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IMPROVING HUMAN DEVELOPMENT IN ASIA: DO GOVERNMENT EXPENDITURE AND GOOD GOVERNANCE MATTER?

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Abstract

The low human development index in the Asian region requires the role of Government through budget spending policies and good governance. This study aims to analyze the effect of Government spending and good governance on the human development index and determine its ranking based on the new calculation model. The data used is panel data with a combination of 29 countries in Asia from 2010 to 2021. The variables used are the human development index, Government spending on education and health, good governance, GDP Per Capita, Unemployment, Population, Life Expectancy, ICT, and average and expected years of schooling used to rank countries. The analysis technique used is panel data regression with a fixed effect approach. The results show that government spending on education significantly affects the human development index, which has a positive relationship. Likewise, Government spending in the health sector significantly affects the human development index but has a negative relationship. Different results have shown that good governance does not significantly affect the human development index. As for the calculation results with the geometric mean, Singapore has the highest human development, while Pakistan and Myanmar have the lowest human development in Asian countries.

Keywords: *Government Expenditure, Government Expenditure on Education, Government Expenditure on Health, Good Governance Indicator, Human Development Index*

JEL Classification: *C23, H11, H51, H52, I31, O15*

INTRODUCTION

Development is an effort constantly being carried out by every country, whether it is still in the developing stage or already in the developed stage. There are three concepts in development. First, development is a process carried out through several stages, beginning at a specific starting point and ending in the final result at a different endpoint. Second, development is a form of transformation towards a better direction, such as an increase in the value and function of the object of development. Third, development is a combination of subjects as actors, which has a method as a guide in its implementation to achieve targets or targets in development objects (Hasan and Aziz, 2018). Development has a broad scope, but changes in the social structure of a more advanced society and good institutional governance. (Arsyad, 2014).

Changes in the social structure of society can be achieved through the process of human development. Human development can be defined as improving human resources' quality through empowerment programs to achieve essential human competencies so that they can participate in

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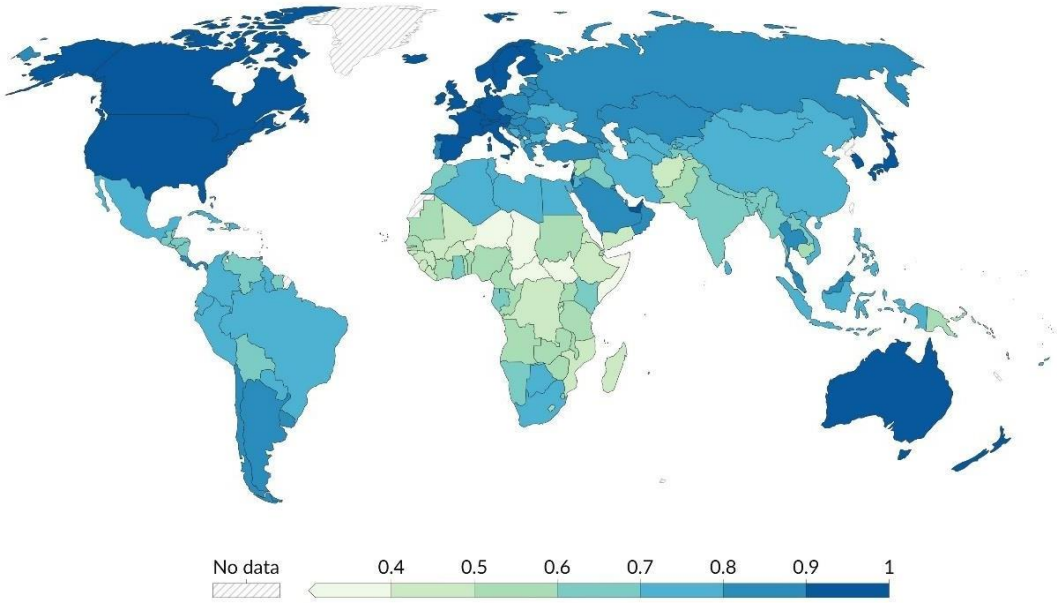
all development fields (Chalid and Yusuf, 2014). Human resource development is considered more than just economic growth and development and is an essential concern for every country (Banik et al., 2022). This is mainly due to it plays an important role in achieving sustainable development, which affects many areas (Ruzima & Veerachamy, 2023).

One of the indicators in assessing the success of human development is the human development index, which determines the success in improving the quality of life of the community and is the main component in assessing the development of a country (UNDP, 2020). In addition, the human development index also serves to explain the success of the Population in accessing the results of development that have been carried out through decent income, access to education to improve the quality of human resources, and access to health to improve people's living standards (BPS, 2009). Furthermore, As explained by Sen (2001), measuring the outcomes of development cannot rely on a single indicator, as it may lead to biased measurements. Instead, multiple interrelated indicators are needed (Chang, 2019). Therefore, this study believes that the Human Development Index (HDI) serves as an appropriate proxy for this research.



Source: Our World in Data (2024)
Fig 1. Human development Index

The figure above shows that European countries, North America, and Australia have a high human development index in the score range of 0.8 to 1. In contrast, countries in the Asian region have a varied human development index on average. Some have high scores and relatively moderate or even less. This shows that human development in Asian countries needs to be improved to catch up with European countries, North America, and Australia, considering that Asian countries have great potential in human and natural resources.

One indicator considered as the key to improving human development is government expenditure. Despite ongoing debates in the literature about the impact of government spending on human development (Anderson et al., 2018; Andrew & Onoriode, 2023). Research by Iheoma, (2022) has successfully bridged this debate. Iheoma emphasizes that government expenditure through subsidies plays a crucial role in fostering human development, particularly in lower-middle-income countries and below, due to economic uncertainties. In the context of this study, the focus is on Asian countries, which predominantly fall within this income group. Therefore, to achieve ideal human development, it is necessary to have assistance from the Government through Government spending.

It is noted that some countries constantly improve and increase Government spending policies to encourage the development of human resources (Prasetyo & Zuhdi, 2013). According to Gupta et al. (1998) Spending on the education and health sectors has a positive impact on human resource development, increases economic growth, and encourages equity to reduce poverty. Greater Government spending on primary and secondary education has a positive impact on widely used measures of educational attainment. Increased spending on health services also reduces child and infant mortality, both of which are included in the calculation of the human development index (Gupta et al., 2002). According to Miranda-Lescano et al. (2024), Government spending on health and education can improve the quality of human resources that are lacking due to inequality. Health spending can increase labor productivity, reduce mortality, and encourage people to be more involved in the learning and education process. Therefore, a country should increase its investment in the health and education sector to achieve overall development (Banik et al., 2022). However, productivity and public spending on education and health depend on how funds are allocated to these sectors through effective and efficient Government governance (Gupta et al., 1998).

Good governance and human development are interconnected concepts. If the governance conditions are not good, development in the country will undoubtedly suffer (Seifi et al., 2021). The condition of Government also represents development, whose success will depend on how far they go in creating good governance (Cheema & Maguire, 2001). Creating good governance is a challenging task. One of the most difficult challenges is the corruption of budgets that should be intended for development purposes (Banik et al., 2022). As a result, there are various problems, such as low levels of education and access to health services (Akçay, 2006). Therefore, good governance is an obligation for a country that wants advanced human development. On the other hand, promoting good governance and the rule of law has become a significant commitment for international development agencies, such as the UNDP and the World Bank (Gamlath, 2013).

The creation of ideal human development cannot be separated from good governance because both are related. If there is a deficiency in one aspect, it will affect the other aspect (Pradhan, 2011). Although good governance is related to human development, the dimension of good governance does not exist in the assessment

of the human development index and its complementary indicators, so there needs to be an effort to overcome this gap through innovation in creating a human development index model that includes aspects of good governance (Gamlath, 2013).

Based on the explanation of the problem above, the human development index in Asian countries is still relatively low. The Government plays a significant role in developing a country, providing access to education and healthcare services. The literature review suggests an initiative to conduct research on the relationship between government expenditure variables and good governance, as measured by the human development index. In addition, this study also tries to measure the new human development index by adding good governance variables into the calculation model. This research is expected to provide a meaningful contribution to understanding efforts to improve human development and serve as a valuable reference for policymakers in developing more effective strategies to generate sustainable development.

LITERATURE REVIEW

Theoretical Framework

Various theories on the role of human capital in sustainable development have been proposed, with experts agreeing that a high-quality workforce can drive economic growth and reduce poverty (Khaykin et al., 2020). There are two key aspects of building quality human capital namely education and health (Schultz, 1961; Becker, 1993). Expenditures on education and healthcare are considered investments in human capital because knowledge and health are inseparable from individuals, making them critical for human capital development (Mankiw et al., 1992). In the context of lower-middle-income countries, government spending is identified as a vital instrument for fostering growth (Shen et al., 2015). Therefore, to support substantial development in these nations, financial support through government expenditure is essential (Sachs, 2005).

Dabla-Norris et al. (2011) highlight that infrastructure management in lower-middle-income countries remains underdeveloped, leading to inefficient returns from private sector participation. Market failures, which are common in developing countries, are identified as the primary cause of this inefficiency (Rao, 2015). This result is supported by Basu et al. (2012), who examined the performance of the healthcare sector in low- and middle-income countries. Their findings indicate that private sector efficiency in these countries is limited, primarily due to more frequent violations of medical practice standards. In contrast, in the education sector, the private sector is perceived to perform better due to superior teaching methods or curricula (Day Ashley et al., 2014). However, this perspective is contradicted by the research of Mancebón & Mũiz (2008), who argue that the apparent success of the private sector is largely attributable to the more advantaged backgrounds of its students. These insights form the basis for prioritizing government spending as the explanatory variable over private sector involvement in this study to better explain variations in the Human Development Index.

Empirical Literature

Previous researchers have conducted research that discusses the effect of

Government spending and the dimensions of good governance on the human development index have been discussed several times. In general, these studies employ different approaches regarding the selection of explanatory and control variables, as well as the methodology used. Referring to research conducted by Gupta et al. (1998), the study compares the level of spending in each country, with the results showing that developing countries' spending on education and health is higher than that of countries in transition, yielding positive outcomes that can accelerate human development. Human development variables still require clarification, and the analytical techniques only compare the available data. So, there is a need for a more complete analysis. Different results were shown by Andrew & Onoriode (2023), who state that Government spending in the public sector has no relationship with the human development index in either the short or long term. This is due to the lack of adequate infrastructure to support activities in education and health.

Furthermore, similar studies discuss the effect of Government spending in the education and health sectors on the human development index conducted by Prasetyo & Zuhdi (2013), the study used a sample of 81 countries in the 2006-2010 time span with Data Envelopment Analysis (DEA) analysis. The results of this study show that an increase in Government spending in the education and health sectors will increase the human development index, so many countries are trying to increase their Government spending. However, this study needs to be more detailed in explaining the relationship between Government spending and the human development index, so it requires further analysis to determine the extent of the relationship between the two variables.

Additionally, research conducted by Miranda-Lescano et al. (2024) examines how public spending affects the decline in the human development index due to inequality. The results showed that spending in the education sector increased school enrollment rates, while spending in the health sector increased people's life expectancy. In this study, there is a variable of governance. However, it needs to be more widely discussed, considering that governance also plays a role in efforts to increase the human development index. More detailed research on the effect of good governance on the Human Development Index was conducted by Banik et al. (2022). Six indicators are used to measure good governance: Corruption Control, Government Effectiveness, Political Stability, Policy Quality, Rule of Law, and Political Rights. The results showed that the dimensions of good governance make spending in the health sector more effective, which will increase the human development index.

RESEARCH METHOD

Data

The data used is quantitative, using econometric models to draw research conclusions, which consists of a combination of cross-section data in the form of 30 Asian countries and time series from 2010 to 2020. The Human Development Index is the dependent variable in this study. HDI is an index created to measure the level of success of the community in accessing development. Its value consists of health aspects proxied by infant life expectancy, education aspects proxied by expected years of schooling and

average years of schooling, and income aspects proxied by per capita income (UNDP, 2020). to rank countries based on their human development index. The applied HDI model has the following calculation equation:

$$Indeks\ Dimension = \frac{Actual\ Value - Minimum\ Value}{Maximum\ Value - Minimum\ Value}$$

The equation is then applied to five individual variables: child life expectancy, expected years of schooling and average years of schooling, per capita income in logarithmic form, and good governance score generated by PCA. Then, the geometric mean calculation is used to obtain the index value. Calculation using the geometric mean is considered better because the index value per country can increase if the overall component increases, while if using the arithmetic mean, a decrease in the value of one component can be balanced by an increase in another component (Escosura, 2010; Gamlath, 2013)

Government expenditure in the health and education sectors is an independent variable in this study. The measurement of government expenditure uses percentage units obtained through the World Bank's and World Health Organization's data bank. In addition, good governance variables are independent variables. In this study, the measurement uses scores from Corruption Control, Government Effectiveness, Political Stability, and Policy Quality, where the data is obtained from the World Governance Indicator. The control variable consists of GDP, Unemployment, Electricity, ICT, and Population where the data is obtained from the World Development Indicator.

Table 1. Data and Data Sources

Variables	Description	Unit	Data Source
	Dependent Variable		
HDI	Human Development Index	Index	Human Development Report
	Independent Variable		
Health Expenditure	Percentage of government expenditure on health sector out of total GDP		Government Effectiveness,
Education Expenditure	Percentage of government expenditure on education sector out of total GDP		
Dimensions of Governance	*Normalized PCA* scores of Corruption Control,		

Percentage Health	World O	Percentage	W	Score	Worldwide Governance Indicator
rganization		orld Bank			

	Political Stability, Policy Quality		
Control Variables			
GDP	The sum of total economic output in a country of the year adjusted for inflation	Constant USD	Worldwide Development Indicator
Unemployment	Number of total labor force who are unemployed and ready to work	Percentage	Worldwide Development Indicator
Electricity	The percentage of population with access to electricity	Percentage	Worldwide Development Indicator
ICT	Investment in Information and Communication Technology Projects	Current USD	Worldwide Development Indicator
Population	The sum of the total population	unit	Worldwide Development Indicator

Analysis Technique

This study uses a dynamic panel data estimation method with a fixed effect approach to identify the dynamic relationship between exogenous and endogenous variables by considering cross-section characteristics. This dynamic model aims to see the impact of the delay of endogenous variables in the previous period. The existence of a correlation between endogenous variables and Lag in the previous period can cause endogeneity, so it needs to be included in the research model (Wonida & Setiastuti, 2023). The fixed effect approach is able to reduce the bias in the research model so that it becomes more accurate (Milner et al., 2018).

The model used in this study is as follows

$$HDI_{it} = \alpha_0 + \beta_1 HDI_{it-1} + \beta\, GEE_{2it} + \beta\, GEH_{3it} + \beta\, GGS_{4it} + \beta_5 (GEE_{it} \times GGS_{it}) + \beta_6 (GEH_{it} \times GGS) + X_{it}\Gamma_{it} + e_{it} \quad (1)$$

Based on the model above, it can be seen that the dependent variable in this study is the Human Development Index. The independent variables are government spending in the education sector, government spending in the health sector, and good governance. The control variable

is represented by Xit, which consists of GDP, Unemployment, Electricity, ICT, and Population.

The model refers to research conducted by Gupta et al. (1998) which discusses public spending in the education and health sectors on human development. Banik et al. (2022)

about the relationship between health spending and the human development index, Prasetyo & Zuhdi (2013) about the effect of education spending on the human development index, Miranda-Lescano et al. (2024), which discusses how the impact of public spending on the human development index is lost due to inequality. And the last one (Stylianou et al., 2023) which discusses the effect of government variables on the inclusive human development index.

RESULT & DISCUSSION

Table 2. Principal Component Analysis for All Indicators of Good Governance Indicator

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	4.582	3.727	0.763	0.763
Comp2	0.855	0.499	0.142	0.906
Comp3	0.355	0.254	0.059	0.965
Comp4	0.100	0.038	0.016	0.982
Comp5	0.062	0.019	0.010	0.992
Comp6	0.043	.	0.007	1.000

Source: data processed (2024)

The PCA table above shows the principal component values of different eigenvalues and proportions. Principal component results with an eigenvalue greater than one indicate that the component can be used for further analysis (Kaiser, 1960). Principal component one gets the largest eigenvalue above one with a proportion of 0.763, meaning that this component can explain 76.3% of the total variation in all indicators of good governance. Therefore, the score generated by the first component is used as a good governance score to estimate the human development index.

Table 3. Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
hdi	348	.731	.116	.5	.95
gee	300	3.629	1.375	.85	11.11
geh	348	4.717	2.078	1.6	11.44
ggs	348	.433	.216	0	1
gee ggs1	300	1.536	.886	.028	4.206
geh ggs1	348	2.14	1.845	0	9.678
gdp	348	29.344	4.369	20.98	37.26
unem	348	4.504	3.539	.1	19.84
elc	348	93.378	13.032	31.1	100
ict	348	4.673	.488	.185	5.4
pop	348	17.019	1.944	12.89	21.07

Source: data processed (2024)

The table above shows summary statistics, which include the mean value, standard deviation (SD), and minimum and maximum values of the selected variables. Some variables are converted into natural logarithm form namely GDP, ICT, and POP, as for the good governance variable obtained from normalized PCA.

The total number of observations amounted to 348 data points from 29 Asian countries between 2010 and 2021, excluding the Government Expenditure on Education variable and the interaction between Government Expenditure on Education and Good Governance Score, which comprised a total of 300 observations. These descriptive statistics represent the distribution of the data used.

Table 4. Pearson Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) hdi	1.000											
(2) L.hdi	0.997	1.000										
(3) gee	0.141	0.149	1.000									
(4) geh	0.237	0.251	0.326	1.000								
(5) ggs	0.560	0.563	-0.097	0.264	1.000							
(6) gee_ggs1	0.597	0.604	0.473	0.355	0.788	1.000						
(7) geh_ggs1	0.473	0.481	0.032	0.751	0.779	0.665	1.000					
(8) gdp	-0.040	-0.050	-0.253	0.001	0.063	-0.056	0.125	1.000				
(9) unem	-0.083	-0.076	0.115	0.143	-0.245	-0.160	-0.114	-0.060	1.000			
(10) elc1	0.518	0.528	0.321	0.105	0.082	0.268	0.073	-0.052	0.266	1.000		
(11) ict	0.542	0.545	0.164	0.185	0.405	0.389	0.282	-0.102	-0.146	0.376	1.000	
(12) pop	-0.207	-0.217	-0.179	-0.073	-0.050	-0.113	-0.007	0.715	0.115	-0.046	-0.176	1.000

Source: data processed(2025)

To produce good estimation results, it is necessary to test multicollinearity to check whether there are variables that have a very strong or perfect correlation, so that the estimation results are not biased. Based on the Pearson Correlation Matrix table above, the explanatory variables used to estimate the human development index are below one, so there is no multicollinearity problem in the research model. The variables of government expenditure and governance have a positive correlation, whereas, for the control variables, only unemployment and population have a negative correlation, which shows a unidirectional relationship

Table 5. Regression Result

	(1) Without Explanatory Variables	(2) Only Government Expenditure Variables	(3) With all Explanatory Variables	(4) With interaction of Explanatory Variables
L.HDI	0.804***	0.712***	0.712***	0.704***
	(20.24)	(14.57)	(14.53)	(14.34)
GEE		0.00228**	0.00228**	0.00580**
		(2.85)	(2.85)	(2.60)
GEH		-0.00388***	-0.00388***	-0.00482**
		(-5.65)	(-5.54)	(-3.24)
GGS			0.000828	0.0291
			(0.04)	(1.03)
GEE*GGS				-0.00898*
				(-1.69)
GEH*GGS				0.00161
				(0.57)
GDP	0.0120	0.0233***	0.0232**	0.0242***
	(1.96)	(3.44)	(3.30)	(3.44)
UNEMP	-0.0000462	-0.000152	-0.000158	-0.000124
	(-0.09)	(-0.23)	(-0.23)	(-0.18)
ELC	0.00000212	0.0000384	0.0000389	0.0000697
	(0.02)	(0.44)	(0.44)	(0.78)
ICT	0.00176	0.00440*	0.00438*	0.00368
	(1.04)	(2.53)	(2.43)	(1.89)
POP	-0.0142	-0.00571	-0.00566	-0.00856
	(-1.40)	(-0.43)	(-0.42)	(-0.63)

Constant	0.0263	-0.398	-0.396	-0.381
	(0.17)	(-1.90)	(-1.87)	(-1.79)
Observation	319	279	279	279
R-Squared	0.772	0.309	0.302	0.317
Country	29	29	29	29

Source: data processed (2024)

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

The regression results table above shows that the Government expenditure variable in the education sector significantly affects the Human Development Index, which indicates that Government expenditure in the education sector contributes to an increase in the Human Development Index in 29 Asian countries. The results of the above study indicate that Government spending on education affects the human development index in line with research conducted by Gupta et al., 1998 which discusses public spending in the education sector of human development. They consider that the level of expenditure in developing countries, especially those in transition, needs to increase spending on education, where the relationship is positive and can accelerate human development. Likewise, research by Li et al., 2024 This paper discusses the effect of public spending on education on the human development index lost due to inequality. The results show that spending in the education sector can increase school enrollment, which will ultimately impact the human development index in the future.

While the Government expenditure variable in the health sector significantly affects the human development index with a negative coefficient, this indicates an inverse relationship between government expenditure in the health sector and the human development index. This result is in line with research by Banik et al. (2022) which discusses the relationship between government spending in the health sector and the human development index. It has negative results indicating that the quality and efficiency of services in this sector are still less than optimal. In research, Alin & Marieta (2011) found that spending in the health sector has no effect on the human development index. That is because the costs in the health sector are relatively expensive, so the increase will reduce the estimated government spending in other sectors that may have more effect on the human development index. Different results were shown by Stylianou et al. (2023), which states that government spending in the health sector is closely related to the human development index. Given that health is an important factor in supporting human economic activity. So it can be said that the higher the level of public health in a country, the better its human resources will be, which will encourage development in that country.

Finally, The good governance variable does not have a significant impact on the Human Development Index (HDI). Similarly, the interaction between government health spending and good governance also shows no significant effect on HDI. Surprisingly, the interaction between government education spending and good governance is negatively correlated with HDI. This

suggests that good governance does not play a role in improving HDI. It also cannot strengthen the impact of government spending in the health sector and may even worsen the effect of government spending in education on HDI. According to Quibria (2015), many Asian countries have poor performance regarding good governance. On the other hand, each country in Asia has a unique political, social, and economic context, and it is impossible to create the same political governance model, so it will be more challenging to estimate simultaneously (Teodoro et al., 2023).

This result differs from the research conducted by Stylianou et al. (2023), which states that good governance is related to the human development index. However, this study separates the governance dimensions into several indicators so that according to them, one indicator is dominant to the human development index. Likewise, research by Banik et al. (2022) shows that good governance variables can moderate Government spending in the health sector and contribute to the human development index. Thus, improvisation is needed to improve good governance and contribute to the human development index. This is because good governance can reduce the level of corruption that negatively impacts a country's development, be it in infrastructure or human development. The better the governance, the lower the level of corruption, and the more effective and efficient the development (Akçay, 2006).

Table 6. Robustness Check

Variables	Coef.	Std. Error	t-value	Sig.
L.HDI	.699	.081	8.66	***
GEE	.001	.001	1.26	
GEH	-.004	.002	-2.32	**
GGS	.021	.032	0.66	
GEE_GGS	-.001	0	-2.16	**
GEH_GGS	0	0	1.18	
GDP	.025	.009	2.79	***
UNEM	0	.001	-0.12	
ELC	0	0	0.44	
ICT	.004	.002	2.52	**
POP	-.011	.017	-0.66	
Constant	-.351	.26	-1.35	

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

Robustness checks are performed to test for robustness and address heteroscedasticity issues in the model. In general, robustness checks are applied to provide necessary or sufficient evidence to provide structural validity (Lu & White, 2014). Based on the robustness check table above, the test results are not much different from the

panel data regression results. Therefore, it can be concluded that the robustness of the model used is quite strong.

Table 7. Geometric Mean of Calculation NHDI

Countries	NHDI Score	Countries	NHDI Score with Governance Score	Rank Change
Singapore	20.62	Singapore	11.22	1
South Korea	20.44	Japan	10.86	1
Japan	20.37	South Korea	10.51	-1
United Arab Emirates	19.24	United Arab Emirates	9.92	-
Kazakhstan	18.78	Qatar	9.48	2
Bahrain	18.75	Oman	9.12	2
Qatar	18.36	Malaysia	9.09	4
Oman	18.34	Kazakhstan	8.55	-3
Iran	18.09	Jordan	8.38	6
Brunei	18.08	Thailand	8.31	2
Malaysia	17.88	Bahrain	8.17	-5
Thailand	17.56	Indonesia	7.79	7
Azerbaijan	17.48	Azerbaijan	7.77	-
Kyrgyzstan	17.10	Philippines	7.73	4
Jordan	17.10	Brunei	7.68	-5
Uzbekistan	17.05	Vietnam	7.68	4
China	16.66	Kyrgyzstan	7.47	-3
Philippines	16.26	China	7.32	-1
Indonesia	16.21	Iran	7.27	-10
Vietnam	16.20	Cambodia	7.16	7
Tajikistan	16.18	Bangladesh	7.14	3
India	14.15	India	7.01	-
Timor Leste	14.09	Uzbekistan	6.88	-7
Bangladesh	13.91	Timor Leste	6.88	-1
Laos	13.57	Tajikistan	6.50	-4
Myanmar	13.12	Laos	6.23	-1
Cambodia	12.80	Nepal	5.96	1
Nepal	12.79	Pakistan	5.47	1
Pakistan	11.62	Myanmar	5.15	-3

Source: data processed (2024)

The table compares NHDI (New Human Development Index) scores and rankings with and without considering governance and the changes in rankings that occur. Some countries experience significant improvements when governance is taken into account, such as Thailand and

Indonesia, which move up 7 positions each, and Iran, which moves up 6 positions, demonstrating the importance of governance factors in supporting human development. Conversely, some countries such as Iran and Timor Leste experienced sharp declines despite having high NHDI

scores, indicating that governance is their Achilles' heel. Singapore and the United Arab Emirates retained the top rankings in both versions of the score, signaling a balance between the quality of governance and development. On the other hand, countries like Pakistan and Myanmar remain in low positions, reflecting serious challenges in human development and governance. Overall, this table illustrates that improvements in governance can have a significant impact on the NHDI ranking, as seen by the improved rankings of Indonesia and Thailand, which indicate progress in public policy and governance.

CONCLUSION & RECOMMENDATION

The role of government on human development in a country is very dominant, be it through budget spending policies or good governance. This study aims to analyze the effect of government spending and good governance on the human development index and also tries to measure the new human development index by adding good governance variables into the calculation model. The results show that government spending in education significantly affects the human development index with a positive relationship, meaning that an increase in spending in the education sector will contribute to an increase in the human development index. Likewise, government expenditure in the education sector, based on the government expenditure variable in the health sector, significantly affects the human development index with a negative relationship, indicating that the quality and efficiency of services in this sector still need to be improved.

Different results are shown by good governance and its interaction with government expenditure, with results that have no significant effect on the human development index. This indicates that good governance does not contribute to improving the human development index. Poor governance performance and different Government structures in each Asian country are the main causes of this insignificance. In the results of the human development ranking from 2010 to 2021, it is found that Singapore has the highest human development in Asia with a score of 20.62 and 11.22 for calculations that include governance indicators. Meanwhile, the country with the lowest human development is Pakistan, with a score of 11.62, while in the calculation that includes the governance indicator, it is Myanmar, with a score of 5.15.

High Government spending must also be accompanied by effectiveness and efficiency in budget absorption to contribute to human development. On the other hand, Asian countries need to improve their governance performance. Given that the level of corruption in Asian countries is still relatively high, it can reduce the effectiveness of budget absorption, which should be used for the benefit of the community instead of only used by some people. Therefore, good governance requires high integrity, responsibility, and innovation in managing expenditures in education and health, so the resulting impact is more significant on human development. The limitation of this study is that not all countries in the Asian continent are used as observation units, especially countries that are experiencing war crises, likewise with the availability of country data in one of the variables. On the

other hand, other variables are still considered influential on the human development index but are not included in the model. Therefore, it can be considered by future researchers who will examine similar themes to produce broader research results.

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