

The Easterlin Paradox Revisited: The Moderating Effect of Governance

KEYWORDS

governance, income, happiness, Easterlin Paradox

Muhammad Ichsan Fadillah

Poznan University of Life Sciences, Poland

Email: Ichsan.fadillah@up.poznan.pl, fadillah92@gmail.com

ABSTRACT

This study examines the moderating role of governance in the income-happiness relationship across 135 countries, utilizing data from the World Happiness Report, World Bank, and Worldwide Governance Indicators. Governance is categorized into basic functions (political stability and rule of law) and advanced functions (control of corruption, government effectiveness, regulatory quality, and freedom of expression). The analysis employs [specify analytical method, e.g., regression analysis or structural equation modeling] to assess these relationships. The results indicate that in non-high-income countries, basic governance amplifies the positive impact of income on happiness, whereas in high-income countries, advanced governance functions as a substitute for income in driving happiness. These findings underscore the importance of income-specific policy approaches to effectively enhance societal well-being.

INTRODUCTION

The relationship between income and happiness among countries at a given point in time is a concept that is well-established under the Easterlin paradox (Sarracino & O'Connor, 2021a). Richard Easterlin theorizes that there is no clear-cut relationship between income and happiness, as evidenced by lowest-income countries having happiness score around the centre. The term “paradox” is introduced further when he tried to compare between cross-sectional and time-series. He found that although income-happiness relationship is directly correlated at a single point in time (cross-sectional study), the relationship becomes weaker when the data points are analysed over-time (time-series study) (Huang et al., 2024).

The incorporation of Easterlin paradox has been used in past research to check the effect of good governance. A study argued that the weak relationship between income and happiness is not result of income’s effect on happiness becoming absent, but it is due to decline in other key supports for well-being, such as social trust and quality of social (Helliwell et al., 2018). To further strengthen this argument, the changes between happiness over time were also present where two-

third of data shows that the change is due to non-income factors as compared to one-third that professes it is due to income (Helliwell et al., 2018). Here, the quality of governance is deemed to be one of those factors, as evidenced by people live in happier communities where high trust is present, including to government officials (Helliwell et al., 2018).

Good governance as non-income factor that improves well-being can work in two ways: whether people live happier in a country with good governance, or good governance allows people to achieve more of something else that makes them happier (Helliwell et al., 2018). Example of the former is that good governance results in happier people through equitable social policies (Sarracino & O'Connor, 2021b). While the example of the latter is that good governance results in higher trust and reduced corruption that are essential for happiness (Helliwell et al., 2018).

While past studies have shown the correlation between good governance and happiness, the one that evaluates the moderating role of good governance in the relationship between income and happiness, however, remain missing. A paper did measure the influence of good governance on happiness adjusting for income (Ott, 2024). However, a study that checks the effect of good governance on income's influence on happiness is crucial due to the nature of Easterlin paradox that places income as a predictor for happiness. This is where this paper comes in to fill the gap. The objective of this paper is to check whether governance acts as moderator in income-happiness relationship.

On top of evaluating the role of good governance as moderator, the paper also explores the differences of this role between different income levels. The moderation role is then compared among income levels, which can give meaningful insights to how good governance's effect differs between income levels. In his original work, Easterlin implies an ever-increasing want of people as economy grows (Sarracino & O'Connor, 2021a). This suggests that people's needs evolve as income increases, which consequently alters the things people derive happiness from, resulting in different happiness-drivers among different income levels. The research question that this paper tries to answer, therefore, is "what is the comparison of the moderating effect of good governance in the income-happiness relationship between different income levels?"

METHODS

This paper examines the relationship between income, governance, and happiness using a robust methodology that relies on reputable data sources. Income data is obtained from the World Bank, specifically using GNI per capita (PPP-adjusted). Governance data is sourced from the Worldwide Governance Indicators issued by the World Bank, while happiness data is taken from the annual World Happiness Report. To enhance the analysis, countries are also categorized based on income levels, with classifications derived from the World Bank.

The dataset consists of 135 countries, with all data points referring to the year 2022. The Worldwide Governance Indicators include six dimensions: Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption (Ekpo, 2020). These indicators are reported on a scale from -2.5 (weakest governance) to 2.5 (strongest governance).

To improve the representativeness of the sample, countries are further classified into two broad categories: high-income and non-high-income. The non-high-income group encompasses upper-middle-income, lower-middle-income, and low-income countries. This classification aligns with the study's hypothesis that governance may have a stronger effect on the income-happiness relationship in high-income countries compared to non-high-income countries.

The research employs linear regression analysis to explore these relationships, leveraging the large dataset to identify statistical patterns. While linear regression is a widely used method in econometric studies, additional clarification on its application in this research—such as variable selection, assumptions, and interpretation—could further enhance accessibility for a broader audience.

RESULTS

Standard Deviation is higher among high-income countries than among non-high-income countries for GNI, yet the opposite is true for WHR (Ahlfeldt & Pietrostefani, 2019). This suggests that the GNI has greater variability in high-income countries yet the WHR remains lower compared to non-high-income countries. This means that greater variability of income among high-income countries corresponds to less variability of happiness for that group, and vice versa for non-high-income countries.

For governance indicators, Table 1 shows multiple results. Firstly, regarding the mean, all indicators for high-income countries have positive mean while for non-high-income countries have negative mean. Secondly, the indicators are showing different SD comparisons. For CC and VA, SD for high-income countries are visibly bigger than non-high-income countries (CC 0.773 vs. 0.476 and VA 0.773 vs. 0.604). Meanwhile, for PV, SD for high-income countries are visibly smaller than non-high-income countries (PV 0.502 vs. 0.798). This suggests that variability of non-high-income countries for CC and VA are lower and more clustered around negative mean compared to high-income countries, while variability of high-income countries for PV are more clustered around positive mean compared to non-high-income countries. Moreover, the rest of the indicators (GE, RL, and RQ) shows similar SD for both high-income and non-high-income countries (~0.5) suggesting that the variability is somewhat similar.

For linear regressions, below are the results:

Table 1. Results of linear regression

INCOME LEVEL	SINGLE-PREDICTOR MODEL	MODERATED MODELS	MARGINAL R ²	STANDARDIZED MARGINAL R ²	
HIGH	0.5046 (P = 0.000000408)	CC	0.6067 (P = 0.000000309)	0.1021	
NON-HIGH	0.4066 (P = 0.0000127)				0.4287 (P = 0.000182)
HIGH	0.5046 (P = 0.000000408)	GE	0.5386 (P = 0.00000479)	0.0340	6.74%

NON-HIGH	0.4066 (P = 0.0000127)		0.4257 (P = 0.000198)	0.0191	4.70%
HIGH	0.5046 (P = 0.000000408)	PV	0.5184 (P = 0.00000996)	0.0138	2.73%
NON-HIGH	0.4066 (P = 0.0000127)		0.4524 (P = 0.0000887)	0.0458	11.26%
HIGH	0.5046 (P = 0.000000408)	RL	0.5881 (P = 0.000000683)	0.0835	16.55%
NON-HIGH	0.4066 (P = 0.0000127)		0.5044 (P = 0.0000163)	0.0978	24.05%
HIGH	0.5046 (P = 0.000000408)	RQ	0.5832 (P = 0.000000836)	0.0786	15.58%
NON-HIGH	0.4066 (P = 0.0000127)		0.4465 (P = 0.000106)	0.0399	9.81%
HIGH	0.5046 (P = 0.000000408)	VA	0.6592 (P = 0.0000000262)	0.1546	30.64%
NON-HIGH	0.4066 (P = 0.0000127)		0.4491 (P = 0.000098)	0.0425	10.45%

From Table 2, it can be seen that the marginal R2 of CC, GE, RQ, and VA are higher for high-income group than non-high-income group. Consequently, the marginal R2 for PV and RL are lower for high-income group than for non-high-income group. Even when the marginal R2 values are standardized (divided by original single predictor model), the results remain the same. The results also show that all models are significant ($P < 0.05$).

From Table 2, the greater variability of income (higher SD of GNI) of high-income group compared to non-high-income group, accompanied by lower variability of happiness (lower SD of WHR), suggests the existence of Easterlin Paradox. This is because GNI of high-income countries are more spread out than non-high-income group, yet the WHR is more clustered around the mean. It can be seen for from the range (min. value to max. value) of GNI from US\$26,250 to US\$118,470 (~US\$90 thousands difference), yet the WHR range is only from 5.9 to 7.8 (~2.0) for high-income countries, as compared to non-high-income countries, where GNI range is only from US\$1,210 to US\$27,330 (~US\$26 thousands), yet the WHR is wide: from 3.2 to 6.2 (~3.0). Easterlin Paradox mentions that as income grows, income-happiness relationship weakens, which is apparent from the widening of GNI from non-high-income countries to high-income countries but the WHR narrows down.

From Table 2, the different characteristics of governance between non-high-income and high-income groups can also be inferred, firstly by looking at the mean, and secondly by looking at the SD difference. Firstly, by looking at the mean, all governance indicators show consistent positive mean value for high-income countries and consistent negative mean value for non-high-

income countries, which suggests that on average governance are better across the board for high-income than non-high-income countries (Kong et al., 2024).

Upon looking further, which is by looking at the SD difference of each indicator between high-income and non-high-income countries, the higher SD of CC and VA for high-income group compared to non-high-income one suggests that the state of corruption perception and freedom of expression in high-income countries are varied while in non-high-income countries are more similar although clustered around negative mean (which can translate to bad situation of corruption and freedom of expression). Meanwhile, the lower SD of PV for high-income group compared to non-high-income group suggests that political stability is more uniform across high-income group, clustered around a positive mean (which can translate to stable political situation), while the political situation in non-high-income countries are more varied.

For the rest of the indicators (GE, RL, and RQ), similar SD score shows that variability are equal around each mean value, where in high-income countries it is positive and in non-high-income countries it is negative, meaning that in high-income countries, the government effectiveness, rule of law, and regulatory quality are relatively better as a group compared to in non-high-income countries.

Regarding the regression results in Table 2, it can be seen that for single predictor model where GNI is the independent variable and WHR is the dependent variable, the R² is higher for high-income countries compared to non-high-income countries. This does not violate Easterlin Paradox since the data is only sourced for year 2022 (single point in time). As Easterlin found, income and happiness are directly correlated at a single point in time (Antolini & Simonetti, 2019). In this paper, the single point in time is represented by the single year of the data. By looking at the R², Easterlin Paradox will only be violated if the R² of high-income countries is lower than of non-high-income countries, which is not the case here.

For the marginal R², the results show higher value for CC, GE, RQ, and VA among high-income countries than among non-high-income countries. This means that the moderating effect of these governance indicators is higher in high-income countries than in non-high-income countries (Subramaniam et al., 2024a). Meanwhile, for PV and RL, the results are the opposite: the moderating effect of these governance indicators is lower in high-income countries than in non-high-income countries. This is further strengthened by standardized marginal R².

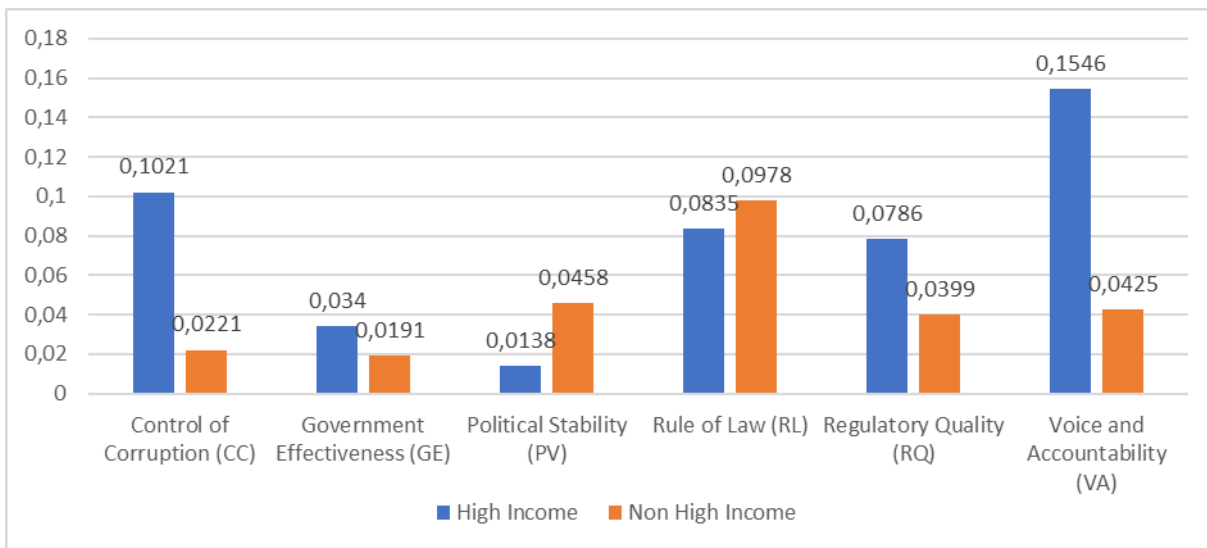


Figure 1. Marginal R2 from Single Predictor Model to Moderated Models

From the perspective of Easterlin Paradox, these results show nuance in good governance's role in income-happiness relationship (van Hoorn & Sent, 2016). There is a clear division of which dimension of indicators have stronger effect on income-happiness relationship across income levels. On one hand, for non-high-income countries, the stronger effect is apparent for political stability and rule of law. It can be inferred from this finding that a higher state of political stability and rule of law provide better environment for security and legal certainty for economic activities to take place, and consequently, people become happier as a result. On the other hand, for high-income countries, the concern is shifted from provision of secure and certain environment to creation of fair and just society. This is reflected from the fact that effect of corruption control, government effectiveness, regulatory quality, and freedom of expression is more apparent in high-income countries than in non-high-income countries (Alvarado et al., 2018).

This shows a rather complementary argument to Easterlin Paradox, as governance are divided into two: basic (political stability and rule of law) and advanced (control of corruption, government effectiveness, good quality of regulation, and freedom of expression). The basic function of governance is still lacking among non-high-income countries and, therefore, its effect works in conjunction with income where people can get happiness from (Subramaniam et al., 2024b). In other words, basic function of governance enforces income's positive role in shaping people's happiness. Meanwhile, in high-income countries, as the basic function of governance is already well-established (the political situation is already stable and rule of law already provides legal certainty), what makes people happy and what they want from governance is shifted to a more advanced form, which is a more just and fairer society where corruption is eradicated, freedom of expression is guaranteed, good quality of regulation, and government that is working for the people. This dimension of governance does not necessarily make income level in the society

goes up, but rather it works as a substitution for income where income no longer gives happiness to people and governance does (Ringen, 2017).

The results of differences in marginal R2 between high-income and non-high-income countries across governance indicators are also closely linked to the variances of governance data in these two groups (Chang, 2015). To recall, it is previously found that SD of high-income countries are higher for CC and VA than of non-high-income countries, while the opposite is true for PV. This shows that because CC and VA have more variability in high-income countries, it is translated to a higher effect of them to happiness than in non-high-income countries. Similarly, for PV, non-high-income countries have more variability in this dimension, therefore it translates to a higher effect to happiness than in high-income countries.

The results of differences in marginal R2 between high-income and non-high-income countries across governance indicators also reveals an insight as to how people in high-income countries perceive basic governance differently than people in non-high-income countries. In high-income countries, a positive level of political stability and rule of law is given, therefore, it does not have a strong effect to happiness like in non-high-income countries where this positive level is not always present. It also shows that there is a tendency for people in high-income countries to take political stability and rule of law for granted.

In terms of policy recommendations, there needs to be a policy focus tailored to high-income countries and countries that fall within the rest of the income classifications (Thomson et al., 2018). For high-income countries, to increase happiness, the focus should be on strengthen efforts to eradicate corruption, to guarantee freedom of expression, to ensure good quality of regulation, and to provide an effective services. Meanwhile, for countries with income level other than high, the effort to become happier should be on creating a stable political environment and ensuring a steady rule of law.

CONCLUSION

This study provides nuanced insights into the moderating role of governance in the income-happiness relationship across different income groups, offering complementary findings to the Easterlin Paradox. By distinguishing between basic governance functions (political stability and rule of law) and advanced governance functions (control of corruption, government effectiveness, regulatory quality, and freedom of expression), the analysis highlights how governance priorities shift based on a country's income level. For non-high-income countries, political stability and the rule of law play a crucial role in enhancing happiness by enabling economic activity and reinforcing the positive relationship between income and well-being. In high-income countries, where basic governance functions are well-established, advanced governance functions become more significant, compensating for the diminishing marginal effect of income on happiness and reflecting societal demands for fairness, justice, and effective governance.

These findings have important policy implications. High-income countries should prioritize enhancing government effectiveness, regulatory quality, and freedom of expression while intensifying anti-corruption measures to sustain and improve happiness levels. Conversely, non-

high-income countries should focus on fostering political stability and strengthening the rule of law as fundamental steps toward economic and social well-being. By bridging the governance-income-happiness nexus, this study deepens the understanding of how governance evolves with economic development. Future research should expand on these insights by incorporating longitudinal analyses to examine how changes in governance over time influence happiness across different income levels.

REFERENCES

- Ahlfeldt, G. M., & Pietrostefani, E. (2019). The economic effects of density: A synthesis. *Journal of Urban Economics*, *111*, 93–107. <https://doi.org/10.1016/j.jue.2019.04.006>
- Alvarado, R., Ponce, P., Criollo, A., Córdova, K., & Khan, M. K. (2018). Environmental degradation and real per capita output: New evidence at the global level grouping countries by income levels. *Journal of Cleaner Production*, *189*, 13–20. <https://doi.org/10.1016/j.jclepro.2018.04.064>
- Antolini, F., & Simonetti, B. (2019). The easterlin paradox in italy, or the paradox in measuring? define happiness before investigating it. *Social Indicators Research*, *146*, 263–285.
- Chang, S.-C. (2015). Effects of financial developments and income on energy consumption. *International Review of Economics & Finance*, *35*, 28–44. <https://doi.org/10.1016/j.iref.2014.08.011>
- Ekpo, A. H. (2020). Governance, Growth and Development in Sub-Saharan Africa: A Revisit of the Evidence. *Working Paper Presented at the AEA/NEA/AFEA Conference in San Diego, California, USA, January*.
- Helliwell, J. F., Huang, H., Grover, S., & Wang, S. (2018). Empirical linkages between good governance and national well-being. *Journal of Comparative Economics*, *46*(4), 1332–1346. <https://doi.org/10.1016/j.jce.2018.01.004>
- Huang, F., Ding, H., Han, N., Li, F., & Zhu, T. (2024). Does wealth equate to happiness? an 11-year panel data analysis exploring socio-economic indicators and social media metrics. *Plos One*, *19*(4), e0301206.
- Kong, L., Sofuoğlu, E., Ishola, B. D., Abbas, S., Guo, Q., & Khudoykulov, K. (2024). Sustainable development through structural transformation: a pathway to economic, social, and environmental progress. *Economic Change and Restructuring*, *57*(2), 27.
- Ott, J. (2024). Good governance and happiness in nations. In *Encyclopedia of Quality of Life and Well-Being Research* (pp. 2833–2840). Springer.
- Ringen, S. (2017). *The possibility of politics: A study in the political economy of the welfare state*. Routledge.
- Sarracino, F., & O'Connor, K. J. (2021a). Economic growth and well-being beyond the Easterlin paradox. In *A Modern Guide to the Economics of Happiness* (pp. 162–188). Edward Elgar Publishing.

-
- Sarracino, F., & O'Connor, K. J. (2021b). Economic growth and well-being beyond the Easterlin paradox. In *A Modern Guide to the Economics of Happiness* (pp. 162–188). Edward Elgar Publishing.
- Subramaniam, Y., Loganathan, N., & Subramaniam, T. (2024a). Moderating effect of governance on healthcare and environmental emissions. *Journal of Environmental Management*, 351, 119646. <https://doi.org/10.1016/j.jenvman.2023.119646>
- Subramaniam, Y., Loganathan, N., & Subramaniam, T. (2024b). Moderating effect of governance on healthcare and environmental emissions. *Journal of Environmental Management*, 351, 119646. <https://doi.org/10.1016/j.jenvman.2023.119646>
- Thomson, K., Hillier-Brown, F., Todd, A., McNamara, C., Huijts, T., & Bamba, C. (2018). The effects of public health policies on health inequalities in high-income countries: an umbrella review. *BMC Public Health*, 18, 1–21.
- van Hoorn, A., & Sent, E.-M. (2016). Consumer Capital as the Source of Happiness: The Missing Economic Theory Underlying the Income-Happiness Paradox. *Journal of Economic Issues*, 50(4), 984–1002.