

Influences of Governance and Economic Development Level on Happiness in High Income Asian and European Countries

Muhammad Asraf Abdullah¹, Jerome Kueh Siew Hui², Audrey Liwan³,
Rosita Hamdan⁴ and Cathrine Chan Bao Hui⁵

This study explores the relationship between governance and human development indicators with happiness using the panel data fixed effect and random effect estimation approach. Findings from the study stress on the importance of good governance in influencing life satisfaction. In a way, good governance stimulates happiness in a positive manner. Governments in developed countries in Asia and Europe may increase happiness and promote equality through enhancements in the quality of governance. This can be done by ensuring good practices in managing the economy and resources of the country. However, the relationship between the economic development level and happiness is inconclusive and insignificant.

Field: Economics and Finance

JEL: G38, I31, O10

Keywords: Governance, Human Development Index, Happiness, Subjective Wellbeing

1. Introduction

For decades, economists in the field of development have strived to find the best measure for ensuring the happiness of the society. There are a number of organizations that provide the measurements for happiness such as the international survey programme named the Euro Barometer since 1973; the World Value Survey since 1980 and recently Veehoven (2005) who has provided a comprehensive measure of happiness across 155 nations. The happiness index has been widely used recently by policy makers to provide an ideal measure for social progress and goal of public policy (World Happiness Report 2015). One of the critical questions in achieving economic development is whether economic growth and development can be translated into happiness. Hence, the main objective of economic growth and development is to ensure societies are satisfied with their lives as their countries are climbing up the ladder of economic development. What is the meaning of having a

¹Corresponding author: Dr. Muhammad Asraf Abdullah, Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia, Email: amasraf@unimas.my.

² Dr. Jerome Kueh Siew Hui, Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia, Email: ksjerome@unimas.my.

³Audrey Liwan, Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia, Email: audrey@unimas.my

⁴Dr. Rosita Hamdan, Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia, Email: hrosita@unimas.my.

⁵Cathrine Chan Bao Hui, Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia, Email: catmeowmeow_92@gmail.com

high level of economic growth and development if the citizens are unhappy with their lives? Sometimes material achievements in terms of economic and social aspects may result in greater dissatisfaction among its citizen. For examples, studies by (Martin 2005) and Layard (2005) found that wealth has no significant relationship with happiness. These studies question what is the meaning of possessing high economic growth or incomes if eventually a large portion of the citizens' incomes are being taxed. Another study questions the meaning of high incomes when one has to compete for already scarce resources to meet unlimited desires(Zhang &Ou 2013). In addition, the study also argued that there is an adverse relation between inflation and happiness. Among the earliest research conducted by Kenny (1999) revealed a constant trend in happiness in Japan between 1958 to 1988 despite five-fold increases in its GDP growth during the period. In fact, a country like South Korea exhibited a significant decline in life satisfaction during four phases of studies between 1990 to 2005 (Esterlin et al. 2010; Hilke, Jan, Christian & Hao 2009).

In the study of Easterlin (2003), it was dictated that the importance of subjective wellbeing (SWB) is not dependent on wealth and material achievements in order to raise the level of life satisfaction. A prior study supports the same idea is evident in Oswald (1997). Recent studies show mixed results with regards to the relationships between income and country governance on happiness. For example, Debnath and Shankar (2014) highlighted that there was no influence of good governance on happiness. Meanwhile, Hendriks and Bartram (2016) support the influential role of government on happiness. Therefore, this study attempts to fill these gaps by verifying the influence of SWB within the context of quality of governance and economic development level on happiness. Good governance ensures positive economic achievement besides ensuring safety, healthcare, and minimal social equality and justice of the citizens (Ott 2010). All of the aspects covered by governance indicators catered for the needs of both low and high income countries. Similarly, economic development as measured by the composite human development index (HDI) consists of both economic and social dimensions, namely real income per capita, literacy rate and life expectancy are crucial in raising happiness among the citizen. This study contributes to the understanding of happiness as a human need as life become more complex in people's routine.

This paper is organized in the following manner. Section two presents the concepts of happiness and reviews selected literature on governance and economic development that impact on happiness in various countries. Section three provides data descriptions and methodology employed in answering the research objectives. Section four presents the interpretation of results from the analysis and discussion of the results. Finally, section five concludes and outlines policy recommendations.

2. Concept of Happiness, Governance and Economic Development

The general idea of developing a happiness index dated back from the United Nations general assembly meeting which was held on July 11, 2011. In the meeting, the Prime Minister of Bhutan proposed to member countries to come up with a measure of happiness which is important as an aid to public policies¹. From that initiative, the United Nations came up with the first comprehensive measure of a happiness index across a broader segment of countries throughout the world. Prior to the establishment of the happiness index in 2012, economists use various measures of happiness

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among others including life satisfaction index developed by World Values Surveyⁱⁱ. According to Gurria (2011), the happiness index measures long, happy and sustainable lives of the citizens in a country. It is a reliable index in portraying the satisfaction of the citizens in a country with their present life.

Conceptually, the term “happiness” is not new in economics field. A more common term referring to happiness is well-being or quality of life. The term has been largely referred to as subjective well-being (SWB) in the literature (Oswald 1997). Happiness is defined as the ratio of positive over negative feelings (Myers 2004) and good feelings about life (Layard 2005 a,b). On the other hand, Duncan (2010) suggested that happiness “comprises of three independent and correlated factors namely SWB, life satisfaction and absence of depression and anxiety”.

In fact, the concept of happiness has been firstly embedded in the study by Easterlin (1970) which links citizens’ well-being with a country’s economic achievement. The study argues that income does matter and has a positive influence on happiness but to a certain limit. A vague but positive relationship between average income and happiness level is also reported in Inglehart (1990), Blanch flower and Oswald (2000) and Bolle, Okhrin and Vogel (2009). Subsequently, Ribeiro and Marinho (2017) draw attention to the important role of income in influencing happiness in Brazil. Interestingly, the result of the study also suggests the presence of the Easterlin paradox in Brazil. In general, richer citizens tend to be happier than the poorer ones, to a certain extent. However, as income increase to a particular level, the correlation between happiness and income tend to be insignificant. This relation is also in congruence with the finding by Helliwell and Huang (2008a) who underline a negative correlation between life satisfaction and higher average income. This is because, as their income increase, the citizen tends to be taxed higher which would lower their utility level. In another study, Easterlin (1974) concluded on the absence of relationship between income and happiness. A few studies in 1990s also supported the findings by Easterlin (1970; 1974). Among these studies are Diener, Suh, Lucas, and Smith (1999); Veenhoven (1993); Ravallion and Lokshin (2000). In another study, Easterlin (1995) pointed on the constant of happiness level in developed countries.

Utilizing wellbeing data covering the period 1997 to 2006 as a proxy for happiness, Ruprah and Luenges (2011) modeled hapiness in Latin America using the Probit model. The finding shows that a negative association between happiness and inflation in Latin American countries.

In building a strong and resilient social capital, good governance does matter. (World Happiness Report 2015). Nevertheless, there is a dearth of research investigating the influence of good governance on happiness. These limited studies are discussed in Hendriks and Bartram (2016); Debnath and Shankar (2014); Ott (2010); Veenhoven (2007); Kacapyr (2008); Helliwell and Huang (2008a).Debnath and Shankar (2014) found that good governance has no influence on happiness. In contrast, Ott (2010) argues the important role of quality governance on wealth in influencing high level of happiness by providing safety, good healthcare and minimal level of social equality and justice. Veenhoven (2007) and Helliwell and Huang (2008a) studied life satisfaction across countries whilst Kacapyr (2008) examined the trend of happiness across countries. Kacapyr (2008) showed that Denmark and Italy exhibited the highest happiness levels while the UK indicated no changes. While Belgium experienced a gradual decrease in the happiness level. Surprisingly, a country like China which is

facing socio-economic problems such as high unemployment, migration and corruption, and Nepal which encountered a high poverty rate recorded an increase in happiness level due to the improvement of the countries governance. All the research show mixed results with regards to the influence of governance on citizen happiness. Therefore, this study aims to investigate the link between good governance and society well-being as an indicator of happiness. Furthermore, Helliwell and Huang (2008a) applied direct utility measurement for life satisfaction to indicate quality governance. The result showed that the ability of the government to provide a thrust worthy environment and deliver honest and efficient service appeared to be important for governance in lower income countries. Although economic factors do matter in influencing an immigrant's happiness in European countries, the role of government and social factors such as positive attitudes of the citizens towards immigrants are undoubtedly crucial as postulated by Hendriks and Bartram (2016).

Both economic and political integration are eminent for improving the SWB of respondents in a sample of 30 OECD countries. It is reflected in an improved macroeconomic performance of the countries sample studied due to political integration (Welsch and Kuhling, 2016). Next, participation in sports is evidenced in increasing the happiness among men and women in the United States although the impact is significantly higher for men than women (Huang and Humphreys, 2012). Modeling using the IV estimation approach, the study's finding pointed on the importance of investments in sports facilities in order to attract people to take part in physical activities which ultimately has positive influence on self reported happiness.

In summary, economic, governance, social, and political factors collectively play significant roles in increasing the level of happiness. Country governance in particular is ultimately important to nurture pro-social behavior. No doubt, good governance is important for ensuring a substantial well-being of the people (World Happiness Report 2015). The ultimate goal of a government or a country is to achieve a high level of social capital through high levels of thrust, good governance and mutual support from the society.

3. Data Descriptions and Methodology

This study adopts the model as introduced in Agan, Sevinc and Orhan (2009) by introducing two new variables which are governance and economic development, on top of other variables such as unemployment and inflation which served as control variables. The model suits our study because it utilizes ordinary least square (OLS) estimation which forms the basis for the fixed effect model which will applied in the study analysis. Meanwhile, instead of examining economic indicators only, a more comprehensive socio economic indicator is used which is proxied by HDI. In contrast, economic achievement is proxied by per capita income as found in the study by Agan et al. (2009).

In this study, happiness is the dependent variable which is measured by average happiness at a specific time. In this context, happiness is measured by "subjective enjoyment of one's life as a whole" which covers aspects such as kind of happiness, time of happiness, method of assessment and rating scale (<http://worlddatabaseofhappiness.eur.nl>). Governance is proxied by average governance indicators and comprises dimensions such as voice and accountability,

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political stability and lack of violence, government effectiveness, regulatory quality, and control of corruption. Next, the economic development level is proxied by HDI. The HDI is formed from the composite of three components namely GNI percapita, life expectancy, and adult literacy. Meanwhile, unemployment and inflation are independent variables that are measured by unemployment rate and Consumer Price Index respectively. The model of happiness is shown in equation 3.1. Economic development level and governance are estimated to have positive relationships with happiness level. On the other hand, unemployment and consumer price index are estimated to have negative relationships with happiness index.

$$HAP_{it} = \alpha + \beta_1 GOV_{it} + \beta_2 HDI_{it} + \beta_3 UNEMP_{it} + \beta_4 CPI_{it} + \lambda_i + \varepsilon_{it} \quad (1)$$

where:

HAP	= average Happiness
UNEM	= Unemployment
CPI	= Consumer Price Index
HDI	= Economic Development level
GOV	= average Governance
α	= Constant
$\beta_1, \beta_2, \beta_3, \beta_4$	= Coefficients of independent variables
λ_i	= Unobserved time invariant country-specific
ε	= Error term

In the panel data regression, it is important to identify the appropriateness of the model between pooled OLS and random-effects model. In this context, Breusch-Pagan Lagrangian Multiplier Test is used to determine which model is suitable. Rejection of the null hypothesis of no differences in the variances indicates that the random-effects model is appropriate. Next, the Hausman test will be conducted to determine which model is appropriate between fixed-effects model and random-effects model. Rejection of the null hypothesis is shown by the difference in coefficients which is not systematic and which indicates that the fixed-effects model is appropriate.

This study adopts the panel data analysis method covering a sample of 25 selected developed countries in Asia and Europe from 2008 to 2015. With total observations of 200, the sample size is adequate for running fixed effect and random effect models. The time period covered is short but feasible and sufficient for estimation using panel data analysis. Next, panel data approach is suitable for our study because it controls for individual specific effects, time effects or both of the nature of our data which has both country and time dimensions. Panel data also suffers less from multicollinearity issue, provides more degrees of freedom and more efficient estimations (Baltagi, 2001). The sample countries consist of Japan, Switzerland, Ireland, United Kingdom, Germany, France, Belgium, Finland, Luxembourg, Austria, Italy, Spain, Czech Republic, Greece, Cyprus, Estonia, Lithuania, Poland, Denmark, Malta, Portugal, Hungary, Croatia, Latvia and Netherland. The happiness index data are obtained from the world database of happiness developed by Veenhoven (2004). The happiness index is formed by surveying the general population regarding their satisfaction or dissatisfaction with life. Among the factors considered in the calculation of the happiness index are indicated in the "States of Nations" which provides the characteristics of nations among others in terms of societal characteristics and the indicators of public wellbeing. These measures are then averaged up to form the

happiness index. The index is one of the best tools to evaluate a society's wellbeing. The index ranges from 0 to 10. The figures have been finalized through various steps of validity tests. The global validity test examines if the outcome of the index is sound. Next, each specific validity test surveys the specific objections that have been raised against the use of happiness. The selections of sample countries are based on the availability of the data. The World Bank defines governance as the exercise of power in managing the economy and resources. In addition, Kaufmann et al.(1999) and Kaufmann et al. (2008) define governance as traditions and institutions by which authority in a country is exercised. In this study, governance is measured by averaging up all the six key elements in the governance indicator produced by Kaufmann et al.(2008), obtained from the World Governance Indicators database. These elements include voice and accountability, political stability and lack of violence, government effectiveness and regulatory quality, rule of law and control of corruption. Next, the HDI indicates the overall accomplishment of a country from the social and economics scopes and can be obtained from the United Nations website. It is worth mentioning that this study adopts a more comprehensive measure of economic development unlike in past studies that commonly used GDP or GDP per capita as a sole measure for a country's income level. Finally, unemployment is measured by the total rate of unemployed persons. Meanwhile, the consumer price index which is the proxy for inflation refers to variation in prices for retail goods. Data for both variables are obtained from the World Bank.

4. Empirical Findings and Discussions

Table 1 shows the results for the Breusch-Pagan Lagrangian Multiplier Test with the purpose to determine the selection between pooled-OLS and random-effects model. It can be concluded that random-effects model is appropriate due to the rejection of the null hypothesis at 1% significant level.

Table 1: Breusch-Pagan Lagrangian Multiplier Test

Chi2(1)	Prob > chi2
408.240	0.000***

Breusch and Pagan Lagrangian multiplier test for random effects. *** indicates 1% of significance level.

Then, we can proceed to the next step to identify the selection between fixed-effects model and random effects model. Based on the Hausman test result shown in table 2, the Chi-Square statistic is 10.36 and the *p*-value is 0.035, which are smaller than the 5% of significant level. Thus, we reject the null hypothesis. This indicates that fixed-effects model is more appropriate in this study.

Table 2: Hausman Test

Test Summary	Chi-Square Statistic	Chi-Squared degree of freedom	Probability
Cross-section random	10.360	4	0.035**

* indicate 5% of significant level.

Table 3 shows the regression estimation based on the fixed-effects model. The results indicate a positive relationship between governance and happiness. If the governance increase by 1%, the happiness index will increase by 5.1% and vice-versa. This result is consistent with studies by Veehoven (2004), Ott (2010) and Helliwell and Huang (2008a,b). Ott (2010) further argues that quality of governance is crucial in promoting happiness and inequality. Next, although economic development level has a positive impact on happiness, the result shows that it is statistically insignificant. This finding is in congruence with the findings from earlier studies by Esterlin (1974); Veehoven (1993); Diener et al. (1999); Ravalion and Lokshin (2000); (Martin, 2005); and Layard (2005), which solely applied economic indicators such as per capita GDP. In addition, a study by Blanchflower and Oswald (2005) also supported the negative impact of economic development on happiness in Australia. The authors further stress that the opposite finding from their study is perhaps due to an absence of psychological dimensions in the HDI composite index which is used as the proxy for economic development in the model. For example, there is a trend of a fall in the happiness among Americans since the 1970s despite recording a high score of HDI (Blanchflower and Oswald 2005). Moreover, the multicollinearity issue among the independent variables is not detected as indicated by the mean value of the variance inflation factor, which is a technique to test for presence of multicollinearity in the model. The mean value of variance inflation factor is 2.01, which is less than 10, suggesting the absence of multicollinearity issue in the model. Therefore, the insignificant result with regards to economic development is valid. Sometimes material achievements in terms of economic and social aspects may result in a greater dissatisfaction among its citizen. Other study questions the meaning of high incomes when one has to compete for scarce resources to meet unlimited wants (Zhang & Ou, 2013). Next, Kenny (1999) revealed a constant trend of happiness in Japan between 1958 to 1988 despite five folds increase in the GDP growth during the period. In fact country like South Korea exhibited a significant decline in life satisfaction during four phases of studies between 1990 to 2005 (Esterlin et al. 2010; Hilke et al. 2009).

Furthermore, all control variables namely consumer price index and unemployment show an inverse relationship with happiness. This result indicates that an increase in consumer price index by 1%, decreases happiness by 0.4% and vice-versa. The result is consistent with the studies by Zhang and Ou (2013), Agan et al. (2009) and Di Tella, MacCulloch and Oswald (2001). Meanwhile, an increase in unemployment by 1%, will lead to a decrease in happiness by 1.1 % and vice-versa. This result is shown by Clark and Oswald (1994), Veehoven (1996), Winkelmann and Winkelmann (1998), and Agan et al. (2009) who concluded that as there are more people unemployed, there will be more unhappy people. This is consistent with the findings from Clark and Oswald (1994), Veehoven (1996) and Winkelmann and Winkelmann (1998).

Table 3: Fixed-effects Regression

Variables	Coefficient	Standard Error	t-statistic	Probability
Constant	1.749***	0.449	2.85	0.000
CPI	-0.004**	0.002	-1.68	0.010
UNEM	-0.011***	0.001	-5.49	0.000
HDI	0.162	0.555	0.92	0.650
GOV	0.051*	0.046	4.07	0.070
R-squared	0.429			
Adjusted R-squared	0.405			

*** indicates 1 per cent of significant level, ** indicates 5 per cent of significant level and * indicates 10 per cent of significant level.

5. Conclusion and Policy Implication

This study aims to validate the findings with regards to the influence of governance and economic development level on the people’s happiness. The findings from this study draw attention to the importance of good governance in influencing life satisfaction. As revealed in the results, the study indicates a strong positive significant influence of good governance on average life satisfaction of the citizens. It can be interpreted that good governance stimulates happiness in a positive manner. However, the relationship between economic development level and happiness is inconclusive as reflected by the insignificant *p* value for economic development level. This finding is not unexpected because past studies have supported the significance of health and social relationship on happiness as shown in the study of Easterlin (2003). However, inflation and unemployment show negative associations with happiness which are in line with past literature such as Clark and Oswald (1994), Winkelmann and Winkelmann (1998), and Agan et al. (2009).

This study draws attention to the importance of having the right measure for happiness because happiness is subjective, depending on one’s feeling at a point in time. Therefore, attempts to evaluate happiness should take into account various factors not only in terms of material well-being but also the SWB so that the happiness index reflects the feeling of citizen with regards to one’s life satisfaction. In addition, there is a need to conduct a macro panel data study to observe the change over time in a nation’s happiness level. To our knowledge, there is a lack of macro panel research on happiness.

It is also worth mentioning that good governance is crucial if the objective of the government is to raise the life satisfaction of its citizens. Governments in developed Asian and European countries can raise the citizens’ happiness level and promote equality through quality enhancements of governance. This can be done by ensuring good practices in managing the economy and resources of a country.

6. Limitation

Although the application of the panel data random effect approach in the analysis of this study works well within a short period of time, observations within a stipulated time interval could be added to the sample countries being studied. This is because more

recent data on happiness would be updated in the world database of happiness in the future. The finding from the study would be interesting if a longer time series data for happiness is available, therefore allowing for panel time series application to model happiness. Furthermore, additional control variables can be integrated within the model which would ensure a more robust result for data observations in terms of countries as well as time dimensions.

Acknowledgements

The financial support from the Ministry of Higher Education, Malaysia through the Research Acculturation Grant Scheme (RAGS/SS02(3)/1312/2015(06)) is gratefully acknowledged.

Endnotes

ⁱ Happiness index has been collected for three years from 2012, 2013 and 2015. The index is a collective effort of experts from diverse fields viz. economics, psychology, survey analysis, national statistics, health, public policy etc. The index ranges from 0-10. A Score greater than 7 indicates high level of happiness, whilst a score below 3 indicates bottom level or least happy.

ⁱⁱ To date World Values Survey (WVS) has published four waves of life satisfaction data, viz. 1981-1984; 1990-1993; 1995-1997; and 1999-2000. WVS is a global collaboration among social scientists to study changing values across major cultures in the world which gives remarkable implications on social and political aspects of human life.

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