

Discussion Paper No.210

Governance and Economic Development in Post-Conflict Countries: What Do 30 Post-Conflict Countries Inform Us?

Yukiko NISHIKAWA April 2019

Graduate School of International Development

NAGOYA UNIVERSITY NAGOYA 464-8601, JAPAN

〒464-8601 名古屋市千種区不老町 名古屋大学大学院国際開発研究科

Abstract:

The article explores the relationship between governance and development with particular focus on post-conflict countries. It raises questions as to whether or not good governance promotes economic growth in post-conflict countries and also what specific focus is necessary in post-conflict countries to improve governance that stimulates economic growth. This study utilizes indicators of 30 post-conflict countries to find correlations between economic growth and governance. The analysis revealed that certain elements of good governance, particularly those that decide the capacity of governance, indeed have correlations with development while the less relevance is found between political system element of governance and development.

Keywords: Post-conflict countries; economic growth; governance; correlation.

1. Introduction

At the start of the 1990s, the World Bank, United Nations Development Programme (UNDP), and other international organizations banded together to focus on governance as an important factor in reducing poverty and promoting development; as a result, measures to achieve good governance were strengthened. The trend to promote good governance among donors fosters a question as to whether or not good governance indeed contributes to economic development. There is, however, no agreement among donors regarding what constitute "good governance." Even in academia, no agreed definition on "governance" exists and thus different scholars study distinctive aspects and elements that are thought to constitute good governance. Nevertheless, it is widely recognized that the "good governance" agenda promoted by major donors entails elements not only "institutional capacity" but also "political system elements (system type)." Here "institutional capacity" refers to the capacity and effectiveness to formulate and implement policies capable of contributing to economic development whereas "political system elements" are indicators related to democratization (i.e., transitioning from a nondemocratic system to a democratic one).

Inclusion of democratic elements in the good governance agenda by major donors is confirmed by various governance-related indicators and indexes introduced since the 1990s, such as the Worldwide Governance Indicators (WGI) and World Governance Index. These indicators and indexes include both political system elements, such as "participation," "civil

and political rights," and "voice and accountability" as well as elements of institutional capacity, such as "rule of law," "government effectiveness," and "control of corruption." The political system elements in these indicators clearly manifest a "democratic" form of governance, more specifically liberal democracy.

Due to diverse views on the concept of "governance" as well as on what constitute "good governance," the good governance agenda becomes complex and, as a result, donors tends to urge to comprehensively tackle multifaceted issues of governance. However, for most countries in which governance is inherently weak and human resources are lacking, achieving good governance as defined by major donors is unrealistic. In post-conflict settings, in particular, it is difficult to comprehensively tackle the multiple issues related to governance.

Accordingly, Merilee S. Grindle proposed that such countries should aim to achieve "good enough governance" by setting achievable short- and long-term goals (Grindle 2004). Yet, Grindle does not suggest what aspects or elements of governance are useful for economic growth. Without doubt, it is imminent particularly for post-conflict countries to identify priority issues of governance at the very initial stage of the recovery process. While major development agencies, including those of international organizations and major donor governments, nowadays involve in peacebuilding and recovery in their development assistance, little study has been done on whether or not post-conflict countries go through the same trajectory of economic recovery with non-post-conflict countries. By the same token, it is not well understood as to whether or not the promotion of "democratic" governance, as emphasized by major donors in development contexts, is also critical for recovery in post-conflict countries.

The inherent assumptions here by major donors are that "good governance" is good for growth and a democratic form of governance is necessary for stability, which, in the long run, sustains growth. This study does not deny the importance of good governance in itself. However, good governance suggested by major donors does not always grant growth unless it appropriately addresses particular constraints. A hypothesis here in this study is that "good governance" and "governance for growth" agendas are different, which will be more clearly manifested by studying post-conflict countries because these countries must first instigate growth before considering sustainability of the growth. An analysis on post-conflict countries will exhibit the particular governance challenges closely linked to stimulating economic growth. This study attempts to identify the priority issues of governance for economic growth,

verifying correlations between economic growth and elements that are thought to constitute "good governance" by utilizing data of 30 post-conflict countries.

Numerous academic studies have been conducted on development, (good) governance, and the prevention of further conflict in post-conflict countries. Since such research requires understanding the various conditions unique to the countries and conflicts in question, many of these studies comprise qualitative analysis, focusing on specific countries. However, there is also a need to review existing theories of how economic growth in post-conflict countries is related to various aspects of governance and the extent to which these conditions jeopardize political stability by identifying distinctive factors common to multiple case examples. The conflicts in the 30 post-conflict countries examined in this study ended after the end of the Cold War. Since a reasonable amount of time has passed since then, it is anticipated that it will be possible to identify some trends. However, this study does not attempt to clarify causal relationships, for which qualitative analysis is vital with full understanding of various conditions unique to each country. Accordingly, this research should be seen as complementing such qualitative analysis.

In order to explore trends in post-conflict countries from as broad a perspective as possible, the 30 countries examined here comprise six countries in the Asia-Pacific region (Afghanistan, Tajikistan, Cambodia, East Timor, the Solomon Islands, and Papua New Guinea), five countries in Europe and the Middle East region (Azerbaijan, Croatia, Georgia, Lebanon, and Bosnia and Herzegovina), four countries in the Latin America region (Guatemala, Haiti, El Salvador, and Nicaragua), and fifteen countries in the Africa region (Angola, Chad, Ethiopia, Eritrea, Liberia, Rwanda, Sierra Leone, Uganda, Burundi, Democratic Republic of the Congo, Guinea-Bissau, Namibia, Cote d'Ivoire, Republic of the Congo, and Mozambique). The common factors shared by these 30 countries are that, in addition to experiencing an armed conflict that ended around the end of the Cold War, each country has experienced some form of conflict between internal groups (though the countries also have unique historical backgrounds and geopolitical conditions), and exhaustive reconstruction was required across the domestic political, economic, and social spheres.

Because this study uses indicators thought to be related to "good governance" promoted by major donor countries, international organizations, and think-tanks, there are several noticeable drawbacks; not merely credibility and availability of indicators but also unavoidable errors in analyzing and interpreting indicators, divergence between indicators, and fundamental flows

arising from the Eurocentric particular conception of "governance" and the narrow definition of "democracy" or democratization. This study recognizes such serious weaknesses of indicators and indexes in themselves as criticized by many scholars, so as problems deriving from biased conception of governance and democracy. To a certain degree, these weaknesses are reduced by not focusing on a particular year but tracking several years in order to grasp trends as well as changes. Despite of these drawbacks, it is worth analyzing them because it also helps us to conversely assess the true utility of governance indicators. The author believes that all governance indicators should be regarded as including divergence measurement errors. Thus they need to be regularly reviewed and their components should be reconsidered. Unlike many other studies indicate, if no correlation is observed, it may be a sign of serious defects of indicators in them. Although the analysis of this study is limited to certain countries and years, the correlation analysis in this study will be a contribution to review the existing governance agenda applied in post-conflict countries and also to find more realistic steps as suggested by Grindle.

2. Indicators Used for 30 Post-Conflict Countries

This study uses data and indicators related to development and governance. Data and indicators related to "development" are based on Gross Domestic Product per capita income (in current US dollars) according to the World Bank (hereafter, "GDP") and the UNDP Human Development Index (HDI).³ Both GDP and HDI include figures collected from the 1970s onwards and analysis of changes over time. HDI uses indexes that were revised after 2010; indicators for the 1970s are calculated using pre-revision indexes. In conducting the analysis, the year in which the conflict ended in each country was taken as 0, and changes over time were clarified with regard to their correlations with GDP and HDI. Based on this, correlation analysis was carried out to determine whether these correlated with indicators related to governance (indexes for democracy, corruption control, political freedom rating, rule of law, political stability and control of violence, and government effectiveness).

Although there are various indicators related to governance, those used in this analysis are based on the Worldwide Governance Indicators (WGI) formulated by the World Bank, ⁴ the Corruption Perception Index formulated by Transparency International (TI), ⁵ the Democracy Index formulated by the Economist Intelligence Unit (EIU), and the Political Freedom Rating formulated by Freedom House. This selection includes the indexes that bring together the

largest amount of data on the largest number of countries and that have been used in previous research covering long time periods (Arndt 2008).

These indicators were used because they enable changes over time in the data to be checked for the 30 countries analyzed and are widely recognized and used in both policy and academic fields (Dollar and Kraay 2003; Kaufmann and Kraay 2002; Meon and Sekkat 2005; Naude 2004).⁶ Although each of the indicators and indexes was analyzed for changes over time, the majority of indicators related to governance were formulated in or after the 1990s. Therefore, the analysis uses data from this period onwards.⁷

It is vital to note here that the imperfections characterizing indicators related to low-income post-conflict countries cannot be denied. Considering the data for the indicators and indexes utilized in this study, in addition to credibility issues characterizing many surveys and research efforts focused on low-income countries, there is also the problem of missing data for the periods of armed conflict or political instability. If a country is missing data or indicators for some reason, that country is removed from the analysis for the year in question. In order to reduce these problems regarding indicators and indexes, efforts were made by using multiple indicators related to development as well as those of governance. In addition, this study employs a multi-year analysis, rather than focusing on a particular year, so as to ensure grasping broader trends when finding correlations, which enables to identify flaws of indicators.

Apart from credibility and availability issues of indicators, there are several noticeable problems, such as divergence between indicators, ⁹ unavoidable errors in analyzing and interpreting indicators, and the difficulty of measuring administrative improvements. The author recognizes these drawbacks. They partly derive from the abstract nature of indicators related to democratization and governance. However, for this reason, they needs to be regularly reviewed and reconsidered, for which findings of this study, though a limited degree, may be able to contribute. For this, there is a need to investigate trends over even longer time periods (including changes over time in the future) as well as to conduct analysis covering even more countries.

3. Evolution of Existing Theories Regarding Governance and Economic Development in Post-Conflict Countries

There are various views concerning the relationships between governance and economic

development. Some scholars point out that good governance indeed contributes to economic growth (Dervis 2014; Cahill 2005), while others argue that unlike donors' emphasize on the importance of governance for development, there is little empirical evidence that prove countries experiencing economic growth and those seeing improvements in the human development index are achieving all elements considered to constitute "good governance".

Existing arguments over economic development and political development can be broadly classified into three views (Hirschman 1995). The first view is that economic development and political development are achieved in parallel (concurrent development). The second is that economic growth is accompanied by political costs or that political development inhibits economic growth (exclusive development). The third view holds that striking a balance between economic development and political development is difficult in the early stages of development; once a certain level of development has been achieved, however, it is possible for economic development and political development to proceed in parallel (condition-dependent development).

As mentioned above, the good governance promoted by donors today includes both aspects of institutional capacity and aspects of political systems premised on democratization. Major developed countries—especially the OECD members—have promoted good governance in relation to sustainable economic development. If political development can be regarded as including political system elements, the first view mentioned above—that economic development and political development progress simultaneously—exists despite contrary evidence in the examples of Korea and Singapore, which have achieved strong economic growth. In fact, many studies point out no significant correlation between political systems and economic performance (Huntington 1991: 59; Haggard 1990: 263). Even today, among the countries sustainably achieving economic growth, political systems are not limited to democracy; in many cases, they are authoritarian regimes. As is said in the second view above, East Asia can be interpreted as an example of actually prioritizing economic development, which is seen to have been achieved by somewhat reducing the costs through political development.

On one side of this kind of argument are theorists who point out that successfully shifting to a democratic political system depends on the economy (i.e., economic development regulates political development, known as condition-dependent development). For example, Havard Hegre points out that, with the exception of authoritarian states, democracy is only stable in

countries with developed economies (Hegre 2003: 2). Collier et al. also point out that when per capita annual income reaches approximately 750 US dollars, democracy becomes more stable than authoritarianism; the higher income levels rise, the more firmly established democracy becomes (Collier et al. 2003: 59-60). Arguments similar to this view have also been voiced (Lipset 1959; Przeworski et al. 2000). Although there are no established theories regarding economic development levels and the stability of democracy, the current approach by OECD members may contradict in itself; while emphasizing the importance of good governance, it may impede economic growth. Accordingly, it is critically needed to grasp what are the priority elements of governance that helps economic growth.

Economic Growth and Human Development: Issues for Development

Economic growth has been viewed as central to development. Some believe that the fruits of economic growth will eventually spread to the poor (the "trickle-down" theory) (Oman and Wignaraja 1991: 15-16) or that economic growth will result in the expansion of welfare (Lewis 1955). However, researchers have also noted that the relationship between economic growth and public welfare is not self-apparent, either from a theoretical perspective or in the actual situations seen in various countries. Several theorists have pointed out that there is a strong correlation between GDP or income per capita and HDI (Cahill 2005). The UNDP has also pointed out that economic growth is necessary for achieving human development (UNDP 1996). In other words, it is widely believed that there is a correlation between economic growth and human development.

Gustav Ranis has also argued that there is a deep mutual relationship between economic growth and human development (Ranis 2004). However, there are countries in which—at least temporarily—human development does not progress despite acknowledged economic growth. Conversely, there are imbalanced countries in which no economic growth can be observed despite acknowledged human development. Indeed, it has been noted that from the 1960s to the 1970s, all countries in which human development was falling behind despite observable economic growth eventually experienced a decline in both economic growth and human development (Ranis et al. 2000). On the other hand, it has also been reported that countries in which economic growth lagged despite observable progress in human development are able to sustainably achieve economic growth in 50% of cases. Accordingly, it is said that a certain degree of human development is required for sustaining economic growth (Ranis 2004: 9).

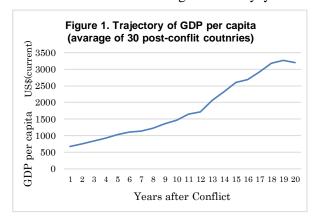
The majority of existing research regarding correlations between GDP or economic growth and human development is not specific to post-conflict countries, so there has been little discussion of the trends that can be observed in the economies of post-conflict countries and regions or how these are related to human development. As Gustav Ranis pointed out with regard to GDP and HDI, in countries immediately after a conflict, it is highly possible that some countries show an imbalance. There is a need to explore the trends in these countries.

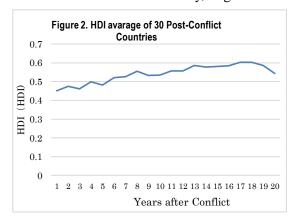
4. Correlation Analysis Based on Data from 30 Countries

Existing studies confirm that the various elements of governance, economic levels, and human development are intricately linked, and it is necessary to consider not only the situation in a specific year but also what other kinds of changes can be observed with regard to relationships between governance and other factors accompanying economic growth. Aid provided to post-conflict countries has up until now been extended on the condition that the recipient country must democratize. However, without clarifying at least which elements of governance significantly affect economic growth during the post-conflict reconstruction period, even achieving "good enough governance" is difficult. Based on the theoretical background introduced in the previous section, this chapter seeks to identify trends in economic and human development following an armed conflict based on data for 30 post-conflict countries and to clarify the correlations between elements thought to be related to governance.

Trends in Per Capita GDP and Human Development Following the End of a Conflict

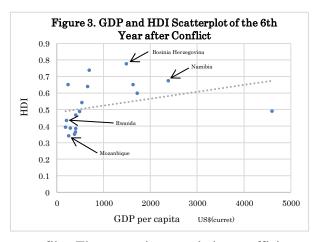
What trends can be observed for economic recovery and human development following the end of conflict in the 30 post-conflict countries? Figure 1 shows trends in average GDP values for the 30 countries during the twenty years after the conflict ended. Similarly, Figure 2

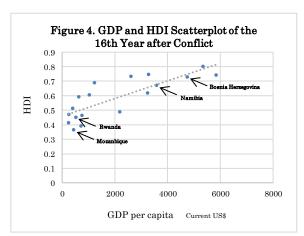




shows trends in average HDI values. For virtually all of the 30 countries, GDP and HDI recovered when compared to the situation during the conflict, with particularly marked GDP growth achieved starting about 10 years after the end of the conflict.¹¹

Of the 30 countries considered, 18 had full data for both GDP and HDI. These countries were extracted and correlations among them were analyzed for the twenty years after the conflict ended. For the correlation between GDP and HDI, wide variations were observed until the eleventh year after the end of conflict, showing weak/slight positive correlations (between +0.3 and +0.6). Afterward, strong positive correlations (between +0.7 and +0.8) were found. That is to say, starting in around the twelfth year after the end of the conflict, the tendency for HDI to increase with GDP became stronger. However, this does not prove a causal relationship. Figures 3 and 4 are scatterplots for years 6 and 16 after the end of the





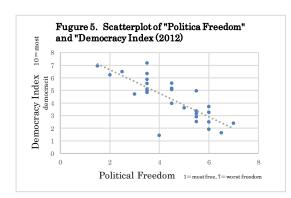
conflict. The respective correlation coefficients are +0.32 and +0.81.

As mentioned above, in the existing studies, there is thought to be a strong correlation between GDP and HDI (Cahill 2005; McGillivray 1991; McGillivray and White 1993). However, among the post-conflict countries analyzed here, this trend did not appear until 10 or more years after the conflict had ended. Furthermore, the change in this correlation over time shows that, even for countries with low HDI at the time conflict ends, a certain degree of improvement in HDI can be expected over the long term. The countries in which such improvements were observed also showed sustainable improvements in GDP; it is expected that recovery of HDI I parallel with GDP growth can be observed starting around 10 years after the end of conflict. Indeed, it has been reported that, even in countries where the economy recovers steadily after the end of the conflict (such as Rwanda and Mozambique), it takes 15 to 20 years for the economy to return to pre-conflict levels (UNDP 2008). Accordingly,

improving the GDP and HDI of post-conflict countries requires long-term strategies.

In contrast, the observations of changes over time confirm that many of the countries with high HDI levels at the end of the conflict (such as Namibia and Mozambique) achieved considerable GDP recovery. There is thus a clear tendency for countries with high HDI immediately following the end of a conflict to subsequently achieve greater GDP recovery than countries with low HDI levels. As discussed in the previous section, Gustav Ranis has pointed out that successful human development leads to sustainable economic growth; economic recovery in a post-conflict country is also thought to be somewhat influenced by the country's level of human development. However, the period examined here was short, and it was not possible to confirm trends in sustainable economic growth, as discussed by Ranis. Similarly, economic growth was confirmed even in countries in which the HDI immediately after the end of the conflict was low, but the sustainability of this growth is not clear.

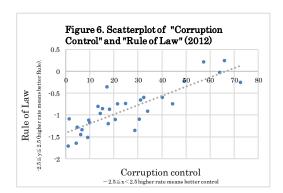
Correlations between Governance Indicators



Multi-perspective analysis was also carried out with regard to the correlation between governance indicators (i.e., the democracy index, corruption control, political freedom rating, rule of law, political stability and control of violence, and government effectiveness) in order to find whether common

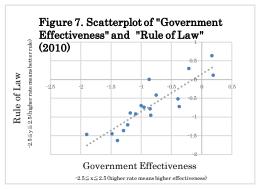
trends in governance could be observed among the 30 post-conflict countries.¹⁴ Among the

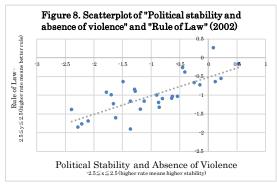
indicators, especially strong correlations were found between four pairs of indicators. First, the "political freedom rating" and "democracy index" showed a strong correlation for each of the years studied (correlation coefficient: 0.8; i.e., high political freedom rating = high democracy index) (Figure 5). As expressed in



the criticism that reconstruction and peace-building aid provided during the 1990s by major donors was aimed at promoting democracy (Paris 2004), these findings somewhat reflect a trend towards democracy premised on liberalism.

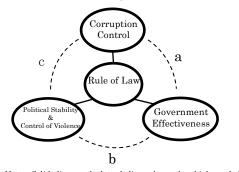
For each of the remaining three pairs, there were strong correlations with "rule of law." First, a strong positive correlation was found between "control of corruption" and "rule of law" during the analysis period (1996-2012) (correlation coefficients between +0.7 and +0.8) (Figure 6). A similar trend was also found for the correlation between "government effectiveness" and "rule of law" (correlation coefficients between +0.8 and +0.9) (Figure 7).





Lastly, a strong positive correlation was found between "political stability and absence of violence" and "rule of law" (Figure 8). From 1996 until the first half of the 2000s, these correlations were strong (correlation coefficients between +0.7 and +0.8). From the second half of the 2000s until 2012, however, there was a tendency for these correlations to weaken slightly compared to the 1990s (correlation coefficient +0.6).

Figure 9. Correlation among Governance Indicators



Note: Solid line and dotted line show the high and less correlations, respectively.

Figure 9 plots the relationships between "rule of law" and the three indicators that are strongly correlated with it (Figure 9). Although a strong correlation is found between "rule of law" and these three indicators, the correlation between "government effectiveness" and "control of corruption" (a in Figure 9), that between "government effectiveness" and

"political stability and absence of violence" (b in Figure 9), and that between "control of corruption" and "political stability and absence of violence" (c in Figure 9) are all found to be slightly positive. None of these correlations is found to be as strong as those between these indicators and "rule of law." ¹⁵

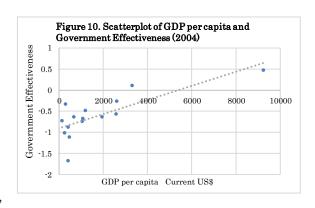
Further analysis is required since the causal relationships among these indicators are not clear. However, this correlation analysis of governance indicators in post-conflict countries

indicates a strong correlation among indicators related to the institutional capacity aspect of governance, centered on "rule of law" in particular. In contrast, for the democracy index and political freedom rating—which are political system elements of governance—no strong correlation with indicators related to the institutional capability for governance is found. Nonetheless, the analysis of the period between 2006 and 2012 shows a slightly positive correlation between "rule of law" and political system elements (democracy index and political freedom rating). In terms of changes over time, these correlations are found to gradually increase over time (correlation coefficients between +0.5 and +0.6).

5. Correlation between Governance and Per Capita GDP

With regard to the 30 post-conflict countries studied here, as mentioned in the previous section, recovery of both economic and human development was observed following the end of the conflict. Furthermore, strong correlations were confirmed among certain indicators related to governance. What relationships, then, were observed between economic development and governance?

When the correlation between each governance-related indicator and GDP was analyzed, "government effectiveness" was found to have the strongest positive correlation with GDP (i.e., high GDP=high government effectiveness) (Figure 10). ¹⁶ With regard to the correlation between GDP and "rule of law"



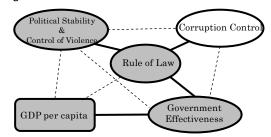
and that between GDP and "political stability and absence of violence," slightly positive correlations was found (correlation coefficients between +0.4 and +0.6). In contrast, only weak positive correlations were found between GDP and "control of corruption" and "democracy index" in all years analyzed (correlation coefficient: +0.3).

For each of the indicators related to HDI and governance, changes over time were analyzed for every two years between 1996 and 2012. In all cases, however, only a weak or slightly positive correlation was found (correlation coefficients between +0.3 and +0.6). To Since a long-term correlation between HDI and GDP had been confirmed previously, this study's analysis of aspects of governance that are beneficial for economic growth with a view to

human development focused on analyzing correlations between GDP and governance indicators.

Figure 11 shows the correlations between governance-related indexes and GDP. Especially strong correlations were found for those elements emphasized as indicating improved governance premised on development in post-conflict countries—that is to say, "government effectiveness" (which had a strong

Figure 11. Correlation between GDP and Governance



Note: Solid line and dotted line show the high and less correlations, respectively.

correlation with GDP) and "rule of law," and "political stability and absence of violence" (which had strong correlations with governance-related indicators) (see Figure 11). Although only a weak correlation was found between GDP and the democracy index and between GDP and the political freedom rating, correlations between GDP and other governance-related indicators were more pronounced. Thus it is possible to argue that the institutional capacity elements of governance (centered on "government effectiveness," "rule of law," and "political stability and absence of violence") are beneficial for economic growth in the post-conflict recovery process.

However, another important finding was that it was not the case that other indicators showed absolutely no correlation with GDP. That is to say, virtually all of the indicators analyzed here were found to be correlated with GDP (although these correlations differed in degree). This suggests that comprehensive measures are ideal for achieving improvements in human development, economics, and governance. However, in situations where this is difficult to achieve, for economic growth, it is advantageous to prioritize elements that show especially strong correlations with GDP.

Nonetheless, the analysis conducted here can be regarded as valid for the period during which countries recover somewhat from situations in which economic and human development are severely depressed by armed conflict. In order to achieve sustainable economic growth and make leaps towards higher levels of development, elements other than those examined here could also be effectively applied. It was found that some indexes show correlations with GDP that increase with the number of years that have passed since the end of the conflict (such as the correlations between democracy and "rule of law" and between HDI and the democracy

index). Conversely, there were also indexes for which correlations with GDP decreased as the number of years since the end of the conflict increased (such as the correlations between "political stability and absence of violence" and "rule of law" and between "political stability and absence of violence" and "government effectiveness"). Thus it is vital to analyze correlations among governance indicators as well as between governance indicators with GDP for next decades in order to identify whether or not GDP and political system elements of governance show stronger correlations vis-à-vis weakening correlations between GDP and elements of institutional capacity.

6. Conclusion

This article began with a question on whether or not good governance matter for economic growth during the post-conflict reconstruction period. From the correlation analysis in this study, the answer to the question is that governance indeed matters for economic growth in the post-conflict period. However, the elements of governance that do matter for growth are specific and hence the good governance agenda widely applied by major donors since the 1990s is divorced from such specific governance challenges. As the hypothesis of this study raised in the beginning of this article indicates, the "good governance" and "governance for growth" agenda differ substantially.

The elements of governance that can be regarded as significant for economic growth during the post-conflict reconstruction period are "rule of law," "government effectiveness," and "political stability and absence of violence." Of these, "rule of law" has an especially strong correlation with other indicators related to the institutional capacity aspect of governance. Therefore, from a growth standpoint, the institutional capacity of governance bears of prime importance in post-conflict contexts. In contrast, no notably strong correlations were found between GDP/HDI and the political system elements included in the good governance agenda promoted by major donors (i.e., democracy indicators and degree of freedom). In other words, whereas achieving a democratic form of governance is good in itself, it is not necessarily critical for economic development.

However, the above-mentioned elements should be given priority in the period immediately following the end of the conflict and during the recovery period for economic growth. Once sustainable economic development is achieved, in order to ensure further development it is essential that consideration be given to the political system elements related to the exercise of

power in governance. For this reason, it is crucial to develop contingent strategies for post-conflict countries to tackle governance problems befitting with growth and economic levels of each context. In fact, since a slight correlation was found between the democracy index and "rule of law" as well as between the democracy index and HDI, it is anticipated that changes will be observed in these correlations depending on GDP fluctuations and the number of years that have passed since the end of the relevant conflict. As can be seen from the correlations between GDP and HDI and between HDI and the democracy index, correlations are possibly not fixed by the initial conditions.

Post-conflict countries are likely to undergo a distinctive process of economic recovery, particularly during their first decades since the end of conflict. During this period, economic recovery and the situation of human development show clear imbalances in many post-conflict countries. This finding indicates that for both economic and human development in post-conflict countries, long-term strategies spanning more than 10 years are required. This study also revealed that countries with relatively good HDI at the time of conflict's end may potentially experience higher economic growth, if sustained, in the later period.

Overall, findings of this study prove that there are particular governance challenges that are most closely linked to stimulating and sustaining economic growth. In this sense, it is true that there is no one-fit-all governance agenda for growth. Moreover, findings of this study hypothetically imply that indicators and indexes of governance, to a certain degree, reveal the situation of governance. It is possible to say so because although this study focused only on post-conflict countries (unlike other studies), the findings nevertheless show similar trends with those of non-conflict countries on certain aspects. Hence, despite of evident limitations, governance indicators and indexes are not completely ineffective tools to assess governance of each country.

This study does not consider the question of how changes in correlations among governance indicators are related to changes in levels of economic and human development. Revealing this point is vital in order to develop concrete and appropriate strategies for archiving "good enough governance" and "governance for growth." Otherwise, the governance agenda may take an independent life of its own, divorcing from particular challenges that are linked to prompting economic growth. Thus concrete case analyses are crucial with such example cases as Rwanda and Cambodia, where noticeable improvements are recognized in economy and human development since the end of conflict. These cases may also provide significant lessons

to reveal causal relations between economic growth and the improvement of institutional capacity. Such qualitative case analysis may be also useful in order to review and strength governance indicators.

¹ For example, the UNDP Human Development Report 2002 raised the issue of the need for governance by the people for the people UNDP (2002: 1-9).

² Opinions differ regarding the conflict period in each country. Here, the conflict periods for the 30 countries studied are based on those given in UNDP (2008).

³ Source: IMF-World Economic Outlook Databases (April 2014 Edition); data can be accessed from the website http://data.worldbank.org/indicator/NY.GDP.PCAP.CD (October 24, 2014).

⁴ Definition of each indicator are based on those given by the World Bank available on the following website: http://info.worldbank.org/governance/wgi/index.aspx#home (November 4, 2014).

With regard to corruption, correlation between WGI "Control of Corruption" indicators (World Bank) and the "Corruption Perceptions Index" (TI) was confirmed. The TI index is used in calculating WGI "Control of Corruption" indicators, and the correlation between the two was reconfirmed. With regard to the 30 countries studied, the correlation indexes for both WGI and TI indicators related to corruption (1998-2012) ranged from +0.76 to +0.95, indicating extremely strong positive correlation. Accordingly, to examine corruption this paper uses the WGI "Reduction of Corruption" index, which is rarely absent from indexes for the 30 countries studied.

⁶ For example, for the Global Integrity Index (GII) evaluation standards are detailed, and it is evaluated very positively. However, it is limited to 43 countries and does not include all 30 countries studied here.

⁷ Analysis was conducted on Governance Indicators, Corruption Perception Indexes, Democracy Indexes, and Political Freedom Ratings for 1996 onwards, 1993 onwards, 2006 onwards, and 1998 onwards, respectively.

⁸ For example, since no data exists prior to 2000 for East Timor, years up to 2000 are not included in the analysis.

⁹ For example, the indicators for governance provided by the World Bank include CPIA (Country Policy and Institution Assessment) and WGI, and the divergence between the two is not small.

Figure 1 is based on data for the 30 countries covering the period from the end of the conflict until the tenth year after the end of the conflict. However, because from the eleventh year onwards some countries do not have data available for every year, the numbers of countries included in the analysis are as follows: year 11 (27 countries); year 12 (25 countries); year 13 (22 countries); year 14 (22 countries); year 15 (19 countries), year 16 (19 countries); year 17 (18 countries); year 18 (17 countries); year 19 (17 countries); and year 20 (11 countries).

¹¹ In order to confirm that the significant increase in GDP growth from year 12 onwards was not due to the decrease in the number of countries included in the analysis, average GDP trends from the first year until year 20 after the end of conflict are examined for only the 25 countries analyzed in year 12. It is found that GDP growth increased from around the twelfth year, just as seen in the analysis of all 30 countries. Accordingly, the increased growth in GDP from the year 12 onwards is not related to the decrease in the number of countries analyzed.

¹² In this paper, "correlation" refers to that obtained using Pearson's integrating correlation analysis. Following correlation analysis, significance was evaluated (significance level of 5%).

Strength of correlation (r) is based in the following standards: 0 = no correlation; $(0 < \text{r} \le 0.2) = \text{virtually no correlation}$; (0.2 < r < 0.4) = weak correlation; $(0.4 \le \text{r} < 0.7) = \text{slight correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) = \text{strong correlation}$; $(0.7 \le \text{r} < 1.0) =$

¹⁴ Changes over time were analyzed using data for every two years between 1996 and 2012 for the WGI, between 1998 and 2012 for the political freedom rating, and between 2006 and 2012 for the democracy index.

¹⁵ The correlation coefficient between "government effectiveness" and "control of corruption" (a in Figure 9) was calculated based on analysis of data for every two years between 2002 and 2012; the correlation coefficients were between +0.3 and +0.5. The correlation coefficient for "government effectiveness" and "political stability and absence of violence" (b in Figure 9) was calculated based on analysis of data for every two years between 1996 and 2012; the correlation coefficient was +0.7 until 2000, but between +0.5 and +0.6 after that. The correlation coefficient for "control of corruption" and

[&]quot;political stability and absence of violence" (c in Figure 9) was similarly calculated for every two years from 1996; the correlation coefficients were between +0.3 and +0.6.

The average correlation coefficient for all two-year periods between 1996 and 2012 for the 15 countries analyzed was +0.7. These 15 countries with full data were selected while considering regional balance (i.e., across Asia, Europe/Middle East, Latin America, and Africa).

The correlation coefficients for HDI and "government effectiveness" were between +0.3 and +0.6;

 $^{^{17}}$ The correlation coefficients for HDI and "government effectiveness" were between +0.3 and +0.6; those for HDI and "rule of law" were between +0.3 and +0.5; those for HDI and "political stability and absence of violence" were between +0.2 and +0.5; and those for HDI and "democracy index" were between +0.4 and +0.5.

References

- Arndt, C. 2008. "The politics of governance rating." *International Public Management Journal* 11(3): 275-297.
- Cahill, B. M. 2005. "Is the human development Index redundant?" *Eastern Economic Journal* 31(1): 1-5.
- Collier, P., V.L. Elliot, H. Hegre, A. Hoeffler, M. Reynal-Querol, S. Nichola. 2003.

 Breaking the Conflict Trap: Civil war and Development Policy, Washington DC: World Bank.
- Davis, K. 2014. "Good governance and economic performance." Accessed April 22, 2016.
 - www.brookings.edu/research/opinions/2014/03/13-good-governance-dervis/
- Dollar, D., and A. Kraay. 2003. "Institutions, trade and growth." *Journal of Monetary Economics* 50(1): 133-162.
- Grindle, S. M. 2004. "Good enough governance: poverty reduction and reform in developing countries." *Governance: An International Journal of Policy, Administration, and Institutions* 17: 525-548.
- Haggard, S. 1990. Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries, London: Cornell University Press.
- Hegre, H. 2003. "Disentangling democracy and development as determinants." Paper presented at the annual meeting of International Studies Association, Portland Oregon, February 27.
- Hirschman, O. A. 1995. *A Prosperity to Self-subversion*, Cambridge: Harvard University Press.
- Huntington, S. 1991. *The Third Wave: Democratization in the Late Twentieth Century,* London: University of Oklahoma Press.
- Kaufmann, D., and A. Kraay. 2002. "Growth without governance." *Economia* 3(1): 169-229.
- Lewis, W. A. 1955. The Theory of Economic Growth, London: George Allen & Unwin.
- Lipset, M. S. 1959. "Some social requisites of democracy: economic development and political legitimacy." *American Political Science Review* 53(1): 69-106.
- McGillivray, M. 1991 "The human development index: Yet another redundant

- composite development indicator?" World Development 19(10):1461-1468.
- McGillivray, M., and H. White. 1993. "Measuring development? The UNDP's human development index." *Journal of International Development* 5(2):183-92.
- Moen, P.G., and K. Sekkat. 2005. "Does corruption grease or sand the wheels of growth?" *Public Choice* 122(1-2): 69-97.
- Naud, A. W. 2004. "The effects of policy institutions and geography on economic growth in Africa: An econometric study based on cross-section and panel data." *Journal of International Development* 16(6): 821-849.
- Oman, P. C., and G. Wignaraja. 1991. *The Postwar Evolution of Development Thinking*, New York: St. Martin's Press.
- Paris, R. 2004. At War's End: Building Peace after Civil Conflict, Cambridge University Press.
- Przewprski, A., M. E. Alvarez, J. A. Cheibub and F. Limongi 2000. *Democracy and Development Political Institutions and Well-Being in the World,* 1950–1990, UK: Cambridge University Press.
- Ranis, G. 2004. "Human development and economic growth." Economic Growth Center, Discussion Paper No. 887, New Heaven: Yale University.
- Ranis, G., F. Stewart and A. Ramires. 2000. "Economic growth and human development." World Development 28(2): 197-219.
- United Nations Development Programme (UNDP). 2008. Post-conflict Economic Recovery: Enabling Local Ingenuity, Crisis Prevention and Recovery Report 2008, NY: UNDP.
- UNDP. 2002. Human Development Report 2002: Deepening Democracy in a Fragmented World, New York: Oxford University Press.
- UNDP. 1996. Human Development Report 1996: Economic Growth and Human Development, New York: Oxford University Press.