Good Governance and Happiness:
Does Technical Quality of Governance Lead to Happiness Universally in both Rich and Poor Countries?*

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This study attempts to examine the effect of good governance or quality of government on the happiness and find out whether the technical quality of governance lead to happiness universally in both rich and poor countries. The study applies multi-level analyses on happiness data from WVS to examine the interplay of individual characteristics and the country context. Unlike the previous literature that argue that efficient government are of importance for both richer and poorer countries, this study finds that good governance enhances the level of happiness only in the high-income countries. Specifically, the effect of technical or delivery quality of governance is limited to relatively rich nations, suggesting that improvement of the technical quality of governance, or efficiency-oriented transformation of government does not ineluctably lead to a higher level of happiness.

Keywords: Good Governance, Happiness, Technical Quality, Quality of Government

1. INTRODUCTION

While the term governance encompasses almost all aspects of the way a country is governed, the concept of 'good governance' has been popular in the field of global development. Good governance defined as good quality of institution has often been argued as the key to understanding economic growth in poor countries Yet, it is also true that controversies are raging as to the meaning and implications of good governance. Debates abound on whether the governance or quality of government defined in terms of its effectiveness, adherence to the general rule of law, and lack of corruption leads to the economic growth and prosperity. Some insist that the correlations are not robust, and that there is actually an inverse causality, from economic growth to the good governance.

With all the controversies, there appears to be a growing consensus on the importance of good governance as quality of institution. Recently, good governance has also been researched extensively on whether there are other factors that have substantial effect on the phenomena other than economic growth, such as citizen support, and democratic stability (Rothstein and Teorell, 2008). Governance or the quality of a government can be admittedly evaluated by the economic growth of the country, in the sense that the economic growth usually leads to better life and improved well-being of people living there. However, if our end is to improve the wellbeing of people, why not examine the results directly?

Survey measures of life satisfaction and happiness are now available for many countries, and they have become regarded as a genuine indicator of measuring human well-being by more and more people. Happiness measure provides valid and reliable information on how well people, as well as societies as a whole, are doing, both at the level of individuals and

that of countries. Also, in the field of development studies, happiness represents an end and thus a constitutive part of development, analogue to capability approach (Schimmel, 2009). For example, the 2030 Agenda for sustainable development embodies an implicit theory of human wellbeing, which will be fostered by a holistic agenda of economic, social, and environmental objectives, rather than a narrow agenda of economic growth alone (Sachs, 2016).

Prior studies on the association between governance and happiness showed that people are more satisfied with their lives in countries having better governance. In particular, they emphasized the importance of 'technical' quality or delivery quality of governance, which is the average of four WGI indicators: government effectiveness, regulatory quality, rule of law and the control of corruption (Bjørnskov *et al*. 2007; Helliwell and Huang, 2008; Ott, 2010; 2011). According to them, technical quality precedes democratic quality of governance because democracy is only a worthwhile institution after government reaches some level of development. Based on their findings, they contend that the improvement of the efficiency or effectiveness in governance will lead to a higher average level of happiness.

This study will explore the effect of good governance upon happiness, which might be a more fundamental and universal goal for the humankind, and an alternative vision of global development. The purposes of the study are as follows. First, this study attempts to investigate further the association between good governance and happiness with multi-level models. Previous studies estimate the effect of governance quality, mostly by comparing international difference in level of happiness and governance. This study differs with them in that it attempts to investigate the relations between the governance and happiness using multi-level analyses. It will explore the effects of individual determinants of happiness and contextual ones together, such as income, employment, marital status, age, GDP per capita and good governance indicators.

Second, this study will examine whether their findings are correct in relation between happiness and the effect of governance, particularly the effect of technical quality of governance. Previous studies contend that the technical quality of governance is of greater relative importance rather than democratic ones, finding that the relation between the technical quality of governance and happiness is universal in rich and poor countries. This study will analyze whether technical quality of governance is of importance regardless of whether they are in relatively high-income or low-income countries, by splitting the samples into richer countries and poorer countries.

This study is organized as follows. It will first present theories on happiness and its determinants, in general, and narrow down the subject to relations between happiness and good governance through literature review. It will proceed with controversial concepts of governance and 'good governance' in the real world of global development. Next, the study will verify whether the relation between the technical quality of governance and happiness is universal through multi-level analyses on happiness data from WVS, first on the whole sample, and subsequently on the split samples (low-income countries and high-income countries). Subsequently, the results from the empirical analysis will be discussed, together with their implications in conclusion.

Table 1. Individual Determinants of Happiness

Determinants of Happiness	Researches
Income/Financial situation	Clark and Oswald (1994), Ferrer-i-Carbonell, (2005).
Work/Employment	Martikainen (2009), Clark and Oswald (1994)
Family relations	Helliwell (2003), Frey (2008)
Age	Blanchflower and Oswald (2007)
Personal Values	Layard (2005), Frey and Stutzer (2002)

2. THEORETICAL BACKGROUNDS AND LITERATURE REVIEW

2.1. Happiness and Good Governance

Understandably, the concept of happiness is highly contentious. Happiness consists not just of hedonic feeling or subjective mood, but also of an individual's deep or robust affective state. Asking people questions related to happiness can measure both an affective appraisal and cognitively guided evaluation, by having them evaluate their own lives based on an overall feeling and judging their lives based on reflection. In this sense, happiness can be broadly defined as 'the overall appreciation of one's life-as-a-whole' (Veenhoven, 2010). Happiness data may carry information about the fit between human nature and different natural, cultural, and institutional environments. Happiness study might provide an alternative to GDP, representing genuine well-being of the people. Measured to derive a more comprehensive appreciation of people's lives, happiness surveys make possible for us to "value the non-income components of all sorts of phenomena" (Graham, 2011).

Happiness researchers so far have identified a number of covariates affecting happiness which explain observed patterns of happiness. Layard (2011) famously summarized the 'Big Seven' determinants that affect happiness: family relationships, financial situation, work, community and friends, health, freedom, and personal values. Most of them were construed as personal, demographic and individual factors of happiness. Major individual determinants that the happiness studies so far have found are summarized in Table 1.

Happiness is contextual in the sense that happiness is necessarily affected by economic, social, and political contexts in which individuals are immersed. Differences in average happiness among regions and countries indicate that situation or condition might affect people's appreciation of life at the collective level. These differences are contextual or situational – people simply function very differently in different situations. People are happier if they feel that other people in their community can be trusted. There is a significant relationship between social capital and happiness (Putnam, 2000; Helliwell and Putnam, 2005). Political freedom is also seen as a contextual determinant, which is primarily measured by the extent to which people feel that their governments are effective and provide them with a stable context of rights.

In order to understand what makes people happy and to ultimately enhance the level of happiness across different contexts, investigations beyond individual characteristics are needed. Improvement or deterioration of a situation or condition might lead to changes in people's appreciation of life at the collective level. Contextual determinants found to be

important so far can be summarized as follows; first, macroeconomic conditions, such as unemployment rate, inflation rate, growth rate; secondly, institutional conditions like political freedom, democracy, the rule of law; and finally, public bads, such as terrorism, civil war, and corruption (Frey and Stutzer, 2002).

People tend to believe that the impact of government on their happiness is relatively low as they are primarily confronted with individual differences in happiness within their own nations (Ott, 2011). However, government has been highlighted as a key determinant of happiness by the studies concerned with either quantity of quality of government. There have been many studies investigating relations between activities and policies of government and happiness. Bjørnskov *et al*. (2007) find that life satisfaction decreases as the proportions of government expenditure compared to GDP increase. In a similar vein, Veenhoven (2000) reported that the welfare state and happiness sustain their positive relationship only before controlling for the level of wealth. On the other hand, Pacek & Radcliff (2008) have found a positive correlation between welfare state and happiness, considering the level of decommodification, the extent of emancipation from market dependency. People are happier when they live in countries with more complete social welfare system. In addition, progressive taxation and lack of inequality improves wellbeing of people (Oishi, Graham, Kesebir, and Galinha, 2012; Wilkinson and Pickett, 2010).

Good governance or good quality of government may improve life evaluation either directly or indirectly. Good governance directly leads to a higher level of happiness as people living in a context of good government are happier. Good governance can be a source of happiness in itself. People care not only about just outcomes, but also the decision making process. By participating in the process, people feel that they are treated with care and respectfully. These direct effects are examples of 'procedural utility' (Frey 2008; Ott, 2010; Helliwell and Huang, 2018). Moreover, good governance indirectly improves well-being of people as good governance allows them to achieve higher levels of something else that is directly associated with their happiness. For example, control of corruption may increase efficiency and economic gains by creating better conditions for entrepreneurship and growth, but there will be additional positive effect on the happiness of people when there is a higher level of social trust.

Governance has been shown to affect happiness in some literature, and earlier researches show a rather clear connection between good governance and happiness in poorer countries. Yet, the results are mixed in richer countries (Samanni and Holmberg, 2010). Bjørnskov *et al*. (2007) show that quality of governance is significantly related to greater happiness, but only in poor countries with an average GDP per capita below 8,000 purchasing-power parity adjusted US dollars. On the other hand, Teorrell (2009) argues that the relations between the quality of government and happiness weakens or becomes no more valid after controlling for the social trust, economic growth and conflicts. Helliwell and Huang (2008) and Ott (2010) reported strong correlations between the quality of governance and average happiness of citizens, segregating indicators of governance into two parts.

Helliwell and Huang (2008) find that quality of government is stronger than any other national-level explanatory variable for happiness, using 160 observations from 75 countries in the World Values Surveys. They divided six measures of WGIs into two groups. The first group is concerned with the quality of the delivery of government services (GOVEDO), covering 'government effectiveness', 'regulatory quality', 'rule of law', and 'control of corruption'. The second group captures the state of democracy (GOVDEM), composed of 'voice and accountability' and 'political stability and absence of violence'. They find that

the former, the delivery quality of government services generally dominates the latter, the democratic quality in supporting better lives. However, as development proceeds, democratic quality has a positive influence among the high-income countries.

Ott (2010) finds that quality of governance is more important for happiness than the size of government. Using cross sections data covering 127 countries drawing from the World Database of Happiness (Veenhoven, 2010), he supports the conclusion of Helliwell and Huang (2008). Finding that technical quality (Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption) correlates with happiness in rich and poor nations while democratic quality (Voice and Accountability, Political Stability) only correlates with happiness in rich nations, he argues that the technical quality of government precedes democratic quality of government. Moreover, good governance does not only produce a higher level of happiness, but also lowers inequality of happiness among citizens (Ott, 2011).

Despite numerous researches, whether good governance is associated with happiness remains an empirical question under ambiguity without a clear answer. This empirical confusion comes from diverse reasons. First, it entails the potential of committing an ecological fallacy to infer single individual's happiness from aggregating cross-country indicators. Second, there seems to be no good theoretical or intuitive reason to assume that the same model applies to poor and rich countries with no regard to the contexts of those countries (Bjørnskov *et al*., 2007).

2.2. Concepts of Governance and 'Good Governance'

Although 'governance' is widely used, there is much less agreement about how the concept should be used and what it really means. While governance is clearly used to refer to something broader than government, the concept is often found to be applied in many different contexts, raising different debates in different academic fields. Rhodes (1996) identifies six different meaning of governance, the minimal state, corporate governance, the new public management, 'good governance', a socio-cybernetic system, and self-organizing networks. While mainly referring to governance as the one for reforming the public sector, he fails to provide a concise definition of governance.

In fact, governance could mean a variety of things, such as institutions, norms, implementation procedures, and decision-making processes. Fukuyama (2013) conceptualizes governance as government's ability or bureaucratic capabilities to make and enforce rules and to deliver services. Kooiman (1993) regards governance as network, a hybrid of hierarchy and market. Governance does not simply adhere to government, including a range of diverse public actors and private firms. For post-foundationalists, it becomes difficult to put bounds on governance, and thus, "Governance becomes everything" (Torfing, 2012).

Among these variant concepts of governance, this study concentrates on good governance. Incorporated and developed by international development aid agencies and organizations, such as United Nations Development Programme (UNDP) and Organisation for Economic Cooperation and Development (OECD), good governance has affected significantly how we think about development. UNDP broadly defines the word governance as "the exercise of political and administrative authority at all levels to manage a country's affairs. It comprises the mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences" (UNDP, 1997). Good governance denotes the use of political authority and exercise of control in a society in relation to the management of its recourses for social and

economic development (OECD, 1995).

The introduction of good governance on the global development agenda was originally made by the World Bank, in a report 'Sub-Saharan Africa: From Crisis to Sustainable Growth' in1989. In an attempt to explain why a number of countries failed to develop, even with the neo-liberal adjustment policies imposed on them by the international agencies, the World Bank came up with the notion of 'bad governance'. With its commanding position in the field of global development, the World Bank has recommended that developing countries put good governance at the forefront of their Poverty Reduction Strategy. Good governance in developing countries has been a prerequisite for receiving financial aid from donors, especially international development aid agencies and organizations. Thus, the Worldwide Governance Indicators (WGIs), concept of good governance outlined by the World Bank has overwhelmingly dominated over others.

Broad definition of good governance by the World Bank is 'rules, enforcement mechanisms, and organizations' (Kaufmann, Kraay, and Mastruzzi, 2011), and it can be narrowly defined as: "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."

WGIs have been measured in more than 200 countries since 1996. The WGIs are a research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen and expert survey respondents in industrial and developing countries (Helliwell & Huang, 2008). They have been compiling exclusively perceptions-based data since 2008. Because they combine many individual data sources into six aggregate governance indicators, WGI data are informative of the broader concept of governance. Each individual indicator provides some useful information, making them comparable (Kaufmann *et al*., 2007; 2008).

However, WGIs have come under severe criticisms from varied researchers. Controversies are raging over their biases, validity, comparability, etc. Kutz & Schrank (2007) argue that the measure entails systemic biases caused by perception biases and selection problems. Thomas (2010) seriously doubted the validity of the WGIs, i.e., what they really purport to measure. She asserts that as the WGIs fail to qualify the content validity, discriminant and content validity are also not achieved. Andrew (2008; 2010) argues that WGI indicators reflect the lack of definition, a mixture of various indicators. He also criticizes that the WGIs are ahistorical and context-neutral as they did not consider country-specific situations. Thus, indicators might end up promoting dangerous isomorphism, suggesting a one-best-way model.

Along with these problems, the WGIs were criticized as associated with the Neo-Liberal, or New Public Management (NPM) as much of the indexes is composed of concepts related to effectiveness or efficiency. Although the rise of good governance in international development is usually associated with progressing from the dominant neoliberal paradigm of the 1980 to the so-called 'post-Washington' consensus, good governance agenda did not go as far as to reverse the neoliberal state minimalism. Good governance is viewed as the political counterpart of economic neoliberalism, reflecting basic neoliberal distrust of the state (Chhotray and Stoker, 2008).

An attempt has been made to link normative-conceptual analyses with empirical research to obtain implications for how policies for good governance should be enacted (Rothstein &

Teorell, 2008). Their concept of the quality of government emphasizes "impartiality", both in "input" side related to access to public authority, and "output" side as the way political authority is exercised. Yet, their focus on "impartiality" may not carry with it the "capacity" of a government to perform (Rotberg, 2014). Furthermore, it would be very hard to reach a consensus measure of impartiality, a normative aspect of governance, without selection biases.

Although WGI's definition of governance is open to several important criticisms, WGI's definition of governance is broad enough to include both qualitative characteristics relating to processes of rulemaking and capacity of government to perform and carry out the policies. In addition, it is not probable to create an entirely new concept substituting for the good governance in the current situation that the good governance is "too strong and overwhelmingly dominant" (Grindle, 2004). No reliable alternative data on quality of government are available, covering as many countries and time series as WGI does (Arndt, 2008). It would be better to shed light on varied aspects of the governance including efficiency, effectiveness and democracy by analyzing the relations of WGIs with more broad and holistic purpose of human wellbeing and genuine development, rather than a narrow goal of economic growth alone.

3. DATA AND RESEARCH DESIGN

3.1. Data Collection and Variables

Most of the studies upon happiness use the term 'happiness' interchangeably with the 'subjective well-being', or 'life satisfaction' (Easterlin, 2001: 465). There are numerous methods of asking about respondent's happiness, life satisfaction, subjective well-being, etc.[1] The study has taken happiness data from the World Values Survey, based on 46 countries with a heavy representation from OECD industrial countries. The question utilized was the life satisfaction question, asking "All things considered, how satisfied are you with your life as a whole these days?", which respondents answer on a ten-point scale.

WVS collects data regarding various dimensions of attitudes, covering countries with widely divergent histories, cultures, and political conditions. This study used observation that overlap with the World Governance Index, which covers from 1996 to 2014, drawing 238,292 samples of 97 countries from 'World Values Survey 1981-2014 Longitudinal Aggregate data'. The country list of WVS sample coverage is outlined in Appendix 1. Individual predictors and demographic variables such as income, employment, marital status, and age were also available from the World Value Survey database.

Governance data is drawn from the World Bank. Each of Six sub-indicators of governance is scaled to have roughly a mean of zero and a standard deviation of 1.0, ranging from approximately −2.5 (weak) to 2.5 (strong). In places where there is a need to further reduce

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[1] Commonly used are summarized as three: First, "Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible. If the top step is 10 and the bottom step is 0, on which step of the ladder do you feel you personally stand at the present time?"; second, "All things considered, how satisfied are you with your life as a whole these days?"; third, "Overall, how satisfied are you with your life nowadays?" (OECD, 2013).

Table 2. Six Components of WGI

(a) The process by which governments are selected, monitored, and replaced	Voice and Accountability (VA):	Capturing 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.
	Political Stability and Absence of Violence/ Terrorism(PV):	Capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism.
(b) The capacity of the government to effectively formulate and implement sound policies	Government Effectiveness (GE):	Capturing 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
	Regulatory Quality (RQ):	Capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development
(c) The respect of citizens and the state for the institutions that govern economic and social interactions among them	Rule of Law (RL):	Capturing 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
	Control of Corruption (CC):	Capturing 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.

Source: Kaufmann *et al.*, 2008

the number of dimensions, I use the simple average of them following Helliwell and Huang (2008) and Ott (2011). As an indicator of technical quality of governance, simple average of the four measures, i.e., Government Effectiveness(GE), Regulatory Quality(RQ), Rule of Law(RL) and Control of Corruption(CC) was utilized. Specific definitions of those are as follows (Table 2).

This study divides the countries in the WVS into two groups according to their GDP per capita. Previous literature on happiness and the relationship between governance and happiness does not provide consistent criteria on categorizing the rich and the poor countries. Bjørnskov *et al.* (2007) use the GDP per capital above 8,000 USD as measure to divide countries. Helliwell and Huang (2008) classify 85 among their sample of 161 countries as poor countries, with GDP per capital that is less than a half of the US level. Berry & Okulicz-Kozaryn (2009) split the sample of 68,361 into low-income countries (40,577 samples) with less than 10,000 US dollars, and high-income countries (27,784 samples) with GDP per capital exceeding the level. Following them, this study split samples by GDP per capita of USD 10,000 in the year of 2005. As the study selected the WVS data for the period 1996-2014, the surveys center on the year 2005. I utilize national-level data such as GDP per capita from World Bank and WGIs of the year, as was suggested by Berry and Kozaryn (2009).

3.2. Research Design

A considerable number of studies exploring the association between individual-level characteristics and contextual effects typically include a dummy variable for country, or have relied on data aggregated beyond the unit of analysis, which are often prone to criticisms associated with the ecological fallacy as mentioned above. Although happiness is usually construed to be a very personal trait of individuals, it would be naive to think that happiness is only a matter that purely and exclusively belongs to an individual, not affected by his or her surroundings.

It is claimed that relevant hypotheses on well-being or happiness can be tested only by simultaneously examining variables at the individual and aggregate level (Helliwell and Putnam, 2004). In this sense, the study will explore the association between good governance and happiness with multi-level models. Multilevel models allow the happiness researcher to divide up how much of the variation in reported happiness we observe is between individuals in a country and how much is between countries (Ono and Lee, 2010).

The underlying principle of multilevel modelling is that intercepts of common linear ordinary least square (OLS)-regression analysis are allowed to vary. Multi-level models fit to analyze the inherently hierarchical structure or nested structure of happiness data, taking into account of the possibility that the happiness levels of individual may not be independent of one another. In addition, multi-level analysis can estimate the magnitude of variances at different levels and how these variances relate to explanatory variables. With multi-level analysis, the dependent variable is tested to estimate the simultaneous contribution of individual and contextual determinants.

Hox (2017) recommends developing multilevel models in progressive steps, starting from simpler models toward a more complex model.

(1) null model
$$y_{ij} = \beta_{0j} + e_{ij,}$$
where $\beta_{0j} = \beta_0 + \mu_{0j}$ (μ_{0j} stands for the residuals at the context level)
$$y_{ij} = \beta_0 + \mu_{0j} + e_{ij}$$

(2) random intercepts, level 1 explanatory variables added
$$y_{ij} = \beta_0 + \beta_1 x_{1ij} + \mu_{0j} + e_{ij}$$

(3) random intercepts, level 2 explanatory variables added
$$y_{ij} = \beta_0 + \beta_1 x_{1ij} + \beta_2 z_{2j} + \mu_{0j} + e_{ij}$$ (z denotes level 2 explanatory variables with only suffix j)
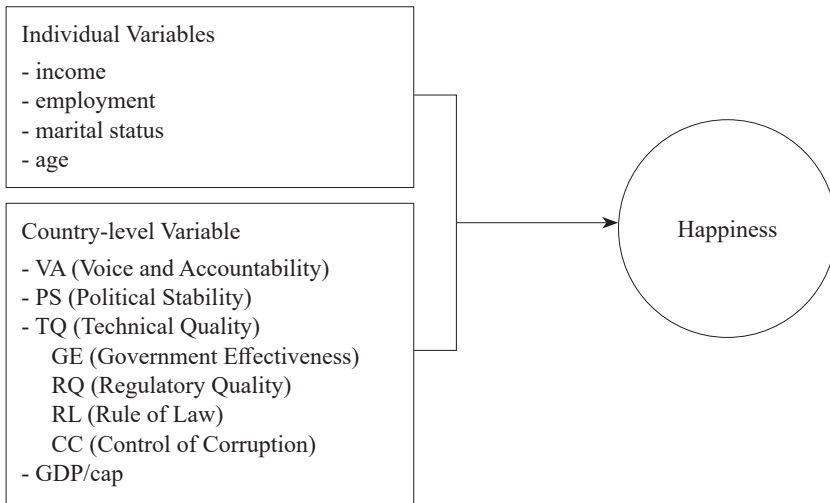
Additionally, multilevel models allow the modelling of cross-level interaction, measuring the influence of contextual factors on the strength of connection between response and predictor variables.

(4) random coefficients
$$y_{ij} = \beta_0 + \beta_{1j} x_{1ij} + \beta_2 z_{2j} + \mu_{0j} + e_{ij,}$$
where $\beta_{1j} = \beta_1 + \mu_{1j}$
$$y_{ij} = \beta_0 + \beta_1 x_{1ij} + \mu_{0j} + \mu_{1j} + e_{ij}$$

Figure 1. Framework of Analysis

In this study, happiness as a dependent variable was modeled as a function of individual variables such as demographic features of respondents in level 1, and contextual variables such as components of good governance and GDP as the controlling variable in level 2. The dependent variable, level of happiness of individuals, will be tested to estimate the contribution of individual variables at level 1 and contextual variables at level 2 to happiness outcomes. Professional multi-level software MLwiN (version 2.22) was used for the analysis, and STATA (version 14.1), a general-purpose package was utilized to confirm the results. The study first analyzed individual-level demographic characteristics. Subsequently other variables were entered and analyzed, together with variables previously put into the model. MLwiN can evaluate how the variability of the model changes after including predictors at the contextual level, by calculating the deviances (-2log likelihood ratio) between them.

When it comes to predictor variables, there are arguably differences among the diverse aspects of governance. Previous literature has a tendency to divide them into two parts, claiming that there are conceptual differences between these two constituting components (Helliwell and Huang, 2008; Ott, 2011). First is to do with the political situation, i.e., 'Voice and Accountability' and 'Political Stability'. Second, the remaining four (GE, RQ, RL, CC) is to do with institutional quality and effectiveness. Helliwell and Huang (2008) call the first two governance components 'GovDem' and the remaining four 'GovDo', while Ott (2010) denominate VA and PS 'democratic quality of governance' and the others 'technical quality of governance'. In addition, previous literature reports that correlations between the first two and the remaining four are somewhat lower, and the correlation within the letter four components are very high.

Aware of this difference between them, this study further attempts to regard the first two, VA and PS not as a group but each as a distinctly separate component of governance, as the correlation between them is found to be relatively lower than that with other remaining four. The correlation among the six WGIs are presented in Appendix 2. Conceptually, VA is asserted not to be included in governance index, as it essentially aims to represent the regime type as a measure of democracy rather than governance (Baird, 2012). In addition, Political stability, a political-science concept in its own right, is analytically distinct from political

democracy (Bollen and Jackman, 1989). According to them, democracy and stability should be separated theoretically and empirically from governance. Thus, this study will classify the six components of governance into three parts: VA, PS, and the four of technical quality of governance.

Random intercept and slope models will be built to estimate the relationships. Model 0 yields a decomposition of the total variance into within and between contextual components. In this first stage, I will judge whether to start multi-level analyses by the statistical significance of variances with variances and ICC (Intra-class correlation). In model 1, the individual determinants from the survey data will be entered and analyzed with no level 2 variable (random intercepts model). In model 2, varied components of governance as contextual determinants as well as GDP per capita as a country level variable are introduced (random intercepts model with level 2 explanatory variables added). Finally, the coefficients of the explanatory variable are allowed to vary in model 3 (random coefficients for income model).

In addition, this study attempts at identifying differential effects of good governance in high-income and low-income countries, whether the technical quality of governance lead to a higher level of happiness universally in rich and poor countries. Thus, the study will investigate the moderator effects of degree of development by splitting sample groups. In these models, multi-level analysis was carried out first on the whole sample, controlled for other individual predictors, and subsequently on the split samples (high-income countries and low-income countries).

All country level variables were centered. Centering makes interpretation of the intercept them in the model easier, as it is the predicted value for a subject that has average values for each explanatory variable. Centered predictor variables can also reduce the changes of multicollinearity when cross-level interactions are included (Rasbash et. al, 2009).

4. ANALYSIS AND RESULTS

First, the samples were examined for whether they were fit for multi-level analysis, that is, whether their between-group variances and the null model were statistically significant. Subsequently, analysis began with the null model of the whole sample, with neither level 1 nor level 2 predictors. The ratio of between-groups to total variance, i.e., ICC (intra-class correlation), was calculated as 16.4 percent, with random effects of 1.179 (standard error of 0.170), and total variance of 6.103 (standard error of 0.016), both of which are statistically significant (table 3).

Subsequently, same analyses were conducted separately for the other two sub divided

Table 3. Variance and Components of Happiness

	Whole Samples estimates (SE)	High-income Countries Samples estimates (SE)	Low-income Countries Samples estimates (SE)
Total variance	6.103(0.016)	5.595(0.027)	6.323(0.020)
Variance between countries	1.179(0.170)	0.750(0.198)	1.114(0.192)
Intra-class correlation	16.4%	11.9%	14.9%
Number of samples	238,292	72,393	165,899

samples, i.e., high-income countries group and low-income countries, to find out whether they were fit for multi-level analysis. As shown in table 3, both samples of high-income countries and low-income countries had statistically significant between-group variances in happiness. The high-income countries group produced an ICC of 11.9 percent, and the low-income countries group an ICC of 14.9 percent, indicating that the between-group effect of the low-income countries respondents in proportion to total variances is a little larger than that of the high-income countries respondents.

First, in model 1, representing all the respondents from high-income and low-income countries, major predictors of happiness included family income, employment status, marital status, and age. As shown in table 4, the results appear to be almost as expected, as outlined in the previous literature. Overall, younger people with higher income, especially if employed and married were found to be happier. Including level 2 explanatory variables in the model has reduced the level 2 variance from 1.179 to 1.172. As the level 2 variance is still significant, level 2 explanatory variable were inserted into the model.

In model 2, components of governance as well as GDP per capita are introduced as a country level contextual determinant. It can be seen that including level 2 explanatory variables in this model has reduced the level 2 variance μ_{0j} substantially, from 1.172 to .878. The reduction indicates that much of the difference between countries is attributable to the level 2 variables, especially GDP per capita. As the level 2 variance is still significant, random coefficient model was considered in model 3.

In model 3, a negative covariance between intercepts and slopes is estimated, indicating that countries that have higher intercepts of income tend to have less steep slopes of income. It suggests the decreasing marginal benefit of income. In other words, an individual who are living in countries with higher average income will experience less additional increase of happiness as his or her income increases than an individual who are living in countries with lower average income when his or her income increases.

GDP per capita is found to be associated with the level of happiness with statistical significance from the model 2 through model 3, with other components of governance controlled for. Thus, an individual living in a county with higher GDP per capita is happier than another in a country with lower GDP per capita with exactly the same individual conditions such as income, employment, marital status, and age. The GDP per capita was put into model as logarithm values. As all the level 2 variables were centered, the coefficient of level 2 independent variable measures the difference from the mean. A one percent increase in GDP per capita is associated with around a 0.3 increase in happiness level in model 3. However, no aspect of governance is shown to be statistically correlated with the individual's happiness in model 2 and model 3.

Overall, the changes in deviance (-2loglikelihood ration) between the model 1 and model 3 were statistically significant, tested with chi-squared distribution, and thus confirm the better fit of the more elaborate model from model 1 toward model 3. However, Level 2 Variance (μ_{0j}) and ICC increased from model 2 to model 3, indicating that the variance between countries which model can explain decreased by allowing the modelling of cross-level interaction.

Next, on the findings on samples of high-income countries presented in table 5, model 1 shows the effect of including individual-level predictors such as family income, employment status, marital status, and age. Like the whole sample, income, employment, age, and marital status are correlated with statistical significance. However, age is positively correlated with the level of happiness. It can be interpreted as a result of better welfare systems of richer

Table 4. Findings on the Whole Group

	Model 1 (random intercepts)	Model 2 (random intercepts, country variables)	Model 3 (random coefficients for income)
Individual-level Variables			
Income	0.150**	0.150**	0.174**
Employment	0.013**	0.013**	0.015**
Marital status	0.076**	0.076**	0.078**
Age	-0.065**	-0.065**	-0.061**
Country-level Variables			
GDP per capita		0.352**	0.296**
VA (Voice and Accountability)		-0.038	-0.074
PS (Political Stability)		-0.139	-0.134
TQ (Technical Quality)		0.138	0.130
N	238,292	238,292	238,292
Level 1 Variance (e_{ij})	5.916(.016)	5.916(.016)	5.828(.016)
Level 2 Variance (μ_{0j})	1.172(.169)	.878(.127)	1.338(.194)
ICC	16.5 %	12.9%	19.2%
-2Loglikelihood	1,268,617	1,268,589	1,264,808

†$p < 0.10$, * $p < 0.05$, ** $p < 0.01$

countries. Thus, older people with higher income, if employed and married were found to be happier.

In model 2, level 2 variables such as GDP per capita and components of governance are introduced. The inclusion of level 2 explanatory variables has reduced the level 2 variance μ_{0j}, from 0.728 to 0.615, indicating that much of the difference between countries is attributable to the level 2 variables. Yet, no aspect of governance shows correlation with happiness with statistical significance of 5%. As the level 2 variance is still significant, random coefficient model was considered in model 3.

In model 3, random coefficient model is introduced by allowing the modelling of cross-level interaction. A negative covariance between intercepts and slopes was found like the model of whole samples, but it was not statistically significant. GDP per capita is not found to be associated with the level of happiness with statistical significance from the model 2 through model 3.

Unlike in the whole sample model, technical quality of governance is statistically significantly correlated with individual's happiness in the final model, with other components of governance and GDP per capita controlled for. Thus, an individual living in a county with higher level of technical quality of governance is happier than another in a country with lower level of governance, even they are exactly same in the individual aspects of happiness such as income, employment, marital status, and age. As all the level 2 variable centered, the coefficient of level 2 independent variable measures the difference from the mean. A one unit of increase in Technical quality of governance is associated with around a 0.7 increase in happiness level in model 3. However, VA and PS does not show correlation with happiness in

Table 5. Findings on the High-income Countries

	Model 1 (random intercepts)	Model 2 (random intercepts, country variables)	Model 3 (random coefficients for income)
Individual-level Variables			
Income	0.106^{**}	0.106^{**}	0.106^{**}
Employment	0.114^{**}	0.114^{**}	0.113^{**}
Marital status	0.200^{**}	0.200^{**}	0.212^{**}
Age	0.015^{**}	0.015^{**}	0.013^{**}
Country-level Variables			
GDP per capita		0.126	0.160
VA (Voice and Accountability)		0.032	0.030
PS (Political Stability)		-0.020	-0.119
TQ (Technical Quality)		$0.608^{\dagger}$	0.749^{*}
N	72,393	72,393	72,393
Level 1 Variance (e_{ij})	5.470(.027)	5.470(.027)	5.407(.027)
Level 2 Variance (μ_{0j})	0.728(.192)	0.615(.162)	0540(.144)
ICC	11.7 %	10.1%	9%
-2Loglikelihood	377,594	377,589	376,719

†p < 0.10, * p < 0.05, ** p < 0.01

rich nations.

Overall, the changes in deviance (-2loglikelihood ration) between the model 1 and model 3 were statistically significant, tested with chi-squared distribution, and thus confirm the better fit of the more elaborate model from model 1 toward model 3. In addition, level 2 Variance (μ_{0j}) and ICC has been constantly decreased from model 1 to model 3, indicating that the models successfully explain the variance between countries with each progressive step. which model can explain decreased

Third, findings on the samples of low-income countries is provided in table 6. Consistent with the most previous literature, model 1 shows that younger people with higher income, especially if employed and married were found to be happier, similar to the whole sample model.

A negative covariance between intercepts and slopes is estimated in model 3, indicating that countries that have higher intercepts of income tend to have less steep slopes of income. This suggests that people living in countries with higher income levels benefit relatively less from extra increase of income than countries at lower income levels, highlighting the decreasing marginal benefit of income.

Introduction of level 2 explanatory variables in this model has reduced the level 2 variance μ_{0j} from 1.093 to 1.077, indicating that very small parts of the difference between countries is attributable to the level 2 variables. GDP per capita does not have the statistically significant association with the individual's happiness level in model 2. Moreover, unlike the previous studies (Ott, 2011; Helliwell & Huang, 2008), no component of governance shows correlation with happiness with statistical significance of 5%, nor 10% level. The result was

Table 6. Findings on the Low-income Countries

	Model 1 (random intercepts)	Model 2 (random intercepts, country variables)	Model 3 (random coefficients for income)
Individual-level Variables			
Income	0.172**	0.172**	0.203**
Employment	0.062*	0.062**	0.070**
Marital status	0.048**	0.048**	0.042**
Age	-0.094**	-0.094**	-0.087**
Country-level Variables			
GDP per capita		-0.035	0.038
VA (Voice and Accountability)		0.084	0.019
PS (Political Stability)		-0.062	-0.119
TQ (Technical Quality)		0.178	0.129
N	165,899	165,899	165,899
Level 1 Variance (e_{ij})	6.085(.020)	6.085(.020)	5.997(.019)
Level 2 Variance (μ_{0j})	1.093(.188)	1.077(.185)	1.733(.299)
ICC	15.2 %	15.0%	22.4%
-2Loglikelihood	899,881	889,880	887,299

†$p < 0.10$, * $p < 0.05$, ** $p < 0.01$

not changed after random coefficient model was considered in model 3.

5. CONCLUSION

To summarize, analyses on the whole countries, high-income countries, and low-income countries produced the following results. First, analyses on the whole samples show that only GDP per capita among country level predictors affects individual's happiness. Secondly, on the high-income countries, technical quality of governance has a positive association with happiness. Finally, analyses on the low-income countries sample reveal that neither GDP per capita nor any aspect of governance does affect the level of happiness.

Additionally, the study finds that age is positively correlated with happiness in richer countries, while it is negatively correlated in poorer countries. The result might come from differences of quality of welfare system between them. The study also located decreasing marginal benefit of income on happiness among the poor countries sample, indicating that people living in countries with rather higher income levels benefit relatively less from additional increase of income than countries at lower income levels.

Studies on the relations between governance and happiness so far emphasize the importance of technical quality or delivery quality of governance. Ott (2011) contends that the relation between technical quality of governance and happiness is universal as the correlation between technical quality and happiness does not depend on wealth, while the correlation between democratic quality ('Voice and Accountability' and 'Political

Stability') and happiness is limited to relatively rich nations. Thus, technical quality precedes democratic quality of governance. Helliwell & Huang (2008) also report that the delivery quality of government services generally dominates the democratic quality.

In this study, governance also has proven to affect happiness in the richer countries, which appears to support the previous literature. Technical quality, composed of Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption, represents mostly efficiency and effectiveness of governance. Other aspect of governance except Technical quality does not show association with happiness. Thus, for those people living in advanced countries, governance, especially governance as efficiency might be beneficial to their happiness.

However, when people in both rich and poor countries were taken into consideration, no component of governance has an effect on happiness, except for GDP per capita. Moreover, this study finds no association of governance with happiness of people living in poor countries. No component of governance, i.e., 'Voice and Accountability', 'Political Stability', and 'Technical quality', let alone GDP per capita was beneficial for happiness in low-income countries. Therefore, this study presents different results from prior researches. Contrary to the previous literature, which emphasizes that technical quality correlates with happiness both in rich and poor nations, the effect of technical quality of governance is limited only to relatively rich nations in this study.

Previous studies on the relations between governance and happiness contribute to expanding the debates on global development by indicating that there might be varied channels and possibilities of improvement beyond those captured by GDP per capita. I agree that there are alternative paths of development rather than the only way through economic growth. Changes of the governance or quality of government may lead to an improvement, especially in terms of human well-being. However, the effect should not be exaggerated. As a whole, changes to a better governance have much less effect than those in GDP per capita.

Moreover, prior studies emphasize mostly on the importance of technical quality of governance, i.e., the effectiveness of governance. However, the effect of changes in technical quality of governance is limited only to richer nations in this study. In other words, the improvement of the governance, particularly efficiency-driven technical quality of governance will not ineluctably lead to a higher level of happiness. Better governance in terms of technical quality does not raise the level of happiness, especially for those people living in poorer countries.

Maybe we don't have much information about the genuine factors of the human well-being in varied country contexts. Admittedly, happiness is a universally desired goal for people, whether living in poorer countries or richer countries. However, happiness still remains rather a complex and controversial issues than most others. To achieve the goal of happiness through implementing some innovations related to institutions and governance, we need to know more about happiness and its relations with them. This study suggests that finding determinants of happiness in poorer countries is a really challenging task. "Better governance, particularly in terms of efficiency and effectiveness, improves happiness" might be a too simple solution for low-income countries, considering the variant contexts of their cultures and governances.

In another perspective, good governance itself entails normative debates, making it a problematic issue. Putting aside the controversy over its values, my opinion is that we should attempt to analyze the effect of good governance in varied contexts toward varied outcomes. Indexes such as WGIs representing good governance are, most of the times regarded as

not ends in themselves, but as instruments to implement something more important, such as economic growth. Through analyzing the effect of good governance upon alternative outcomes, such as human well-being and happiness rather than economic growth alone, we can approach the disputed issue of good governance in a more desirable way.

This study contributes to the literature on governance in that it attempts to analyze empirically the effect of good governance upon happiness, unlike most of other studies which focus on the relations between the good governance and economic growth. In addition, considering the inherently hierarchical structure of happiness data, the study utilized multi-level models to simultaneously examine variables at the individual and aggregate level, controlling for major individual level and contextual level variables. Unlike the previous studies, this study finds that better governance in terms of technical quality does not raise the level of happiness, especially for those people living in poorer countries.

This study has its limitations. Due to the intrinsic limitations of research design and statistical modeling—for example, the limited number of degrees of freedom—the study cannot include all the variables presumably associated with happiness: education, family members as individual level variables, population density, ethnicity, other social factors, and formal institutions that cannot be measured with governance index. Future studies on the relationship between happiness and contextual determinants could benefit from using different variables than those considered in this article.

APPENDIX

Appendix 1: Country List

High-income Countries (29)	Low-income Countries (68)
Australia, Canada, Taiwan, Cyprus, Finland, France, Germany, Hong Kong, Hungary, Israel, Italy, Japan, South Korea, Kuwait, Netherlands, New Zealand, Norway, Norway, Puerto Rico, Qatar, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Great Britain, United States	Albania, Algeria, Angola, Azerbaijan, Argentina, Bangladesh, Armenia, Bosnia, Brazil, Bulgaria, Belarus, Chile China, Colombia, Croatia, Dominican rep, Ecuador, El Salvador, Ethiopia, Estonia, France, Ghana, Guatemala, India, Indonesia, Iran, Iraq, Kazakhstan, Jordan, Kyrgyzstan, Lebanon, Latvia, Libya, Lithuania, Malaysia, Mali, Mexico, Moldova, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russia, Rwanda, Senegal, Vietnam, Zimbabwe, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, Macedonia, Egypt, Tanzania, Burkina Faso, Uruguay, Uzbekistan, Venezuela, Yemen, Servia and Montenegro, Zambia, Serbia, Montenegro, Bosnia

Appendix 2: Correlation between WGIs

	VA	PS	GE	RQ	RL	CC
VA	1	.728**	.853**	.884**	.856**	.840**
PS	.728**	1	.794**	.756**	.856**	.815**
GE	.853**	.794**	1	.943**	.969**	.968**
RQ	.884**	.756**	.943**	1	.922**	.913**
RL	.856**	.833**	.969**	.922**	1	.967**
CC	.840**	.815**	.968**	.913**	.967**	1

** $p < 0.01$

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