# **Exploring Disparities in Happiness Index Rankings: A Comparative Study between Selected Countries**

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Abstract - This study aims to investigate the impact of economic and certain social and governance factors on the happiness index, with a focus on estimating their relative contribution to disparities among groups of countries classified according to income levels (high, upper-middle, lowermiddle, and low). This study employs a multiple regression technique to analyse data collected from the World Bank database and the World Happiness Report spanning the years 2010 to 2019 to compare the four groups of countries categorized by the World Bank according to their income levels of each income group. The findings of this study show that healthcare expenditure and government effectiveness increase people's happiness in all four groups of countries. Furthermore, the findings suggest that fiscal contribution matters for people's happiness only in high income and upper middle-income countries. Additionally, infrastructure, government effectiveness, political stability and absence of violence and terrorism, rule of law and voice and accountability matter for the happiness of people in lower-middle income countries. All variables, except fiscal contribution, have a significant impact on the happiness of people in low-income countries. This paper is the first that analyses how economic and certain social and governance factors relatively impact happiness of peoples in selected four groups of countries that classified according to their all four income levels.

**Keywords:** Comparative study and Happiness.

## I. INTRODUCTION

Happiness is something that everyone feels in a different way. Despite the progress that has been made in promoting happiness in countries, some countries, including Sri Lanka, still face challenges in ensuring that their citizens are happy and contented. This will provide a thorough picture of how people perceive previous economic facts (such as inflation and tariffs) and use that interpretation to create their belief system about what will happen in the future (Arshed et al., 2021). The primary tool of economic policy for affecting wellbeing, financial stability and, consequently, happiness is taxation (Delgado-Rodríguez & De Lucas-Santos, 2022).

## A. Happiness Index

In the 2012-year, a group of independent academic happiness specialists created the Happiness Index. This index has a range of 0 to 200. The inquiry has been posed to over a million individuals globally, and the responses have been utilized to formulate the annual Happiness Index. In 2018, 157 countries included Happiness Index data. The World Happiness Report has identified seven primary factors that exhibit the strongest correlation with the Happiness Index. There are GPD per capita income, social support, Healthy life expectancy, Freedom makes life choice, Generosity, Perceptions of corruption, Unexplained happiness.

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The composite score for each country is derived by amalgamating diverse factors, which are subsequently utilized to rank countries based on their overall happiness levels, thereby determining the Happiness Index. The primary objective of this report is to offer valuable insights into the factors that contribute to well-being, and to urge policymakers to accord priority to policies and initiatives that foster happiness and life satisfaction among their citizens.

In the fields of social sciences and policymaking, interest in happiness as a fundamental human ambition has grown. Happiness indices, which measure overall health and well-being, are crucial tools for figuring out what makes people happy in various nations. In comparison to several other countries, Sri Lanka, a country in South Asia, has regularly scored lower on numerous happiness indices. It investigates the possible causes of the disparity in happiness levels between Sri Lankans and residents of other countries, as shown by happiness indices. Given the significance of happiness for country economic growth and stability, many academics and politicians have worked to understand the elements that affect happiness (Fereidouni et al., 2013).

Numerous factors, including economic, social, and legal factors, have an impact on the pursuit of happiness. Happiness is frequently related to economic factors including Income, employment, and standard of living. It's complicated how happiness and wealth relate to one another. When compared to people with lower income, people with higher incomes are frequently happier. Easterlin1. Social components that influence well-being include social support, social connections, and the importance of relationships. Wellbeing and happiness are intimately tied to each other. The wellbeing of a person's mental and physical health, emotions, and social life are intricately linked (Trabelsi, 2022).

# B. Happiness Differences

In happiness indices, certain countries continuously rate highly, most notably the Nordic nations (Finland, Denmark, Norway, Sweden, and Iceland), while Sri Lanka has historically received lower rankings. The HDI is a worldwide comparative indicator of standards of living, literacy rates, and life expectancy. It displays a country's level of development and evaluates how economic decisions affect people's happiness (Tiwari & Mutascu, 2015).

This research aims to address this issue by examining the reasons what factors impact people in selected countries in happiness index. The study will offer a thorough examination of the economic, social, and legal factors that contribute to happiness in select countries, and how these factors compare to those countries. By examining these elements, this study seeks to bring insight into ways to increase select countries' levels of happiness and contribute to the creation of interventions and evidence-based policies that support happiness and well-being. What connection exists between a person's overall life satisfaction and how satisfied they are with public services? What other elements those public policies can affect are crucial for subjective well-being?

For policymakers and practitioners looking to increase wellbeing and happiness in select countries and comparable contexts, understanding the causes of the differences in happiness levels between select countries and some countries can have important implications. This research can offer insights into potential procedures and policies that can improve happiness in select countries by identifying the important variables that affect happiness. By providing insight into the complex relationships between many factors, the research findings may help to shape future works of happy literature.

The research problem of the research is to identify why some countries exhibit higher happiness index scores. As the factors we will consider economic, social, and legal factors that influencing happiness of people in certain countries that are in happiness index and which depends on four income levels, this study's main objective is to identify what are the economic, social, and legal factors that are impact on the happiness of people in different countries and why people in some countries exhibit higher happiness index scores.

Therefore, this study aims to investigate the multifaceted relationship between various economic and institutional factors and people's happiness taking the happiness index as the proxy. We are examining the impact of infrastructure such as electricity, transportation, and water system, the influence of health expenditures, the role of fiscal policies, the government spending and taxation policies etc. on happiness index in the four groups of countries.

The major economic factor we considered is the per capita income in exploring how variations in income levels influence people's overall life satisfaction. Then, we also investigate the influence of governance and institutional factors aiming to understand how effective governance structures and institutional quality impact the well-being of nations. Through a comprehensive analysis of these dimensions, this research seeks to contribute to a deeper understanding of the factors influencing happiness comparing the four groups of countries.

## II. PROBLEM STATEMENT

The research problem of the research is to explore what makes people happy in Sri Lanka and other countries, as well as why certain countries' people score higher on the happiness scale than Sri Lankans. As the factors we consider economic, social, and legal factors that influencing happiness of people in certain countries that are in happiness index and which depends on four income levels, this study's main objective is to identify what are the economic, social, and legal factors that are impact on the happiness of people in different countries and why people in other countries happier than Sri Lankans.

The research questions would be:

- 1. How does infrastructure (Electricity, Transportation, water) impact on happiness?
- 2. How does health expenditures influence happiness?
- 3. How does a fiscal policy contribute to happiness?
- 4. How to governance/institutional factors impact on the countries' happiness?

Resource allocation decisions can be informed by the findings, according to officials. Policymakers may allocate more resources to enhancing a particular variable if it is discovered that it significantly affects happiness levels (for example, health expenditure), which will raise the population's level of happiness. The study reveals that Finnish people are happier than French people due to greater freedom and less restrictions in Finnish society, despite having identical GDP per capita (Brulé & Veenhoven, 2014).

The study can compare Sri Lanka's happiness levels with those of other nations, which can assist identify areas where Sri Lanka must make improvements to catch up with other countries. The study examines the relationship between subjective well-being and life satisfaction in ten democratic societies, focusing on South Africa from 2010-2014. Findings show that countries with high democracy values tend to have higher life satisfaction rates (Loubser & Steenekamp, 2017). The study uses data from the World

Bank, Eurostat, and World Happiness Report to examine happiness index ratings in EU-27 countries from 2012 to 2019. Results show a positive correlation between happiness index, GDP per capita, and CT (Akgun et al., 2023).

This research study encompasses both primary and secondary objectives. However, our primary focus lies on identifying the factors influencing happiness levels in countries other than Sri Lanka in the Happiness Index. Additionally, the secondary objectives, include:

- 1. To identify fiscal contribution (VAT, GST) impact on happiness.
- 2. To identify infrastructure impact on happiness.
- 3. To identify health expenditure impact on happiness.
- 4. To identify governance factors, impact on happiness.

#### III. LITERATURE REVIEW

# A. Introduction to Happiness

Happiness increased between 1981 and 2007, according to representations from relevant national surveys, which were conducted at the time. By using secondary data for the period of 1981-2007 of Germany and using Regression analyses. Conclude the result as recent data cross-sectional research shows that high levels of SWB are in fact sustainably correlated with economic variables are only one aspect of the story (Inglehart et al., 2008). For instance, whereas France and Finland both have identical GDP per capita, Fins are happier than French people. In this paper, they explore whether differences can be explained by freedom. By using primary data for the Netherlands with qualitative analysis concluded the results as the reason Finnish people are happier than French people is that they feel and act with more freedom is a result of both greater courage to be free as well as less restrictions in Finish society (Brulé & Veenhoven, 2014). Economic considerations influence subjective well-being, but new cross-sectional research shows that durable associations with high levels of SWB are complex, with elements like freedom also playing a substantial effect in overall happy levels. Aims to explore the variables influencing Sri Lankan's happiness. Specifically, the goal is to determine what influences Sri Lankan's happiness the most by using primary data for the qualitative analysis of Sri Lanka by using a convenient sampling methodology and conclude the result as like earlier studies in happiness markers in Eastern societies (Gunawardena, 2015). According to other studies on happiness indicators in Eastern countries, the goal of this study is to pinpoint the essential elements that have a major impact on Sri Lankans' level of happiness.

To investigate the likelihood of a society's commitment to democracy using happiness as one potential indicator through secondary data for the period of 2010–2014 in South Africa. To examine, across ten nations, the relationship between subjective well-being (happiness and life satisfaction) and the value of living in a democratic society. With using quantitative analysis, correlation analysis and conclude the result of the importance of living in a democracy correlates with life satisfaction, and countries that place a high value on democracy tent to have high life satisfaction rate (Loubser & Steenekamp, 2017). This study investigates the variables using data from the World Bank, Eurostat, and World Happiness Report. Using secondary data from the EU-27 countries between the years of 2012 and 2019, Turkey was used to examine how happiness index ratings in European countries changed over the course of eight time points. The results are concluded as HIR has a favourable link with macro results when employed in panel ordinary least squares and quantile regression models. Positive correlations exist between

the happiness index and GDP per capita. A positive correlation exists between the CT and the happiness index (Akgun et al., 2023). These studies apply thorough analyses of many socioeconomic elements, highlighting the considerable association between democratic commitment, subjective well-being, and macro-level indicators, illustrating the complex dynamics influencing both.

#### B. Fiscal Contribution

The empirical findings from the literature on happiness are then examined to see if they provide the necessary data to parameterize the models and determine the effects of including these factors into conventional tax models. Used secondary data for USA and Panel data regression analysis. Findings indicating that happiness is influenced by status as well as income and that people can adjust to limitations, showing only minor losses in happiness because of disabilities (Weisbach, 2008). This study provides empirical evidence that, even after adjusting for several demographic and socioeconomic variables, "tax morale"-the intrinsic motivation of taxpayers to pay taxes-remains a significant predictor of happiness. Used primary data for Italy and used correlation analysis. The key finding, that fiscal integrity produces an increased hedonic return than dishonesty, is consistent with neuroeconomic research (Lubian & Zarri, 2011). The evaluation of the effect of taxation on SWB is the main objective. for Germany, secondary data were used. Utilizing information from the German Socio-Economic Panel's 26 waves, a quantitative investigation and panel data regression analysis were conducted to discover that, depending on net income, taxes had a positive, significant, and robust influence on SWB (Akay et al., 2012). These studies investigate the relationship between taxation, income, status, and intrinsic motives using a variety of approaches and data sources, providing important insights into how these variables affect societal outcomes and subjective wellbeing.

To examine the mediated links between social effect, happiness, and desire to pay prosocial taxes as well as to reproduce in an American sample the association between willingness to pay prosocial taxes and wellbeing. A cross-national and cross-epoch relationship between paying taxes to benefit others and subjective well-being. By using secondary data and Regression coefficient analysis for conclude the result as national tax policies should be focused on emphasizing shared objectives over individual preferences and the positive effects of taxation for society at large (Kelley & Evans, 2017). There have been studies on the impact of taxes and government spending on happiness. Using secondary data for Turkey from 2010 to 2017 using panel data analysis, the study came to the conclusion that taxes and other public spending have a positive effect on happiness (Şaşmaz & Şakar, 2020). These studies examine the connection between social influence, wellbeing, and support for prosocial taxation, showing the possible advantages of tax regulations that are cantered on common societal goals.

# C. Health Expenditure

This essay investigates the relationships between happiness (utility) and several socioeconomic aspects. Using Sweden data from 1991, both primary and secondary. Happiness increases with income, health, and education and drops with urbanization, unemployment, being single, and male gender, according to research using the random sampling approach (Gerdtham & Johannesson, 2001). To investigate the variables that influence a person's sense of their own health and happiness as well as the degree of community-level covariation between health and happiness. Used secondary data for

USA. Multivariate multilevel regression analysis After adjusting for demographic factors, it was shown that self-reported levels of bad health and unhappiness were strongly correlated with income and education with a steeper gradient for those in poor health. The associations poorly-rated personal health and happiness at the community level were greater (0.65) than the correlations between the two outcomes at the individual level (0.16) (Subramanian et al., 2005). This essay examines the relationships between factors that affect people's happiness, such as income, health, education, urbanization, employment position, marital status, and gender, using data from Sweden in 1991.

The article examines the connection between health and happiness from an economics perspective, emphasizing the significance of adaptation. By using secondary data and regression analysis conclude the result that, in terms of happiness and money, roughly parallels the Easterlin paradox (Graham, 2008). It investigated how happiness and health are related. By using secondary data for USA and used multivariable logistic regression. The findings, which are resistant to frequent technique bias, show that, except for illnesses that interfere with daily functioning or are linked to social stigma, subjective health measurements are stronger predictors of happiness than objective ones (Angner et al., 2009). Regarding the socio-economic factors influencing happiness and health, there are two rapidly expanding research streams that are the focus of this paper's methodical analysis by using primary data for USA and Correlation analysis to conclude the result investing in social and environmental capital, as well as culture, education, and creative products, is likely to improve people's health and happiness, as the analysis of the twin paradoxes also suggests (Borghesi & Vercelli, 2012). In order to gain an important understanding of how these factors interact and affect overall well-being, this research thoroughly investigates the complex link between socioeconomic, psychological, and physical well-being.

# D. Infrastructure

The Sustainable Neighbourhood Happiness Index (SNHI) is a framework for assessing and analysing the way in which different cities, towns, neighbourhoods, and communities adopt sustainable practices and the extent to which these actions translate into opportunities for residents to pursue happiness. The history of the SNHI is discussed in this essay. The history of the SNHI is discussed in this essay. According to secondary data for the USA and linear regression analysis, Detroit has the lowest SNHI, followed by San Francisco, Athens, and Ithaca, which are all slightly over the mean SNHI on the SNHD. San Francisco has the highest SNHI, while Detroit has the lowest. Engineers, developers, architects, planners, decision-makers, and academics can all utilize the SNHI to evaluate the relative development and happiness of any neighbourhood or community (Cloutier et al., 2014). This essay examines the fundamental elements of the estate sector Tamil society's level of living, which is a particularly distinctive socioeconomic group living in Sri Lanka's central highlands. Using Primary and secondary data for Sri Lanka. And used mixed method to get result as policy changes to increase wages and improve salary management skills could improve future living standards for Indian Tamils in Sri Lanka's estate sector (Kowsalya, 2014). The suburbanization of Berlin and Cairo at the turn of the 20th century is contrasted in this essay. Used secondary data with published research articles, around 1900 and qualitative analysis. Thus, the history of the rail network in Berlin and Cairo refers to urban networks outside of Europe where, at the turn of the 20th century, technology, a similar understanding of the city, and subject creation were in circulation (Prestel, 2015).

The Sustainable Neighbourhood Happiness Index (SNHI) provides a comparative framework for evaluation while also serving as a tool for analysing and understanding how communities embrace sustainable practices and their influence on inhabitants' wellbeing. The objective of this study is to determine the relationships between the country's level of transportation infrastructure development and the elements affecting population wellbeing. Used secondary data for Latvia. Implement factor analysis, time series analysis, regression analysis, and correlation analysis. The analysis's findings are as follows: Roads are more prevalent in locations with higher population densities, yet it can be challenging to determine which element is reliable in this situation: Despite being shorter than 40% of all roads in the nation, the state highways are in superior shape and have more than 60% of the finance. Agriculture and poverty are positively correlated, while state road length and freight transportation are adversely correlated. Low population density prohibits the road network from being developed more easily, and low road infrastructure density prevents significant regional development. The author claims that there are reasonable and understandable correlations between all facets of transportation infrastructure and welfare in the Riga statistical region, but that the situation in other statistical regions of Latvia is highly unexpected and difficult to explain. This is due to the fact that Latvia's road system mostly dates back to the Soviet era, although the country's economy and its structure have undergone major changes since then (Popova, 2017). This study aims to investigate how a country's level of transportation infrastructure development and the factors influencing population well-being are related.

This article examines the infrastructure access in rural Nepal and evaluates its potential effects on people's happiness. This article examines the infrastructure access in rural Nepal and evaluates its potential effects on people's well-being. Applying primary data for Nepal and quantitative analysis to draw conclusions, The results of this study have applications for rural development in the mountains and hills where access is crucial to human well-being and where human settlements are dispersed widely (Sapkota, 2018). As there has been an increase in interest about how people assess their own happiness, it has become more crucial to investigate the relationships between various macro and individual level characteristics, generally referred to as happiness. Used primary data and descriptive analysis to come to the conclusion that stated happiness is a trustworthy indicator in the decision-making process and that it could be used in addition to the frequently used indicators of economic trade-offs, as well as the inclusion of non-quantifiable attributes that have trustworthy effects on model calibration (Duarte et al., 2010). The article examines the availability of infrastructure in rural Nepal and considers how that can affect the people's standard of life.

#### E. Governance Factors

*1) Government Effectiveness:* This article examines while accounting for other important factors, how governance issues affect happiness in the MENA area. Using secondary data for the years 2009-2011 and 14 MENA countries used panel random effects regression analysis. The research identifies three factors that are positively correlated with happiness but are not statistically significant: voice and accountability, high-quality regulation, and corruption prevention (Fereidouni et al., 2013). This study examines how LGI's good governance practices affect the standard of living of its people by using primary and secondary data for the Sri Lanka. Used mixed method, primary sampling unit (PSU) stratified sampling technique and cluster sampling. The results highlight that good

governor is not practiced by the local government institutions (Weerawansa, 2015). The Middle East and North Africa (MENA) region's countries have varied happiness levels and a downward tendency, making this heterogeneity an attractive subject for research. While accounting for socioeconomic and demographic factors, the goal of the article is to investigate how different levels of happiness among MENA countries are impacted by governance quality. Using secondary data from 2007 to 2017, panel random effects regression analysis was used to examine 20 MENA countries. Empirical findings for the entire sample show that happier locals are better at running their governments. Additionally, studies show that in developed nations, political stability and the absence of violence have the greatest positive effects on people's happiness (Youssef & Diab, 2021). The article examines how governance concerns affect happiness levels in the MENA region, using data and regression analysis to determine the importance of various variables.

- 2) Political Stability and absence of violence or terrorism: In exploring why people from certain countries score higher on the happiness index compared to Sri Lankans, this study assesses various aspects and refined using the world values survey's life satisfaction measures, treating them as direct indicators of well-being. In this study, several qualities and types of governance are evaluated in huge international samples using the life satisfaction measurements from the World Values Survey as though they were direct measures of utility. Using for secondary data and used regression analysis. The findings demonstrate that political stability and voice have coefficients that are like each other in each group of nations but do differ between the groups, with the only positive influence of voice in the sample of wealthy nations being the only significant effect (Helliwell & Huang, 2008). The Worldwide Governance Indicators (WGI) research project, which assesses six characteristics of governance, covered 212 countries and territories in its 2009 iteration. Using secondary data, 1996-2008, 212 countries and OLS analysis. They find that the WGI still enables useful cross-country comparisons and progress monitoring even after accounting for margins of error (Prestel, 2015). This study aims to determine whether technical excellence in governance leads to happiness universally in both wealthy and developing nations. Additionally, it seeks to investigate the connection between happiness and effective governance. Using secondary data and OLS regression analysis. According to this study, only high-income nations experience an increase in happiness because of excellent governance (Woo, 2018). These studies examine how governance characteristics are assessed and how they affect wellbeing, using data and regression analysis to determine their significance in various situations.
- 3) Rule of Law: This article focused on the following significant aspect of free market institutions: rule of law. Using secondary data for the years 1990-2020 and used correlation and regression analysis. Realize that civic virtues improve pleasure and that they have a good relationship with the rule of law (Graafland, 2023). The impact of the rule of law on wellbeing is examined in this article. Using autoregressive distributed lag (ARDL) approach and time series data for China for the years 1998 to 2020 The rule of law enhances people's long-term happiness and health, according to study (Lin et al., 2022). Fit and misfit (F&M) have an impact on ideas, plans, and execution. Because these notions are new to the legal system and the public sector, this study aims to demonstrate how they can be approached legally. Applying secondary data for Slovenia and regression analysis. F&M are intangible assets that are closely related to the rule of law. In nations

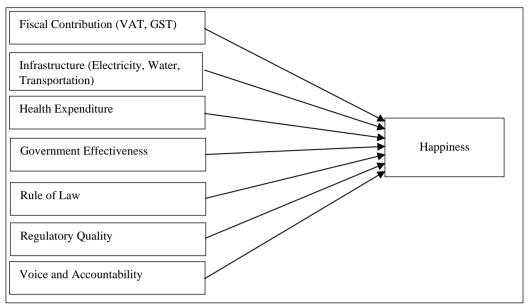
that rate well for the rule of law, citizens are content and contented, and the opposite is also true. While there are weak correlations between misfit and organization, there are strong ones between regulation and participation, regulation and organization, regulation and participation, and regulation and regulation. Thus, A Google search disproves the strongest correlation between mismatch and organization that lies at the core of the F&M research (Pečarič, 2018). These studies use data and regression analysis to explore how fit and mismatch (F&M) interact and how this affects ideas, plans, and execution, particularly in the context of legal systems and the public sector.

- 4) Voice and Accountability: This study explores the impact of village democracy, a significant local governance change in one of the world's most populous regions, on the happiness of rural Chinese citizens. Using for secondary data for the China and used Ordinary Least Squares (OLS) regression. The findings emphasize the significance of citizen involvement in democracy and the fundamental function of local accountability in influencing citizens' subjective well-beings (Lin et al., 2022). This article investigates how unemployment has a significant negative influence on happiness, higher income levels improve happiness, but only marginally. Using for primary data and Secondary data for Switzerland and used Ordinary Least Squares (OLS) regression. It concluded happiness is statistically significantly positively but only somewhat influenced by higher equivalent income (Frey & Stutzer, 2000). These studies, one of which focuses on the impact of village democracy in rural China and the other of which examines the effects of unemployment and income levels on happiness in Switzerland, both use regression analysis to reach their conclusions. Together, they offer important insights into the factors influencing happiness.
- 5) Regulatory Quality: This study examines the function of many institutional happiness quality aspects for 33 Asian nations. Using for secondary data for 33 Asian Countries and used panel regression analysis. The findings demonstrated that happiness is significantly influenced by factors such as employment, openness, money, and good governance (Arshed et al., 2021). This article examines while accounting for other important factors, how governance issues affect happiness in the MENA area. Using secondary data for the years 2009-2011 and 14 MENA countries used panel random effects regression analysis. The research identifies three factors that are positively correlated with happiness but are not statistically significant: voice and accountability, high-quality regulation, and corruption prevention (Fereidouni et al., 2013). Using regression analysis to uncover important truths about how governance and institutional quality affect people's subjective well-being. These studies thoroughly examine the variables affecting happiness in the MENA and Asian countries.

# F. Identified Research Gaps

According to available information, limited studies are carried out in this area in effect of influential factors affecting happiness of selected happiness index countries which depends on four income levels. Based on the facts, the researchers focus on recognition and investigation on happiness on one of the variables, as well as the form of relationship between happiness and one- or two-income levels. If happiness indicators are added to the current economic measures of prosperity, policymakers will be better able to assess and formulate policies.

Figure 1. Conceptual Framework



Source: Author compilation.

# D. Hypotheses of the Study

To assess the results of the current investigation, a multiple regression equation were created exploring disparities in happiness index rankings based on the factors such as Infrastructure (Electricity, Transportation, Water), health expenditure, fiscal contribution (VAT, GST), government effectiveness, political stability and absence of violence or terrorism, rule of law, voice and accountability and regulatory quality (Figure 1). The hypotheses are follows:

- H1 Fiscal contribution (VAT, GST) have an impact on the Happiness.
- H2 Infrastructure (Electricity, Transportation, Water) has an impact on Happiness.
- H3 Health Expenditure has an impact on Happiness.
- H4 Governance factors (government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) has an impact on the Happiness.

# III. METHODS

This study employs a multiple regression technique to analyze data collected from the World Bank database and the World Happiness Report spanning the years 2010 to 2019 to compare the four groups of countries categorized by the World Bank according to their income levels of each income group. For this research we used panel regression model. Panel data are cross-sectional data that have been observed over time. For identify if our data were panel or not, we did F test, LM test and Hausman test. F test refers the equalness of variance. LM tests examine whether the random effect is significant or not. In a panel analysis, the Hausman test is used to distinguish between fixed effect and random effect models. We used three different panel data estimate techniques (POLS, Fixed effect, Random effect) to assess how those data performed across a range of income levels. Without any cross-sectional or time effects, POLS is a typical form of ordinary least squares regression. Individual groups and times are assumed to have different intercepts

in the regression equation under fixed effects. Individual group/time have various disturbances, according to the random effects' hypothesis.

# A. Multiple Regression

A multiple regression model is used to examine the impact of Infrastructure (Electricity, Transport and Water), Health expenditure, Fiscal policies, Governance factors (government effectiveness, political stability and absence of violence or terrorism, rule of law, voice and accountability, and regulatory quality) on happiness. For each country, the model will run for a predetermined period.

Multiple Regression Equation:

$$\begin{aligned} HP_{it} &= \beta_0 + \beta_1 IF_{it} + \beta_2 HE_{it} + \beta_3 FC_{it} + \beta_4 GE_{it} + \beta_5 PSAVT_{it} + \beta_6 RL_{it} + \beta_7 VA_{it} + \\ \beta_8 RQ_{it} + \varepsilon \end{aligned} \tag{1}$$

 $\beta_0$  = Constant term

 $\beta = Slope$ 

 $HP_{it} = Happiness of country i at time t$ 

IF<sub>it</sub> = Infrastructure (Electricity, Transport, Water) of country i at time t

 $HE_{it}$  = Health Expenditure of country i at time t

 $FC_{it}$  = Fiscal Contribution of country i at time t

 $GE_{it}$  = Government Effectiveness of country i at time t

PSAVT<sub>it</sub> = Political Stability & Absence of violence or terrorism of country i at time t

 $RL_{it}$  = Rule of Law of country i at time t

 $VA_{it} = Voice$  and Accountability of country i at time t

 $RQ_{it} = Regulatory Quality of country i at time$ 

## IV. RESULTS

The results of three different statistical tests were compared in the Table 1 to assess how well three different panel data estimate techniques (POLS, Fixed Effects, and Random Effects) performed across a range of income levels. The fixed effect is thought to be more appropriate than the POLS model, according to the F and LM tests. The Hausman test is used to distinguish between fixed effect and random effect models. According to the Hausman test results, the Fixed Effects model is more preferred over the Random Effects model for "All countries," "High Income Level," "Upper-Middle Income Level," Lower-Middle Income Level" and "Low Income Level" at a significant level of 10% or greater.

**Table 1. Specification Test for Panel Data Models** 

	F test	LM test	Hausman test		
Income Levels	H <sub>0</sub> : POLS	H <sub>0</sub> : POLS	H <sub>0</sub> : Random		
medile Levels	II(). FOLS	II(). FOLS	effect		
	H <sub>1</sub> : Fixed effect	H <sub>1</sub> : Random effect	H <sub>1</sub> : Fixed effect		
All countries	48.08***	2694.62***	56.23***		
High Income Level	28.24***	734.96***	38.48***		
Upper Middle-Income Level	51.72***	710.61***	37.84***		
Lower Middle-Income Level	17.90***	219.20***	42.40***		
Low Income Level	4.07***	0.00	34.82***		

Source: Authors compilation.

Note: The symbols \*p<0.10 \*\*p<0.05 \*\*\*p<0.01 significance level respectively.

The coefficients of the fixed effect and random effect models, robust standard error values, significant groups, and R<sup>2</sup> results for all nations and each country's income level are shown in Appendix 1, Figure 2, and Figure 3.

According to the results, at the global level, which controls economic, social, and legal factors, we observe that government effectiveness has a positive significant impact on happiness. And healthcare expenditure has a negative impact on happiness. furthermore, fiscal contribution, infrastructure, political stability and absence of violence and terrorism, regulatory quality, rule of law and voice and accountability has no significant impact on happiness. Since the fixed effect R<sup>2</sup> is equal to 0.2480, the variance of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 24.8% of the variation of the output variable (happiness). Additionally, the variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 56.45% of the variance of the output variable (happiness) in the random effect, with R<sup>2</sup> equal to 0.5645.

One of the findings of this is level of high-income country shows that the social, economic, and legal factors impact on high income countries people's happiness. Then we observed that happiness is strongly dependent on fiscal contribution; VAT and GST (Fixed Effect and Random Effect). While HE has a negative impact on happiness. And we observed that infrastructure, government effectiveness, political stability and absence of violence and terrorism, rule of law, regulatory quality, and voice and accountability has no significant impact on high income countries people's happiness. The fixed effect R<sup>2</sup>value for this income level is 0.1641, which indicates that the variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 16.41% of the variance of the output variable (happiness). The variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 55.24 percent of the variance of the output variable (happiness) in the random effect.

Moreover, upper-middle income country shows that only government effectiveness (Fixed Effect and Random Effect) lead to a higher level of happiness in upper-middle countries people. And fiscal contribution; VAT and GST has a negative impact on upper-middle income level countries happiness. While infrastructure, healthcare expenditure, political stability and absence of violence and terrorism, rule of law, regulatory quality and voice and accountability has no significant impact on people's happiness. The variance of the outcome variable (happiness) is explained by the variance of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) in this income level fixed effect model with an R<sup>2</sup> value of 0.0144. The variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability)

contributes to 0.14% of the variance of the output variable (happiness) in the random effect, according to  $R^2$  of 0.0014.

It also discloses lower-middle income level countries people's happiness. It indicates that an infrastructure (Random Effect), government effectiveness (Fixed Effect and Random Effect), political stability and absence of violence and terrorism (Fixed Effect and Random Effect), rule of law (Random Effect), and voice and accountability (Fixed Effect and Random Effect) lead a significant impact on happiness of lower-middle income level countries happiness. Furthermore, it shows fiscal contribution, healthcare expenditure, and regulatory quality has no significant impact on lower-middle income level countries happiness. The variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) explains 14.48% of the variance of the output variable (happiness) at this income level, according to the fixed effect R<sup>2</sup> value of 0.1448. The variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 27.84% of the variance of the output variable (happiness) in the random effect, with an  $R^2$  of 0.2784.

Further it shows that what are the economic, social, and legal factors impact on law income level countries people's happiness. This represents that government effectiveness (Fixed Effect and Random Effect), and voice and accountability (Fixed Effect and Random Effect) has a positive significant impact on happiness. And Infrastructure (Fixed Effect) healthcare expenditure (Fixed Effect and Random Effect), political stability and absence of violence and terrorism (Fixed Effect), rule of law (Random Effect), and regulatory quality (Random Effect) has a negative impact on happiness. While it placed as a negative adversely for poor income levels, fiscal contribution has no significant impact on happiness. The variation of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 48.31% of the variance of the output variable (happiness) in this income level fixed effect model, which has an R<sup>2</sup> value of 0.4831. The variance of the input variables (fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability) contributes to 68.57% of the variance of the output variable (happiness) in the random effect model, with an R<sup>2</sup> value of 0.6857.

In conclusion, these results can compare how impact these economic, social, and legal factors on happiness in all four income levels. These findings led us to the conclusion that the effect of several variables on happiness, including fiscal contribution, infrastructure, health expenditure, government effectiveness, political stability and absence of violence or terrorism, rule of law, regulatory quality, voice, and accountability, differs depending on the income level of a country. These all four income level countries show that, fiscal contribution matters for people's happiness only in high income countries and upper-middle income countries. And regulatory quality matter only for lower-middle income countries people's happiness. Infrastructure has a strong positive significant impact on low-income level countries happiness than lower-middle income level countries happiness. Whereas healthcare expenditure has an impact on happiness in only high income and low-income level countries happiness. Government effectiveness also has strong impact than upper-middle income level countries, lower-middle income

level countries and law income level countries happiness. Finally, rule of law has strong impact on happiness in Lower-middle income level countries than low-income level countries since voice and accountability has strong impact on happiness in low-income level countries than lower-middle income level countries.

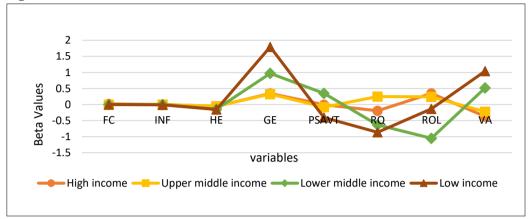


Figure 2. Four income levels – Fixed Effect

Source: Authors compilation.

Figure 2 shows how impact our variables on each income level in fixed effect. According to that rule of law have a highest positive significant impact on high income level countries happiness while voice and accountability have a lowest negative impact. And, upper-middle, lower-middle- and low-income level countries happiness strongly depend on government effectiveness, while voice and accountability, rule of law and regulatory quality have the lowest impact respectively.

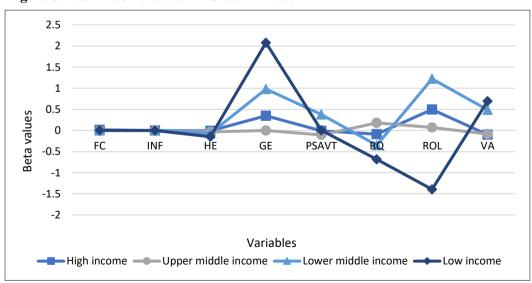


Figure 3. Four income levels – Random Effect

Source: Authors compilation.

Figure 3 shows how impact our variables on each income levels happiness in random effect. According to that government effectiveness has a strong positive impact on high income countries' happiness while rule of law has lowest negative impact. And regulatory quality has the highest positive impact on upper middle-income levels countries' happiness while voice and accountability Rule has the lowest negative impact. The rule of law has the highest impact on lower middle-income level countries happiness and regulatory quality has a lowest impact on that level. Finally, government effectiveness has the highest impact on low-income level countries happiness while rule of law has a lowest impact on that level happiness.

### V. CONCLUSION

This research study's focus is on happiness indices, which are determined by how happy a nation is. The authors also compared the impact of each objective of each: higher income country, upper middle-income country, lower middle-income country, and lower income country find out the similarities and the differences between the countries in terms of the factors influencing happiness index in select countries. The study used secondary data from the years 2010 to 2019 to explore the happens index of select countries and the factors affecting the volatility of in select countries.

The main finding of this study is that the level of happiness for people in high income and upper-middle income level countries depends on one factor fiscal contribution: GST and VAT. People in high income and upper-middle income countries are willing to pay taxes, and because of this, fiscal contribution has a significant impact on the happiness of people in these countries. And, these all four income level countries show that, fiscal contribution matters for people's happiness only in high income countries and upper-middle income countries. And regulatory quality matter only for lower-middle income countries people's happiness. Infrastructure has a strong positive significant impact on low-income level countries happiness than lower-middle income level countries happiness. Whereas healthcare expenditure has an impact on happiness in only high income and low-income level countries happiness. Government effectiveness also has strong impact than upper-middle income level countries, lower-middle income level countries and law income level countries happiness. Finally, rule of law has strong impact on happiness in Lower-middle income level countries than low-income level countries since voice and accountability has strong impact on happiness in low-income level countries than lower-middle income level countries.

## **REFERENCES**

Akay, A., et al. (2012). Happy Taxpayers? Income Taxation and Well-Being.

Akgun, A.İ., Türkoğlu, S.P., & Erikli, S. (2023). Investigating the determinants of happiness index in EU-27 countries: a quantile regression approach. International Journal of Sociology and Social Policy, 43(1–2), 156–177. https://doi.org/10.1108/IJSSP-01-2022-0005

Angner, E., et al. (2009). Health and happiness among older adults: A community-based study. Journal of Health Psychology, 14(4), 503–512. https://doi.org/10.1177/1359105309103570

Arshed, N., et al. (2021). Comparing Quality of Institutions with Happiness of Asian People. Studies of Applied Economics, 39(3). https://doi.org/10.25115/eea.v39i2.3431

- Borghesi, S., & Vercelli, A. (2012). Happiness and health: Two paradoxes. Journal of Economic Surveys, 26(2), 203–233. https://doi.org/10.1111/j.1467-6419.2010.00635.x
- Brulé, G., & Veenhoven, R. (2014). Freedom and happiness in nations: why the Finns are happier than the French. Psychology of Well-Being, 4(1), 1–14. https://doi.org/10.1186/s13612-014-0017-4
- Cloutier, S., Jambeck, J., & Scott, N. (2014). The Sustainable Neighborhoods for Happiness Index (SNHI): A metric for assessing a community's sustainability and potential influence on happiness. Ecological Indicators, 40(May), 147–152. https://doi.org/10.1016/j.ecolind.2014.01.012
- Delgado-Rodríguez, M.J., & De Lucas-Santos, S. (2022). Tax compliance, public spending and happiness in Europe. Corporate Governance (Bingley), 22(3), 577–591. https://doi.org/10.1108/CG-05-2021-0202
- Duarte, A., et al. (2010). New approaches in transportation planning: Happiness and transport economics. NETNOMICS: Economic Research and Electronic Networking, 11(1), 5–32. https://doi.org/10.1007/s11066-009-9037-2
- Frey, B.S., & Stutzer, A. (2000). October 1999 MAXIMISING HAPPINESS? Research in Economics, 1(2), 145–167.
- Gerdtham, U.G., & Johannesson, M. (2001). The relationship between happiness, health, and socio-economic factors: Results based on Swedish microdata. Journal of Socio-Economics, 30(6), 553–557. https://doi.org/10.1016/S1053-5357(01)00118-4
- Gholipour Fereidouni, H., Najdi, Y., & Ekhtiari Amiri, R. (2013). Do governance factors matter for happiness in the MENA region? International Journal of Social Economics, 40(12), 1028–1040. https://doi.org/10.1108/IJSE-11-2012-0208
- Graafland, J. (2023). On Rule of Law, Civic Virtues, Trust, and Happiness. Applied Research in Quality of Life [Preprint], (April 2022). https://doi.org/10.1007/s11482-023-10163-2
- Graham, C. (2008). Happiness and health: Lessons And questions For public policy. Health Affairs, 27(1), 72–87. https://doi.org/10.1377/hlthaff.27.1.72
- Gunawardena, G. (2015). Explorations of factors affecting happiness of Sri Lankans, (November), 290–297.
- Helliwell, J.F., & Huang, H. (2008). How's Your Government? International Evidence Linking Good Government and Well-Being. British Journal of Political Science, 38(4), 595–619. https://doi.org/10.1017/S0007123408000306
- Inglehart, R., et al. (2008). Development, Freedom, and Rising Happiness: A Global Perspective (1981–2007). Perspectives on Psychological Science, 3(4), 264–285. https://doi.org/10.1111/j.1745-6924.2008.00078.x
- Kelley, J., & Evans, M.D.R. (2017). The new income inequality and well-being paradigm: Inequality has no effect on happiness in rich nations and normal times, varied effects in extraordinary circumstances, increases happiness in poor nations, and interacts with individuals' perceptions, att. Social Science Research, 62, 39–74. https://doi.org/10.1016/j.ssresearch.2016.12.007
- Kowsalya, D. (2014). Standard of living of the Indian origin Tamils in the Sri Lankan estate sector. International Journal of Scientific and Research Publications, 4(3), 1–6.

- Lin, L., et al. (2022). Rule of Law, Happiness, and Human Health: Mechanisms and Effects. Frontiers in Public Health, 10(July), 1–7. https://doi.org/10.3389/fpubh.2022.908601
- Loubser, R., & Steenekamp, C. (2017). Democracy, well-being, and happiness: A 10-nation study. Journal of Public Affairs, 17(1–2), 1–12. https://doi.org/10.1002/pa.1646
- Lubian, D., & Zarri, L. (2011). Happiness and tax morale: An empirical analysis. Journal of Economic Behavior and Organization, 80(1), 223–243. https://doi.org/10.1016/j.jebo.2011.03.009
- Pečarič, M. (2018). A transparent legal system of indicators as the indicator of personal fit. International Journal of Organizational Analysis, 26(1), 171–184. https://doi.org/10.1108/IJOA-08-2017-1210
- Popova, Y. (2017). Relations between Wellbeing and Transport Infrastructure of the Country. Procedia Engineering, 178, 579–588. https://doi.org/10.1016/j.proeng.2017.01.112
- Prestel, J. Ben (2015). Hierarchies of happiness: Railway infrastructure and suburban subject formation in Berlin and Cairo around 1900. City, 19(2–3), 322–331. https://doi.org/10.1080/13604813.2015.1015277
- Sapkota, J.B. (2018). Access to infrastructure and human well-being: evidence from rural Nepal. Development in Practice, 28(2), 182–194. https://doi.org/10.1080/09614524.2018.1424802
- Şaşmaz, M.Ü., & Şakar, E. (2020). The effect of taxes and public expenditures on happiness: Empirical evidence from OECD countries. International Journal of ADVANCED AND APPLIED SCIENCES, 7(8), 130–136. https://doi.org/10.21833/ijaas.2020.08.014
- Subramanian, S. V., Kim, D., & Kawachi, I. (2005). Covariation in the socioeconomic determinants of self-rated health and happiness: A multivariate multilevel analysis of individuals and communities in the USA. Journal of Epidemiology and Community Health, 59(8), 664–669. https://doi.org/10.1136/jech.2004.025742
- Tiwari, A.K., & Mutascu, M. (2015). The relationship between environmental degradation and happiness in 23 developed contemporary economies. Management of Environmental Quality: An International Journal, 26(2), 301–321. https://doi.org/10.1108/MEQ-05-2014-0077
- Trabelsi, M.A. (2022). What is the impact of social well-being factors on happiness? European Journal of Management Studies [Preprint]. https://doi.org/10.1108/ejms-01-2022-0004
- Weerawansa, S. (2015). Success of Current Local Government System in Sri Lanka, 27–32. http://www.kdu.ac.lk/proceedings/irc2015/2015/msh-007.pdf
- Weisbach, D.A. (2008). What does happiness research tell Us about taxation? Journal of Legal Studies, 37(SUPPL. 2). https://doi.org/10.1086/529073
- Woo, C. (2018). Good governance and happiness: Does technical quality of governance lead to happiness universally in both rich and poor countries? Journal of International and Area Studies, 25(1), 37–56.
- Youssef, J., & Diab, S. (2021). Does quality of governance contribute to the heterogeneity in happiness levels across MENA countries? Journal of Business and Socioeconomic Development, 1(1), 87–101. https://doi.org/10.1108/jbsed-03-2021-0027

**Appendix 1: Fixed Effect and Random Effect Estimates** 

Appendix 1: Fixed Effect and Random Effect Estimates											
Variables	All Countries		High Inco	ome level	Upper Middle- Income Level		Lower I		Low Income Level		
variables	HP		HP		HP		HP		HP		
	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE	
FC	0023	0032	.0154*	.0067	0042	0036	0028	0002	0064	.0023	
rC	(.0042)	(.0035)	(.0077)	(.0048)	(.0025)	(.0027)	(.0116)	(.0122)	(.0070)	(.0048)	
IF	0015	.0004	0022	0001	.0038	.0011	.0030	.0024*	.0080**	0016	
Ir	(.0018)	(.0007)	(.0020)	(.0012)	(.0040)	(.0028)	(.0046)	(.0013)	(.0030)	(.0026)	
GPI	.0000**	.0000***	.0000	.0000**	.0001***	.0001***	.0000	.0001	.0005*	.0001	
GPI	(0.0000)	(0.0000)	(.0000.)	(.0000.)	(.0000.)	(.0000)	(.0001)	(.0000)	(.0003)	(.0002)	
HE	0765**	0542*	0456	0058	0186	0097	1403	0775	1078*	1257***	
пе	(.0341)	(.0324)	(.0295)	(.0229)	(.0536)	(.0463)	(.0853)	(.0569)	(.0488)	(.0319)	
CC	.4128**	.3465**	.5787**	.5266***	.3021	.1524	.2107	.2392	.9058	.8683***	
CC	(.1708)	(.1372)	(.2297)	(.1980)	(.2216)	(.2024)	(.4055)	(.3761)	(.4971)	(.3327)	
GE	.4652***	.5170***	.2213	.1622	.2547	.2733*	.9310**	.8930**	$1.1930^{*}$	1.7060***	
GE	(.1661)	(.1592)	(.2183)	(.2101)	(.1620)	(.1541)	(.3762)	(.3746)	(.5761)	(.3475)	
PSAVT	.0852	.0709	.0375	0441	1207	1568	.3138	.3512***	2777	.0192	
ISAVI	(.1050)	(.0919)	(.1555)	(.1440)	(.1355)	(.1277)	(.1593)	(.1240)	(.2194)	(.0933)	
RQ	2808	1641	2305	2031	.0987	.0609	6490	3964	-1.1144**	-1.0174***	
NQ	(.1943)	(.1623)	(.3081)	(.3060)	(.3378)	(.2902)	(.4490)	(.2878)	(.4422)	(.2973)	
ROL	0937	1529	.2004	.2032	.1753	.0262	-1.1328	-1.3305**	5343	-1.6607***	
KOL	(.2457)	(.2137)	(.3146)	(.2955)	(.3658)	(.3311)	(.7192)	(.5261)	(.6629)	(.4593)	
VA	0797	.0440	4902	2477	3225	1320	.5629	.5015**	.8803	.7442***	
V A	(.2192)	(.1391)	(.5949)	(.4672)	(.3842)	(.2379)	(.2487)	(.2107)	(.4752)	(.2631)	
Constant	6.4027***	5.7681***	5.9828***	5.4547***	4.6952***	4.9658***	5.0878***	4.6166	6.5541***	5.4915	
Constant	(.5195)	(.3761)	(.9362)	(.7278)	(.6935)	(.6059)	(1.2851)	(.8743)	(1.1059)	(.54358)	
N	950	950	370	370	300	300	190	190	90	90	
No of Countries	95	95	37	37	30	30	19	19	9	9	

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Variables	All Countries		High Income level		Upper Middle- Income Level		Lower Middle- Income Level		Low Income Level		
	HP		HP		HP		HP		HP		
	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE	
No of Years	10	10	10	10	10	10	10	10	10	10	
R <sup>2</sup> within	0.1204	0.1075	0.1627	0.1300	0.1967	0.1818	0.2249	0.2132	0.5619	0.4131	
R <sup>2</sup> between	0.4788	0.6384	0.3902	0.6910	0.0021	0.0682	0.1989	0.3559	0.6092	0. 9457	
R <sup>2</sup> overall	0.4551	0.6037	0.3690	0.6426	0.0072	0.0784	0.1967	0.3229	0.5449	0.7168	

Source: Authors compilation.

Note: The symbols p<0.10 \*\*p<0.05 \*\*\*p<0.01 significance level respective.

**Appendix 2: Summary Descriptive Statistics for the Key Variables** 

Continen ts		Happin ess	Fiscal	Infrastructu re	GDP Per Capital	Health Expenditur e	Control of Corruptio n	Governmen t Effectivenes s	Political Stability & Absence of violence/ter rorism	ory	Rule of Law	Voice and Accounta bility
	Obs.	950	950	950	950	950	950	950	950	950	950	950
	Mean	5.6841	60.8757	176.3263	14469.38	6.9763	.1872	.2966	.0372	.3639	.2307	.2454
Global	SD	1.1287	15.4395	110.603	17225.63	2.5363	1.0418	.9354	.8579	.9051	.9777	.9089
<b>310.04.</b> 2	Min.	2.404	3.9677	42.7595	249.2478	2.4318	-1.6453	-1.5381	-2.8010	-2.0018	1.9225	-2.1244
	Max.	7.993	118.7373	1126.325	80411.52	16.8443	2.3992	2.2357	1.6393	2.2553	2.1247	1.7379
	Obs.	370	370	370	370	370	370	370	370	370	370	370
High	Mean	6.6193	60.0379	195.0143	31055.26	8.5239	1.2342	1.2432	.7498	1.2715	1.2592	1.0521
Income	SD	.7484	14.3381	154.2558	17270.4	2.3696	.7849	.5759	.5235	.5116	.5907	.6138
Level	Min.	4.775	3.9677	107.6535	6572.871	3.1579	3814	3085	-1.3411	0777	.04653	-1.9071
	Max.	7.9	87.8596	1126.325	80411.52	16.8443	2.3992	2.2357	1.6393	2.2553	2.1247	1.7379
	Obs.	300	300	300	300	300	300	300	300	300	300	300
Upper-	Mean	5.5300	59.6559	173.6944	5993.822	6.3596	2779	0143	1922	.1079	2225	1177
Middle	SD	.7616	16.7649	44.6230	2263.942	1.9276	.4885	.4654	.5943	.4483	.4578	.6962
Income Level	Min.	3.467	20.0981	76.6058	2289.931	2.4464	-1.2453	-1.1916	-2.0090	-1.3236	- 1.1128	-1.6805
	Max.	7.257	118.7373	325.0251	12500.11	10.4422	1.0033	1.1609	1.1110	1.1969	1.0239	1.1515
T	Obs.	190	190	190	190	190	190	190	190	190	190	190
Lower- Middle	Mean	4.8514	65.7849	168.2671	2133.164	5.4184	6885	4945	5706	4838	6077	3829
Midule	SD	.7742	11.3282	93.4971	1407.913	2.0707	.4037	.3906	.6309	.4927	.4209	.6166

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Continen ts		Happin ess	Fiscal Contributio n	Infrastructu re	GDP Per Capital	Health Expenditur e	Control of Corruptio n	Governmen t Effectivenes s	A beened of	ory	Rule of Law	Voice and Accounta bility
Income Level	Min.	2.955	41.9315	42.7595	565.0103	2.4318	-1.4256	-1.5381	-2.0208	-2.0018	- 1.8376	-2.1244
	Max.	6.348	88.2776	562.7722	7550.263	11.2694	.2796	.3243	.8336	.4039	.1542	.5967
	Obs.	90	90	90	90	90	90	90	90	90	90	90
T	Mean	4.1107	58.0218	125.2845	577.993	5.9580	7177	8881	8436	7238	7161	5338
Low Income Level	SD	.5842	20.1266	47.7790	250.5819	2.5007	.3443	.3084	.9046	.2879	.4097	.4512
	Min.	2.404	5.6746	61.5690	249.2478	3.2380	-1.6453	-1.4956	-2.8010	-1.5363	- 1.9225	-1.4325
	Max.	5.129	84.6172	256.5074	1413.865	14.1267	1069	4368	.6609	1390	1376	.1678

Source: Authors compilation.