International Journal of Economics, Business and Management Research

Vol. 9, No.01; 2025

ISSN: 2456-7760

The Impact of Corruption on the Human Development Index in Countries Worldwide and Policy Implications for Vietnam

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doi.org/10.51505/IJEBMR.2025.9118 URL: https://doi.org/10.51505/IJEBMR.2025.9118

Received: Jan 11, 2025 Accepted: Jan 19, 2025 Online Published: Jan 26, 2025

Abstract

The Human Development Index (HDI) is a comprehensive measure of social development. This study examines the impact of corruption on human development in countries worldwide from 2012 to 2022, using Pooled OLS, FEM, REM models, and the instrumental variable method with robust standard errors. While several studies have analyzed the impact of the Corruption Perceptions Index (CPI) on the HDI, most focus on a single country or a short time frame. Additionally, the data, often sourced from articles and reports lacks recent and continuous updates, limiting the ability to analyze, evaluate, and propose effective solutions. This study contributes to the literature on factors influencing human development by incorporating macroeconomic control variables into the estimation model. The empirical analysis shows that CPI has a significant and positive impact on human development in both the short and long term. The study concludes that policymakers in Vietnam can draw lessons from global experiences to implement effective anti-corruption measures. It is crucial to focus on addressing the root causes of corruption, rather than just its effects, to improve the public's perception of corruption.

Keywords: human development index (HDI), corruption, quality of life, corruption perceptions index (CPI), Vietnam.

1. Introduction

Research on the impact of the Corruption Perceptions Index has become an important topic in economics over the past two decades *(Urbina, 2000)*. Corruption is a global issue that attracts the attention of governments, organizations, and citizens alike *(Popova & Podolyakina, 2014)*. It is also one of the main obstacles to human development *(Hardi et al., 2023)*. Evidence of this issue includes the World Bank's "Anti-Corruption Strategy," the United Nations' "Convention against Corruption," and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions *(Urbina, 2000)*. Corruption has profoundly affected both society and the economy, with global institutions consistently emphasizing that it poses a significant obstacle to a nation’s economic progress *(World Bank, 2006)*. Corruption is estimated to cause over $1 trillion in annual losses, while corruption in government spending results in damages of up to $1.5 trillion *(Labelle, 2011)*. Additionally, five of the ten countries with the

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highest Corruption Perception Index are also ranked among the top ten nations with the highest levels of violence globally *(Transparency International, 2022).*

Understanding the impact of corruption on human development is particularly crucial in countries where high GDP growth coexists with persistent poverty, widespread illiteracy, and low life expectancy. A review of the literature reveals several ways in which corruption undermines human development. Corruption leads to poverty and exacerbates disparities in human development *(Emara, 2020; Ortega et al., 2014)*; it reduces government spending on education and healthcare *(Mauro, 1998)*; increases income inequality, child and infant mortality rates, and primary school dropout rates *(Gupta et al., 2001; Kraay & Zoido-Lobaton, 1999)*; and distorts the allocation of economic benefits *(Rose-Ackerman, 1997)*. Moreover, corruption diminishes the quality of life by reducing the efficiency of public services, increasing costs, and promoting social injustice *(Anderson & Tverdova, 2003)*. Consequently, good governance becomes essential for achieving comprehensive human development, as the absence of it allows power to be exploited for personal gain rather than societal benefit. Transparency International (2024) reports that only 28 out of 180 countries assessed in the 2023 Corruption Perceptions Index (CPI) showed improvements in public sector corruption, while 34 countries experienced significant declines. Most nations have failed to curb corruption, with the 25% of countries scoring the lowest on the CPI accounting for only 10% of the world's population.

Despite these perspectives, many economists argue that corruption can play a significant role in supporting governments to promote economic growth and improve human development in the short term, while having detrimental effects on economic growth over the long term *(Ahmad et al., 2012)*. Some studies suggest that corruption directly impacts human development, whereas others assert that its effects are indirect, operating through macroeconomic variables.

This study explores the Human Development Index (HDI) by analyzing the direct impact of the Corruption Perceptions Index (CPI) alongside control variables such as GDP per capita, government expenditure, inflation, political stability, urbanization, and population size from 2012 to 2022. Notably, this period encompasses global crises, particularly the COVID-19 pandemic of 2021–2022, during which nations with low CPI scores encountered significant challenges in managing public funds, negatively impacting their HDI.

Studies on the HDI since the 2010s have provided comprehensive insights into factors influencing the HDI. Some have explored the impact of the CPI on the HDI, but most focus on single countries or short time periods. Many data sources are outdated or lack continuity, limiting analysis and solution development. This study investigates the direct relationship between the CPI and the HDI on a global scale from 2012 to 2022, offering policy suggestions to enhance quality of life and support sustainable development.

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2. Literature review

The Human Development Index (HDI) is a key measure of a country's development *(Asongu & Le Roux, 2017*). To promote HDI and ensure sustainable development globally, the United Nations has implemented a framework known as the Sustainable Development Goals (SDGs) *(Ngo Thai Hung et al., 2023)*. HDI reflects a combination of environmental conditions and a country's overall state, aiming to create a better quality of life by meeting human needs within their capacities *(Linhartova and Pucek, 2024)*. Human development remains the ultimate goal of governments, focusing on improving the welfare and prosperity of their citizens *(Kurniawan et al., 2023)*.

Corruption is a complex phenomenon, taking various forms and serving different functions depending on the context *(Ahmad et al., 2012)*. Political corruption can profoundly affect the economy, social equity, and public trust in government institutions.

Corruption undermines the quality and efficiency of healthcare and education services, increasing healthcare costs, reducing access to basic medical services, and exacerbating social inequality. These effects hinder people's ability to access and benefit from essential services, ultimately weakening the component indicators of the Human Development Index (HDI) (Akcay, 2006; Anderson & Tverdova, 2003; Ahmad et al., 2012).

Corruption results in the inefficient allocation of resources and budgets, making it difficult for citizens to access public services, which in turn fosters social inequality (Anderson & Tverdova, 2003). Additionally, corruption undermines labor market transparency and leads to the unfair distribution of resources, hindering economic growth and reducing the capacity to create employment opportunities.

Corruption not only impacts income but also undermines the ability to enhance quality of life and personal development, especially for low-income households (Aghion et al., 2016; Malanski & Póvoa, 2021). A corrupt environment erodes public trust in the political and legal systems, which directly affects mental health and life satisfaction, thus hindering human development (Helliwell et al., 2014; Akisik et al., 2020).

Corruption often accelerates the approval and implementation of projects that conflict with a nation's sustainable development goals, such as resource extraction projects that cause environmental pollution. These projects not only degrade the quality of life but also diminish the country's potential for sustainable development (Nawatmi, 2014; Alfada, 2019).

The method for calculating the Human Development Index (HDI)

$$HDI = \sqrt[3]{I_{health} \, x \, I_{education} \, x \, I_{income}}$$

HDI ranges from 0 to 1. An HDI value of 1 represents the highest possible level of human development, while a value of 0 indicates a society with no human development.
The HDI is calculated based on three components:

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Health Index (I_{health}): measured by life expectancy at birth.
Education Index ($I_{education}$): calculated using the mean years of schooling for individuals aged 25 and older, along with the expected years of schooling for children of school-going age.
Income Index (I_{income}): based on the Gross National Income (GNI) per capita, adjusted for purchasing power parity (PPP).
The United Nations Development Programme (UNDP) classifies HDI into the following groups:
Group 1: Very High Human Development **(HDI ≥ 0.800)**
Group 2: High Human Development **(0.700 ≤ HDI < 0.800)**
Group 3: Medium Human Development (**0.550 ≤ HDI < 0.700)**
Group 4: Low Human Development **(HDI < 0.550)**

3. Method

3.1 Study area

The study analyzed the impact of corruption on human development using data from 2012 to 2022. A sample of 29 countries was selected based on the availability and reliability of key data. Initially, over 90 countries were considered, but many were excluded due to incomplete or inconsistent data on essential variables like the Human Development Index (HDI), corruption levels, and control factors. Missing data for certain years or unreliable updates from international organizations also limited the scope.

Some countries lacked regularly updated or consistent data, making it challenging to ensure continuity for analysis. After filtering, the final sample included a diverse mix of developed and developing countries from various regions, ensuring representativeness and robustness for the study.

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Table 1. List of countries in sample data

	Country		**Country**
1	Albania	16	Canada
2	Algeria	17	Central African Republic
3	Armenia	18	China
4	Australia	19	Comoros
5	Austria	20	Croatia
6	Bahamas	21	Cyprus
7	Barbados	22	Iran (Islamic Republic of)
8	Belgium	23	Korea (Republic of)
9	Bolivia (Plurinational State of)	24	Malta
10	Bosnia and Herzegovina	25	Morocco
11	Botswana	26	North Macedonia
12	Brazil	27	Norway
13	Bulgaria	28	Paraguay
14	Burkina Faso	29	Ukraine
15	Burundi		

3.2 Proposed research model

$$\mathbf{HDI_{it} = \beta 0 + \beta 1\ GDPPC_{it} + \beta 2\ lnGovConsump_{it} + \beta 3\ PS_{it} + \beta 4\ CPI_{it} + \beta 5\ IR_{it} + \beta 6\ UP_{it} + \beta 7\ lnPop_{it} + \varepsilon_{it}}$$

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Table 2. Description and measurement of variables in the Model

	Variable	**Notation**	**Units**	**Scales**
Dependent Variable	Human Development Index	HDI		$0 \leq HDI \leq 1$
Independent Variable	Corruption Perceptions Index	CPI		$0 \leq CPI \leq 100$
Control Variable	Natural logarithm of GDP per capita	lnGDPPC		
	Natural logarithm of government expenditure	lnGovConsump		
	Political stability and absence of violence/terrorism index	PS		
	Inflation rate	IR	%	Annual percentage of GDP deflator
	Natural logarithm of total population	lnPop		
	Urban population percentage	UP	%	Percentage of urban population over total population

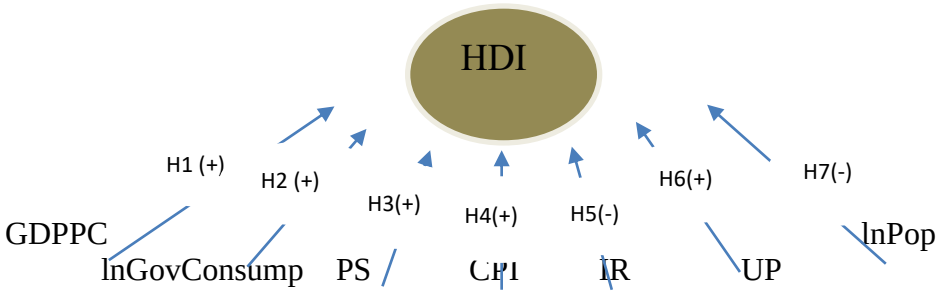

Figure 1. Research Hypotheses

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This study uses Stata 14 software to analyze the Human Development Index (HDI) of countries worldwide during the 2021-2022 period and examines the impact of corruption on HDI from 2012 to 2022.

First, descriptive statistics are used to provide an overview of the data. This analysis describes the basic characteristics of the variables, including mean values, standard deviations, and the maximum and minimum values.

This study also uses comparative statistical analysis to assess differences between groups of countries or time periods. Comparing data across groups can reveal changes in CPI and HDI over time or between regions with different socio-economic conditions.

Next, correlation and regression analyses are conducted to evaluate the relationship between the independent and dependent variables. Pearson correlation is used to measure the linear relationship between CPI and HDI, determining the strength of their association.

Additionally, three main regression models were used in this study, including Pooled OLS regression, the Fixed Effects Model (FEM), and the Random Effects Model (REM).

Finally, the model estimation with robust standard errors was applied to address autocorrelation and heteroscedasticity in the selected optimal regression model, improving the reliability of the estimates.

4. Results and Discussion

4.1 Current status of the Human Development Index (HDI) in Countries Worldwide

The Human Development Index (HDI) is a comprehensive measure of social development, incorporating three key dimensions: life expectancy, education, and income. According to data from the Human Development Reports 2021/2022, the global HDI declined for two consecutive years (2020 and 2021) for the first time in history. This decline can be primarily attributed to the severe impact of the COVID-19 pandemic. Key factors contributing to this decrease include: reduced life expectancy and economic recessions. These impacts were felt across both developing and developed nations, representing a significant setback in the global effort to achieve sustainable human development.

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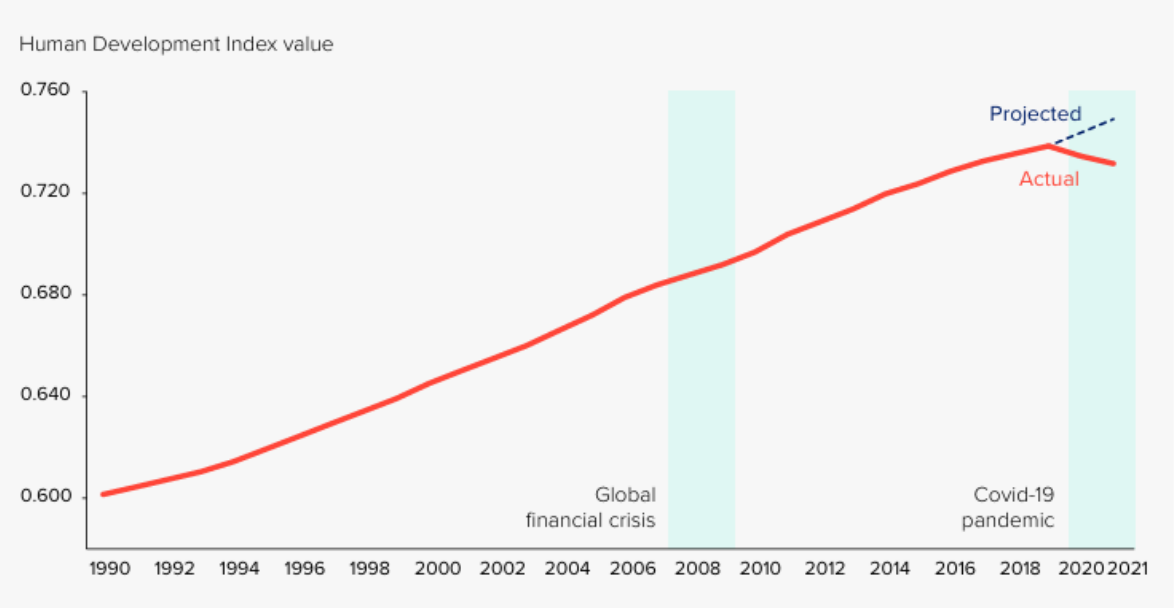
Figure 2. Global Human Development Index (HDI) declines for two consecutive years for the first time on record



Note: The period of the global financial crisis is indicative.

Source: Human Development Report Office calculations based on data from Barro and Lee (2018), IMF (2021c, 2022), UNDESA (2022a, 2022b), UNESCO Institute for Statistics (2022), UNSD (2022), World Bank (2022c)

However, the impact of this global crisis has been uneven across different continents. Furthermore, the climate emergency, as highlighted by the UNDP, poses serious threats to sustainable development worldwide. While developed nations have shown greater resilience thanks to advanced healthcare systems and robust social infrastructure, developing countries—particularly low-income ones with lower HDI scores—remain highly vulnerable. These countries' reliance on natural resources and inadequate infrastructure further exacerbates their risk during environmental crises.

The Human Development Reports 2021/2022 further emphasize the importance of green recovery and sustainable development to improve the HDI in the future. To ensure better outcomes, countries should invest in healthcare, education, and social policies that improve citizens' quality of life and help build resilience to future global challenges.

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Table 3. Comparative Statistics of HDI by Continent in 2022

Continent	Obs	Mean	Std.	Min	Max
Asia	13	.788	0.077	.674	.935
Africa	17	.559	0.127	.387	.796
America	12	.825	0.064	.741	.929
Europe	26	**.893**	0.068	.734	.967
Oceania	2	**.942**	0.005	.939	.946

Source: Created by authors

According to HDI comparisons across continents, **Oceania** and **Europe** rank highest globally in HDI. Countries in these regions consistently achieve very high HDI scores, reflecting their advanced social development and superior quality of life. This success is attributed to their well-developed and sustainably maintained healthcare and education systems, alongside robust economies that ensure stability and prosperity for their citizens.

Oceania, which has the highest average HDI, is represented by only two countries, Australia and New Zealand. Despite this limited representation, the region exemplifies high living standards and strong social welfare systems.

Asia and the Americas exhibit significant disparities in development. Countries such as Japan, South Korea, Canada, and the US boast high HDI scores (0.925) reflecting strong healthcare systems, advanced education, and high living standards. Conversely, nations like India (0.633) and Pakistan (0.544) have much lower HDI scores, underscoring persistent inequalities in education and healthcare. Despite progress, many countries still struggle with limited resources and climate change, challenges made worse by the pandemic's focus on addressing the health crisis.

Sub-Saharan Africa struggles with economic instability, resource scarcity, and climate change, leading to low HDI scores for countries like Niger (0.400), Central African Republic (0.404), and Chad (0.394). Poor infrastructure, healthcare, and political instability slow progress, requiring stronger international support and internal reforms.

4.2 Results of Assessing the Impact of Corruption on the Human Development Index

4.2.1. Results of Descriptive Statistical Analysis

The HDI has an average of 0.788, ranging from 0.347 to 0.967, showing significant inequality in human development across countries. This reflects economic disparities and unequal access to basic services, highlighting the importance of policy, governance, and international support in reducing the development gap.

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Table 4. Descriptive Statistics of Variables

Variables	Obs	Mean	Std.	Min	Max
HDI	319	.788	.158	.347	.967
CPI	319	.518	.227	.02	.92
IR	319	.055	.086	-.251	.563
lnGovConsump	319	8.503	9.246	1.996	28.588
UP	319	.679	.189	.121	.993
lnPop	319	15.986	1.567	12.548	21.068
PS	319	.544	2.822	-2.038	21.86
lnGDPPC	319	9.265	1.513	5.569	11.612

Source: Created by authors

4.2.2. Results of Correlation Matrix

The Pearson correlation matrix shows that the HDI is strongly positively correlated with several key independent variables, highlighting their influence on human development.

Table 5. Pearson Correlation Matrix between independent and dependent variables

Pairwise Correlation

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) HDI	1.000							
(2) CPI	0.706*	1.000						
(3) IR	-0.148*	-0.272*	1.000					
(4) lnGovConsump	-0.062	-0.078	-0.124*	1.000				
(5) UP	0.768*	0.526*	-0.095	0.005	1.000			
(6) lnPop	0.002	-0.096	0.179*	0.080	0.029	1.000		
(7) PS	0.190*	0.158*	0.112*	-0.085	0.126*	-0.213*	1.000	
(8) lnGDPPC	0.956*	0.773*	-0.243*	-0.018	0.764*	-0.053	0.158*	1.000

**** p<0.01, ** p<0.05, * p<0.1*

Source: Created by authors

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4.2.3. Estimation results using the Pooled OLS regression method

The Sig(F) value of 0.00 < 0.05 confirms the model's statistical significance, indicating that the independent variables explain most of the HDI variation. The adjusted R^2 of 92.86% shows that the 7 variables account for nearly all variation, with only 7.14% due to external factors or random errors. With R^2 > 50%, the model is highly reliable.

Table 6. Estimation results of the Pooled OLS regression model

Variable	(1) HDI
CPI	-0.0467***
	(0.0169)
IR	0.107***
	(0.0304)
lnGovConsump	-0.000749***
	(0.000262)
UP	0.0497**
	(0.0199)
lnPop	0.00476***
	(0.00160)
PS	0.00219**
	(0.000889)
lnGDPPC	0.102***
	(0.00333)
Constant	-0.239***
	(0.0311)
Observations	319
R-squared	0.930

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Created by authors

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Table 7. Multicollinearity Test Results: Variance Inflation Factor (VIF)

Variance Inflation Factor

	VIF	1/VIF
lnGDPPC	4.524	.221
CPI	2.64	.379
UP	2.523	.396
IR	1.204	.831
PS	1.123	.891
lnPop	1.114	.898
lnGovConsump	1.045	.957
Mean VIF	2.025	.

Source: Created by authors

All independent variables have VIF values below 10, indicating no multicollinearity and ensuring accurate regression coefficient (Dospinescu and Dospinescu, 2020).

Table 8. Estimation results of the OLS model with Robust Standard Errors

Variable	(1) OLS with Robust Standard Errors
CPI	-0.0467***
	(0.0157)
IR	0.107***
	(0.0359)
lnGovConsump	-0.000749***
	(0.000260)
UP	0.0497***
	(0.0171)
lnPop	0.00476***
	(0.00169)
PS	0.00219***
	(0.000423)
lnGDPPC	0.102***
	(0.00325)
Constant	-0.239***
	(0.0321)
Observations	319
R-squared	0.930
Observations	319
R-squared	0.930

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Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Created by authors

4.2.4. Fixed Effects Model (FEM)

After using OLS regression with robust standard errors to address heteroscedasticity, the Fixed Effects Model (FEM) was tested. The FEM controls for unobservable, time-invariant factors like culture or natural conditions, providing more accurate and reliable results for the impact of independent variables on the dependent variable.

Table 9. Estimation results of the Fixed Effects Model (FEM)

Variable	(1) Fixed Effects Model (FEM)
CPI	-0.126***
	(0.022)
IR	0.130***
	(0.028)
lnGovConsump	0.008***
	(0.002)
UP	-0.001
	(0.020)
lnPop	-0.003
	(0.002)
PS	0.000
	(0.001)
lnGDPPC	0.113***
	(0.004)
Constant	-0.221***
	(0.031)
Observations	319
Number of CountryID	29
R-squared	0.937

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Created by authors

Wald Test for Hypothesis Testing

Hypotheses:

H0: The Pooled OLS model is appropriate.

H1: The Fixed Effects Model (FEM) is appropriate.

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The test result shows Prob > F = 0, which is below 0.05. Thus, we reject H0 and accept H1, indicating that FEM is more accurate than the Pooled OLS model.

4.2.5. Random Effects Model (REM)

After identifying the FEM as optimal, the author tested the Random Effects Model (REM) to account for random factors and address information gaps. This approach offers a new perspective by analyzing unobserved variables affecting the dependent variable.

Table 10. Estimation results of the Random Effects Model (REM)

Variable	(1) Random Effects Model (REM)
CPI	-0.093***
	(0.020)
IR	0.125***
	(0.029)
lnGovConsump	-0.000
	(0.000)
UP	0.012
	(0.020)
lnPop	0.002
	(0.002)
PS	0.001
	(0.001)
lnGDPPC	0.112***
	(0.004)
Constant	-0.252***
	(0.030)
Observations	319
Number of CountryID	29

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Created by authors

4.2.6. Model selection between FEM and REM

The Hausman test was performed to decide whether the Fixed Effects Model (FEM) or Random Effects Model (REM) is more appropriate for the study.

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Table 11. Hausman Test Results

Hausman Test (1978)

	Coef.
Chi-square test value	31.879
P-value	0

Source: Created by authors

Hypotheses Testing

H0: The Random Effects Model (REM) is appropriate

H1: The Fixed Effects Model (FEM) is appropriate.

Test Results:

Chi2 Statistic: 31.88

Prob > Chi2: 0

The results reject H0 and accept H1, indicating that FEM is the better choice, with more reliable estimates.

Table 12. Estimation results of the Fixed Effects Model (FEM) with robust standard errors

Variable	(1) FEM with Robust Standard Errors
CPI	-0.126***
	(0.0216)
IR	0.130***
	(0.0420)
lnGovConsump	0.00803**
	(0.00294)
UP	-0.00122
	(0.0276)
lnPop	-0.00303
	(0.00323)
PS	0.000479
	(0.000523)
lnGDPPC	0.113***
	(0.00504)
Constant	-0.221***
	(0.0496)
Observations	319
Number of CountryID	29
R-squared	0.937

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Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Source: Created by authors

4.2.7. Instrumental variable method

To strengthen the regression model and validate the causal relationship between the variables, the instrumental variable (IV) method is used. The selected IV is the one-period lagged logarithm of the Corruption Perceptions Index (CPI).

The relationship between corruption and HDI may be bidirectional, where a high HDI can improve governance and reduce corruption, while corruption negatively affects HDI. Using the lagged CPI as an IV isolates the causal relationship by minimizing the influence of random factors in the current period and maintaining the connection between the lagged CPI and the current CPI.

Table 13. Estimation results of the Regression Model with Instrumental Variables

Variable	(1) Kết quả kiểm định IV
CPI	-0.134***
	(0.040)
IR	0.100***
	(0.039)
lnGovConsump	-0.001***
	(0.000)
UP	0.034*
	(0.019)
lnPop	0.006***
	(0.002)
PS	0.003***
	(0.001)
lnGDPPC	0.114***
	(0.006)
2014.Year	0.011
	(0.010)
2015.Year	0.006
	(0.011)
2016.Year	0.002
	(0.011)
2017.Year	-0.000
	(0.012)
2018.Year	-0.012

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	(0.011)
2019.Year	-0.002
	(0.011)
2020.Year	-0.002
	(0.010)
2021.Year	-0.007
	(0.010)
2022.Year	0.001
	(0.012)
Constant	-0.310***
	(0.042)
Observations	290
R-squared	0.927

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Created by authors

4.3 Discussion

In this study, the robustness test results show that the regression coefficients of the independent variables significantly affect the Human Development Index (HDI). The F-value of the Weak Identification Test is 35.6, which is higher than the critical values of the Stock-Yogo test (10% critical value is 16.38). This indicates that the instrumental variable used is sufficiently strong, and the model does not not have a "weak instrument" problem.

The Corruption Perceptions Index (CPI) has a regression coefficient of -0.134, meaning a 1% decrease in the CPI is associated with a 0.134% increase in HDI. This a negative impact of CPI on human development. This finding is consistent across the Pooled OLS, FEM, REM, and instrumental variable models, all confirming the inverse relationship between CPI and human development.

This inverse relationship may stem from several underlying reasons.
First, it could be due to the short-term effects of anti-corruption reforms. The implementation of anti-corruption measures may lead to temporary economic instability, especially if public projects are paused for investigation or restructuring. This disruption in public services and infrastructure can lead to a short-term decline in HDI.

Second, it may result from the side effects of stricter management policies. Strengthening regulations and oversight to combat corruption can reduce economic flexibility, particularly for small-scale businesses. As the market becomes more constrained and the business environment more challenging, job losses and reduced income may follow, negatively impacting the Human Development Index (HDI).

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Third, it may be due to the structural complexity of the CPI and HDI indices. While the CPI measures perceived corruption levels, the HDI evaluates human development based on health, education, and income. If improvements in the CPI are not accompanied by investments in education, healthcare, and social welfare, the HDI may not rise or could even decline. This suggests that the relationship between CPI and HDI is not always straightforward.

Finally, it could be due to uneven budget allocation. Studies such as Mauro (1995) suggest that in countries focused on combating corruption, budgets for sectors like education and healthcare may be cut, especially when resources are redirected toward administrative reforms. This can lead to a decline in the key components that contribute to the HDI.

Several global studies have found similar results regarding the inverse relationship between the CPI and HDI. Research by Meon and Weill (2010) suggests that in economies with bureaucratic systems and numerous barriers, corruption can sometimes act as a "grease" to reduce inefficiencies in public services. In the short term, increased corruption may benefit some inefficient economies; however, its long-term effects are harmful. When anti-corruption measures are implemented without accompanying administrative reforms, the management system may face challenges, leading to a decline in public service quality and negatively affecting the HDI.

Similarly, the study by Razafindrakoto and Roubaud (2010) shows that the CPI does not always accurately reflect true level of corruption. Therefore, an increase in the CPI may not always lead to real improvements in people's lives and can sometimes negatively impact the HDI if anti-corruption measures result in reduced essential public services.
In summary, the relationship between CPI and HDI is complex and varies by country. In developed countries with high HDI levels, the link between CPI and HDI may not be clear or could even be negative. Anti-corruption policies should be paired with investments in healthcare, education, and social infrastructure to improve both CPI and human development.

4.4 Solutions

Implement a multi-dimensional strategy: focusing on improving public management structures and efficient budget allocation. Vietnam could consider adopting competitive salary policies for officials and civil servants, especially in sensitive positions. It is also crucial to establish independent agencies to oversee public budget allocation, ensuring transparency and fairness in areas like education, healthcare, and social welfare. This approach will directly improve citizens' quality of life and enhance HDI indicators.

Investment focus on education and healthcare infrastructure: especially in poor, remote, and mountainous areas. Norway's experience shows that investing in universal education and human development reduces inequality and greatly improves the quality of life. Reducing corruption in the healthcare, education, and infrastructure will enhance investment efficiency, improve access to services, and boost life expectancy. These factors are essential for raising the Human Development Index (HDI).

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Support for the growth of small and medium-sized enterprises (SMEs): Corruption in the private sector often limits SME growth, which is crucial for job creation and economic development. Providing SMEs, especially women-owned businesses, with preferential loans, management training, and skill development programs will increase business transparency. This will drive economic growth, create jobs, and improve the quality of life, leading to a higher HDI.
Integration of anti-corruption measures into sustainable development and environmental protection strategies: Corruption in the environmental sector can hinder efforts to tackle issues like pollution and climate change. Therefore, the government should invest in robust environmental monitoring systems, such as air and water stations in industrial zones and urban areas, to detect and address violations quickly. These actions will improve public health, create a sustainable environment and raise the quality of life and the HDI.

Economic stabilization and inflation control: Experience from developed countries shows that economic instability is often a direct consequence of corruption. Therefore, Vietnam needs to maintain price stability, especially for essential goods, to protect consumes. Additionally, creating a transparent financial management and monitoring system will help prevent uncontrolled inflation and support the sustainable development of the economy.

5. Conclusion

This study examines the Human Development Index (HDI) of countries worldwide during the 2021-2022 period and achieves several objectives.

First, it systematically outlines key concepts related to the HDI and analyzes the direct impact of corruption on human development across different nations. By exploring the relationship between corruption and HDI, the study provides a comprehensive understanding of how governance and transparency influence development outcomes.

The research also delves into the current state of HDI globally, with a particular focus on Vietnam. It compiles detailed information and identifies critical factors affecting the HDI, including the Corruption Perceptions Index (CPI), GDP per capita, government expenditure, political stability and absence of violence/terrorism, inflation rate, urban population percentage, and total population.

To validate its findings, the study employs Pooled OLS, Fixed Effects Model (FEM), and Random Effects Model (REM) estimation methods. Among these, the Fixed Effects Model (FEM) is identified as the most suitable, effectively capturing the impact of CPI and other control variables on HDI with high statistical significance. The results highlight the complex relationship between corruption and development, emphasizing the need for robust governance to improve human well-being.

Based on insights from Vietnam's HDI status and lessons from international experiences, particularly from Singapore, Norway, and New Zealand, the study offers actionable policy recommendations. These include targeted investments in governance, education, healthcare, and

economic stability to enhance HDI effectively. By providing practical suggestions, the research aims to guide policymakers in fostering sustainable human development.

However, this study has limitations as it relies only on secondary data, without interviews or field surveys, which may reduce accuracy and leave gaps in understanding the impact of corruption on the HDI in specific countries.

References

Ackerman, S.-R. (1997). Corruption, Inefficiency and Economic Growth. *Nordic Journal of Political Economy, 24(1),* 3-20. https://www.nopecjournal.org/NOPEC_1997_a01.pdf

Aghion, P., Akcigit, U., Cagé, J., & Kerr, W. R. (2016). Taxation, corruption, and growth. *European Economic Review*, *86*, 24–51. https://doi.org/10.1016/j.euroecorev.2016.01.012

Ahmad, E., Ullah, M. A., & Arfeen, M. I. (2012). Does corruption affect economic growth?. *Latin american journal of economics*, *49*(2), 277-305. http://dx.doi.org/1O.7764/LAJE.49.2.277

Akçay, S. (2006). Corruption and human development. *Cato J.*, *26*, 29.

Akisik, O., Gal, G., & Mangaliso, M. P. (2020). IFRS, FDI, economic growth and human development: The experience of Anglophone and Francophone African countries. *Emerging Markets Review*, *45*, 100725. https://doi.org/10.1016/j.ememar.2020.100725

Alfada, A. (2019). The destructive effect of corruption on economic growth in Indonesia: A threshold model. *Heliyon*, *5*(10). https://doi.org/10.1016/j.heliyon.2019.e02649

Anderson, C. J., & Tverdova, Y. V. (2003). Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies. *American Journal of Political Science*, *47*(1), 91–109. https://doi.org/10.1111/1540-5907.00007

Asongu, S. A., Roux, S. L., & Biekpe, N. (2017). Environmental degradation, ICT and inclusive development in Sub-Saharan Africa. *Energy Policy*, *111*, 353–361. https://doi.org/10.1016/j.enpol.2017.09.049

Dospinescu, O., & Dospinescu, N. (2020). Workaholism in IT: An analysis of the influence factors. *Administrative Sciences*, *10*(4), 96. https://doi.org/10.3390/admsci10040096

Emara, A. M. (2020). The Impact of Corruption on Human Development in Egypt. *Asian Economic and Financial Review*, *10*(5), 574–589. https://doi.org/10.18488/journal.aefr.2020.105.574.589

Gupta, S., Davoodi, H., & Tiongson, E. (2001). Corruption and the provision of health care and education services. In *Routledge eBooks* (pp. 123–153). https://doi.org/10.4324/9780203468388-13

Hardi, I., Saputra, J., Hadiyani, R., Maulana, A. R. R., & Idroes, G. M. (2023). Decrypting the Relationship Between Corruption and Human Development: Evidence from Indonesia. *Ekonomikalia Journal of Economics*, *1*(1), 1–9. https://doi.org/10.60084/eje.v1i1.22

Helliwell, J. F., Huang, H., Grover, S., & Wang, S. (2014). Good Governance and National Well-being. *OECD Working Papers on Public Governance*. https://doi.org/10.1787/5jxv9f651hvj-en

Kurniawan, B., Kusdiana, D., Suryaman, R., và Priadana, M. (2023, December). The Influence of Macroeconomic Factors and Corruption on Human Development in ASEAN-7. *Proceedings of the 6th International Conference of Economics, Business, and*

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ISSN: 2456-7760

Entrepreneurship, ICEBE 2023, 13-14 September 2023, Bandar Lampung, Indonesia. http://dx.doi.org/10.4108/eai.13-9-2023.2341207

Labelle, H. (2011, April). Transparency as modernization of the State: Experiences, key actors and challenges. *Transparency as Modernization of the State Conference, Santiago de Chile*.

Linhartova, V., & Pucek, M. J. (2024). Corruption and Human Development: Panel Data Analysis in Transition Economies. Montenegrin Journal of Economics, 20(2), 169-182. https://doi.org/10.14254/1800-5845/2024.20-2.14

Malanski, L. K., & Póvoa, A. C. S. (2021). Economic growth and corruption in emerging markets: Does economic freedom matter? *International Economics*, *166*, 58–70. https://doi.org/10.1016/j.inteco.2021.02.001

Mauro, P. (1998). Corruption and the composition of government expenditure. *Journal of Public Economics*, *69*(2), 263–279. https://doi.org/10.1016/s0047-2727(98)00025-5

MichaelWoolcockMichael, M. a. H. G. F. J. (n.d.). *World development report 2006: equity and development*. World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/435331468127174418/world-development-report-2006-equity-and-development

Nawatmi, S. (2014). Korupsi dan pertumbuhan ekonomi negara-negara Asia Pasifik. *Jurnal Bisnis Dan Ekonomi*, *21*(1). https://media.neliti.com/media/publications/24209-ID-korupsi-dan-pertumbuhan-ekonomi-negara-negara-asia-pasifik.pdf

Ortega, B., Casquero, A., & Sanjuán, J. (2013). GROWTH IN HUMAN DEVELOPMENT: THE ROLE OF CORRUPTION. *Journal of International Development*, *26*(7), 974–998. https://doi.org/10.1002/jid.2963

Popova, Y., & Podolyakina, N. (2014). Pervasive Impact of Corruption on Social System and Economic Growth. *Procedia - Social and Behavioral Sciences*, *110*, 727–737. https://doi.org/10.1016/j.sbspro.2013.12.917

Thái, H. N., Minh, B. B., & Linh, Đ. H. (2023). Mối quan hệ giữa chỉ số phát triển con người, cơ sở hạ tầng công nghệ, năng lượng tái tạo và tăng trưởng kinh tế tại Việt Nam. *Tạp chí Kinh tế và Phát triển*, (315), 13-25. http://js.ktpt.edu.vn/index.php/jed/article/view/1123

Transparency International. (2022, January 22). *2015 Corruptions Perceptions Index - Explore the results*. Transparency.org. https://www.transparency.org/en/cpi/2015

Urbina, D. A. (2020). The Consequences of a Grabbing Hand: Five Selected Ways in Which Corruption Affects the Economy. *Economía*, *43*(85), 65–88. https://doi.org/10.18800/economia.202001.004