public Organization Review*, 11 (1), 13-27.

Peters, B.G. (2002). The Changing Nature of Public Administration: From Easy Answers to Hard Questions. *Asian Journal of Public Administration*, 24 (2), pp. 153-183.

Peters, B.G., & Pierre, J. (1998). Governance without Government? Rethinking Public Administration. *Journal of Public Administration Research and Theory*, 8 (2), 223-243.

Poluha, E., & Rosendahl, M. (2002). *Contesting 'Good' Governance: Crosscultural Perspectives on Representation, Accountability and Public Space*. London, U.K: Rutledge.

Posner, R. (1974). Theories of Economic Regulation. *The Bell Journal of Economics and Management Science*, 5 (2), 335-358.

Powell, W. W. (2007). The New Institutionalism. In Clegg, S and Bailey, J. (ed.). *The International Encyclopedia of Organization Studies*. Sage Publishers. Retrieved

11/20/2011 from (preprint: http://www.stanford.edu/group/song/papers/NewInstitutionalism.pdf.

Pradhan, R. P., & Sanyal, G. S. (2011). Good Governance and Human Development: Evidence form Indian States. *Journal of Social and Development Science*, 1 (1), pp. 1-8.

Provan, K. G., & Kenis, P. (2008). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, 18 (2), 229-252.

Przeworski, A., Alvarez, M.E., Cheibub, J.A. & Limongi, F. (2000). *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*. Cambridge, United Kingdom: Cambridge University Press.

Ranis, G., Stewart, F., & Samman, E. (2006). Human Development: Beyond the Human Development Index. *Journal of Human Development*, 7 (3), 323-358.

Reinhart, C. M., & Rogoff, K. S. (2009). *This Time is Different: Eight Centuries of Financial Folly*. Princeton, New Jersey: Princeton University Press.

Repucci, S. (2011, March). *Economic Crisis Responses from a Governance Perspective in Eastern Europe and Central Asia: Regional Report.* United Nations Development Program (UNDP) (Regional Center for Public Administration Reform (RCPAR)). Retrieved 06-20-2012 from http://www.rcpar.org/mediaupload/publications/2011/20110325_Impact_of_Economic_Crisis_on_Governance_FINAL.pdf.

Rhodes, R. (2007). Understanding Governance: Ten Years On. *Organization Studies*, 28(08), 1243–1264.

Rhodes, R. A. (1996). The New Governance: Governing without Government. *Political Studies*, 652—667.

Rhodes, R. A. W. (1997). *Understanding governance: Policy Networks, Governance, Reflexivity and Accountability (Public Policy & Management)*. Berkshire, UK: Open University Press.

Riddell, R. (2007). *Does Foreign Aid Really Work?*. New York, NY: Oxford University Press.

Ringle, C.M., Wende S., & Will, A. (2005a). Smart PLS – Version 2.0. User Instruction Manual. Institute of Marketing, Humboldt-Universitat zu Berlin.

Ringle, C.M., Wende S., & Will, A. (2005b). SmartPLS 2.0 (M3) Beta. Institute of Marketing, Humboldt-Universitat zu Berlin. Retrieved 05-01-2012 from http://www.smartpls.de.

Roland, G. (2004). Understanding Institutional Change: Fast-Moving and Slow-Moving Institutions. *Studies in Comparative International Development*, 38 (4), 109-131.

Sagar A. D., & Najam, A. (1998). The Human Development Index: a Critical Review. *Ecological Economics*, 25, pp. 249–264.

Salamon, L. (2002). *The Tools of Government: A Guide to the New Governance*. New York, NY: Oxford University Press.

Santiso, C. (2001). Good Governance and Aid Effectiveness: The World Bank and Conditionality. *The Georgetown Public Policy Review*, 7 (1), 1-22.

Schneider, F. (2010). *The Influence of the Economic Crisis on the Shadow Economy in Germany, Greece and the other OECD Countries in 2010: what can be done*. mimeo.

Schuessler, J. & Ibragimov, B. (2009). *Hacking Framework Extended: The Role of Vulnerabilities*. Retrieved 10/18/2012 from http://joseph.schuesslersounds.com/Research/Hacking%20Framework%20Extended/5.pdf.

Scott, R. (2010). The Science of Muddling Through Revisited. *Complexity and Organization*, 12 (1), 5-18.

Scott, W. (2003). *Organizations: Rational, Natural and Open Systems* (5th Ed.). Upper Saddle River, NJ: Prentice Hall.

Scott, W. R. (2001). *Institutions and organizations* (2ed ed.). Thousand Oaks, CA: Sage Publications.

Seldadyo, H., & De Haan, J. (2006). The Determinants of Corruption: A Literature Survey and New Evidence. *Proceedings from EPCS Conference*, Turku, Finland.

Selee, A. (2004). Exploring the Link Between Decentralization and Democratic Governance. In Tulchin, J & Selee, A. (Eds.) *Decentralization and Democratic Governance in Latin America*. Washington D.C.: Woodrow Wilson International Center for Scholars.

Selznick, P. (1996). Institutionalism "Old" and New". *Administrative Science Quarterly*, 41 (2), 270-277.

Shostak, F. (August 23, 2001). *What is up with the GDP?*. Auburn, Alabama: Ludwing Von Mises Institute. Retrieved 10/18/2012 from http://mises.org/daily/770.

Simkovic, M. (2011). Competition and Crisis in Mortgage Securitization. Harvard Law School (Working Paper # 1924831) Retrieved 03-06-2012 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1924831.

Sirimanne, S. (2009). Emerging issue: The gender perspectives of the financial crisis. *Commission on the Status of Women Fifty-third session*, New York, 2 - 13 March, United Nations. Retrieved 03-24-2010 from http://www.un.org/womenwatch/daw/csw/csw53/panels/financial_crisis/Sirimanne.formatted.pdf.

Smith, B. (2007). *Good Governance and Development*. New York, NY: Palgrave Macmillan.

Stahile, L., & Wold, S. (1990). Multivariate-Analysis of Variance (MANOVA). *Chemometrics and Intelligent Laboratory Systems*, 9(2), 127-141.

Statistics Denmark. (2009). *Statistical Yearbook 2009 (SY09)*. Retrieved 03-07-2012 from http://www.dst.dk/pukora/epub/upload/14468/sy2009.pdf.

Statistics Estonia. (2012). *Statistical Database*. Retrieved 03-07-2012 from http://pub.stat.ee/px-web.2001/Dialog/statfile1.asp.

Stoker, G. (1998). Governance as theory: Five Propositions. *International Social Science Journal*, 50 (155), 17–28.

Streeten, P. (1994). Human Development: Means and Ends. American Economic Review, 84(2), 232-237.

Tangsupvattana, A. (2005). Driving the Juggernaut: From Economic Crisis to Global Governance in Pacific Asia. In Tay, S. (ed.), *Pacific Asia 2022: Sketching Futures of a Region*. Tokyo, Japan: Nihon Kokusai Koryu Center.

Tanzi, V., & Davoodi, H. (1999). Corruption, Growth, and Public Finances. International Monetary Fund (Working Paper No. 182). Retrieved 10-30-2012 From http://anti-corr.ru/archive/corruption%20growth%20and%20public%20finances.pdf

Taylor, A. M., & Taylor, M. P. (2004). The Purchasing Power Parity Debate. Journal of Economic Perspectives.18 (4), 135-158.

Teisman, G., & Klijn, E. (2002). Partnership arrangements: Governmental Rhetoric or Governance Scheme? *Public Administration Review*, 62(2), 197–205.

Temme, D., Kreis, H., & Hildebrandt, L. (2006). *PLS path modeling- A software review*. Institute of Marketing (SFB 649 Discussion Paper 2006-084), Humboldt-Universitat zu Berlin, Germany.

Thomas, M. (2008). What do the worldwide governance indicators measure? Retrieved 4/20/10 from http://www.sais-jhu.edu/bin/q/r/What%20Do%20the%20 Worldwide%20 Governance%20 Indicators%20Measure.pdf.

Tong, S. Y., & Yang, Z. (2009). *China's Responses to the Economic Crisis*. East Asian Institute (EAI) (Background Brief No. 438), Singapore, Singapore. Retrieved 04-03-2012 from http://www.eai.nus.edu.sg/BB438.pdf.

Tulchin, J., & Selee, A. (Eds.) (2004). *Decentralization and Democratic Governance in Latin America*. Washington D.C.: Woodrow Wilson International Center for Scholars.

Tullock, G., Seldon, A., & Brady, G. (2002). *Government Failure: A Primer in Public Choice*. Washington D.C: Cato Institute.

United Nations (UN). (2000). "*We Can End Poverty 2015: Millennium Development Goals*" New York. Retrieved 06/14/2011 from www.un.org/millenniumgoals/.

United Nations (UN). (2007). *Good Governance Practices for the Protection of Human Rights*. New York, NY: United Nations Press.

United Nations Conference on Trade and Development (UNCTD) (2009). *World Investment Report 2009*. New York, NY: United Nations Publications. Retrieved 03-23-2010 from http://unctad.org/en/docs/wir2009_en.pdf

United Nations Conference on Trade and Development (UNCTD) (2011). *Global Investment Trends*. New York, NY: United Nations Publications. Retrieved 03-12-2011 from http://www.unctad-docs.org/files/UNCTAD-WIR2011-Chapter-I-en.pdf.

United Nations Development Program (UNDP) (2010). *Human Development Report 2010 20th Anniversary Edition. The Real Wealth of Nations: Pathways to Human Development*. (2nd ed.). New York, NY: Palgrave Macmillan. Retrieved 06-26-2011 from http://hdr.undp.org/en/media/HDR_2010_EN_Complete_reprint.pdf.

United Nations Development Program (UNPD) (2000). *Global Human Development Report*. Oxford, New York: Oxford University Press.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2009). *What is Governance?* Retrieved 02/10/2011 from http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.pdf.

Vachris, M. A., & Thomas, J. (1999). International Price Comparisons based on Purchasing Power Parity. *Monthly Labor Review*, 122 (10), 3-12.

van den Bergh, J. (2009). The GDP paradox. *Journal of Economic Psychology*, 30 (2), 117-135.

Wahr, F., Gray, K., & Radloff, A. (2009). *The Student Experience*. In 32nd HERDSA Annual Conference, Darwin, Australia, p. 230- 240. Retrieved 10/19/2012 from http://www.herdsa.org.au/wp-content/uploads/conference/2009/papers/HERDSA2009_James_V.pdf.

Warren, M. (1999). Civil Society and Good Governance. Unpublished Manuscript. Retrieved 9-10-2012 from http://www9.georgetown.edu/faculty/wilcoxc/CivilSociety.pdf

Waterman, R. W., Rouse, A. R., & Wright, R. L. (2004). *Bureaucrats, Politics, and the Environment*. Pittsburgh, PA: University of Pittsburgh Press.

Weaver, R. & Rockman, B. (1993). Do Institutions Matter? Government Capabilities in the United States and Abroad. Washington, DC: Brookings Institution Press.

Weingast, B. R. (1995). The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development. *Journal of Law, Economics, and Organization* 11, 1-31.

Weiss, T. (2000). Governance, Good Governance and Global Governance: Conceptual and Actual Challenges, *Third World Quarterly*, 21 (5), 795-814.

Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. Electronic Commerce Research and Applications, 9 (6), 476–487.

Wetzels, M., Odekeren-Shroder, G., & van Oppen, C. (2009). Using PLS Path Modeling for assessing hierarchical construct models: guidelines and empirical illustration. Management Information Systems Quarterly, 33 (1), 177-195.

Wilkin, S. (2011): Can Bad Governance be Good for Development? *Survival: Global Politics and Strategy*, 53 (1), 61-76.

Wilkinson, R. (2005). The Global Governance Reader. New York, NY: Routledge.

Williamson, O. E. (1998). The Institutions of Governance. *The American Economic Review*, 88 (2), 75-79.

Wilson, R. (2002). *Private Partners and the Public Good*. (Briefing Paper No. 1). Belfast: Institute of Governance, Public Policy and Social Research, Queen's University Belfast.

Winters, L., & Yusuf, S. (2007). Introduction. In L. Winters & S. Yusuf (Ed.), *Dancing with Giants: China, India and the Global Economy* (pp. 1-34). Washington, D.C: World Bank and Institute of Policy Studies.

Wong, P., Ho, P., & Autio, E. (2005). Entrepreneurship, Innovation and Economic Growth: Evidence from GEM data. Small Business Economics, 24, 335–350.

World Bank (1991). *Managing Development: The Governance Dimension*. (Discussion Paper 34899). Washington, DC.: The World Bank. Retrieved 06/26/2011 from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/03/07/000090341_20060307104630/Rendered/PDF/34899.pdf.

World Bank Institute. (2006). Governance Data: Web-Interactive Inventory of Datasets and Empirical Tools, Washington, D.C. Retrieved 02-11-2011 from http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBIGOVANTCOR/0,,contentMDK:20673879~menuPK:1742423~pagePK:64168445~piPK:64168309~theSitePK:1740530,00.html.

World Bank. (2004). Beyond Economic Growth Student Book. Retrieved 04/04/2012 from http://www.worldbank.org/depweb/english/beyond/global/glossary.html.

World Bank. (2012a). Data. Retrieved 03-11-2012 from http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD.

World Bank. (2012b). *What the World Bank Is Doing*. Retrieved 03-11-2012 from http://www.worldbank.org/financialcrisis/bankinitiatives.htm.

World Bank. (2011). *Worldwide Governance Indicators*. Retrieved 03-11-2012 from http://info.worldbank.org/governance/wgi/resources.htm.

World Bank. (n.d). *Good Governance and its benefits on economic Development An Overview of Current Trends*. Retrieved 06/16/2011 from http://siteresources.worldbank.org/INTWBIGOVANTCOR/Resources/1740479-1149112210081/2604389-1149699431307/edouardpresentation_munich_inwent.pdf.

Yap, J. T., Reyes, C. M., & Cuenca, J. S. (2009). *Impact of the Global Financial and Economic Crisis on the Philippines*. Philippine Institute for Development Studies (Discussion Paper Series NO. 2009-30). Retrieved 02-24-2011 from http://www.unicef.org/socialpolicy/files/Impact_of_the_Global_Finanical_and_Economic_Crisis_on_the_Philippines.pdf.