

Quality of Human Resources for Sustainability: Human Capital Theory Perspective

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Abstract

Purpose: This study aims to analyze the influence of corruption and political stability on the quality of human resources.

Research Methodology: The research was conducted in 62 countries in the Asia, Europe, and America regions during the 2020–2024 period, which was analyzed using a panel regression method with a fixed effects approach.

Results: In aggregate, the primary research findings indicate that corruption and political stability have a significant negative effect on human resource quality. However, regional analysis reveals heterogeneity. In the Americas, corruption and political stability have a positive effect on human resource quality, although the effect of political stability is not significant. In Asia, corruption has a positive effect, while political stability has a negative effect. Conversely, in Europe, corruption has a negative effect and political stability has a positive effect on human resource quality. These differences indicate that the relationship between institutional factors and human resource quality is influenced by the characteristics of governance, economic conditions, and institutional capacity in each region.

Conclusions: Corruption and political stability have a negative and significant effect on human resource quality.

Limitations: This research only covers 62 countries based on a survey conducted by the International Institute for Management Development (IMD) World Competitiveness Center.

Contributions: Academically, this study extends the literature by placing political factors and corruption within the framework of Human Capital Theory and offers a new measurement of human resource quality. Practically, the results can be used as a basis for formulating contextual human resource development policies.

Keywords: *Corruption, Human Capital Theory, Political Stability, Quality of Human Resources*

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1. Introduction

The quality of human resources remains a major challenge for many countries, particularly developing and poor countries. This is because the quality of human resources in these countries lags behind that of developed countries, both in terms of education, workforce skills, and the ability to adapt to technological developments and innovation. Data from the [Transparency \(2025\)](#) shows that the quality of human resources in most developing and poor countries remains ranked 40th or lower out of 67

countries surveyed over the past three periods. According to [Zubaidi, Cahyono, and Maharani \(2019\)](#), this condition indicates that the quality of human resources in these countries is still relatively low, which in the long term can lead to poor financial reporting quality, triggering investor distrust and ultimately hampering sustainable development, increased exploitation of natural resources, triggering significant losses that hinder the achievement of sustainable development ([Zallé, 2019](#)).

Based on the Human Capital Theory proposed from [Becker \(1964\)](#), quality human resources are the result of long-term investment in education, training, and skills development. Adequate investment will increase individual productivity and organizational performance, while low investment can hinder the development of quality human resources. Therefore, many developing and poor countries continue to strive to improve the quality of human resources through the provision of educational facilities, training, and skills development programs. According to [Aman-Ullah, Mehmood, Amin, and Abbas \(2022\)](#), improving the quality of human resources is an important goal for every country because it has been proven to improve organizational performance, encourage the country's economic growth, and ensure sustainable development runs well ([Saleh, Surya, & Manda, 2020](#); [Kim, & Go, 2020](#)). However, these efforts often face various obstacles, particularly corruption, which can reduce the effectiveness of government spending in the education and health sectors and the quality of public services, thus hampering the improvement of human resource quality ([Emara, 2020](#); [Urbina, & Rodriguez, 2022](#); [Celik, & Kostekci, 2025](#)). Political instability, which triggers policy uncertainty and disrupts the sustainability of development programs, particularly in the education and health sectors, thus hampering the improvement of human resource quality ([Quedraogo, Tabi, Ondo, & Jiya, 2022](#); [Rakolobe, & Teise, 2025](#)).

Current studies that comprehensively examine the effects of corruption and political stability on human capital quality, considering inflation as a control variable in a single model for Europe, the Americas, and Asia, have not been tested in the scientific literature. Existing studies are still partial and focus on specific country or regional contexts. For example, studies by [Bazie, Thiombiano, and Maiga \(2024\)](#) examined the effect of corruption on human development in African countries. Theoretically, this study reinforces the view that institutional quality is a crucial factor in human development, while empirically it shows that corruption hinders the improvement of human resource quality by reducing the effectiveness of public spending. However, this study was limited to Africa, so the generalizability of the results to other regions is limited. [Quedraogo et al. \(2022\)](#) showed that political stability plays a crucial role in improving human development in Africa. Their main contribution lies in confirming that political stability supports the effectiveness of public policies, but this study did not consider macroeconomic factors, such as inflation, which can also affect human resource quality. Study by [Hoa \(2020\)](#) showed that corruption negatively impacts human capital accumulation in Vietnam. This study provides empirical evidence on the mechanisms by which corruption reduces the effectiveness of investments in education and health. However, the study's single-country focus limits the external validity of the findings. [Abdulla \(2021\)](#) found that corruption reduces the quality of human development in the United States by decreasing the effectiveness of public services. This study's contribution extends the empirical evidence on the impact of corruption in developed countries, but it does not simultaneously consider the influence of political factors and macroeconomic conditions. [Khan and Waqas \(2020\)](#) examined developing countries and showed that corruption hinders human capital development, particularly in countries with high economic inequality. This study adds to the literature by emphasizing the importance of institutional quality in human resource development, but it fails to account for differences in regional characteristics that can lead to variations in research results, and [Linhartova and Pucek \(2024\)](#) found that corruption negatively impacts human development by weakening governance. The empirical contribution of this study is that it provides evidence from countries with relatively strong institutions. However, the study's limited scope in Central Europe makes the findings difficult to generalize to countries with different institutional characteristics. These varying findings are due to differences in institutional quality, governance capacity, level of economic development, and social characteristics across countries, which are suspected to be contributing factors. Therefore, the relationship between corruption, political stability, and human resource quality requires further research, particularly in Asian, American, and European countries.

This research is novelty in three main aspects. First, it uses a cross-continental perspective by analyzing countries in Asia, the Americas, and Europe, thus providing a more comprehensive understanding of the influence of corruption and political stability on human resource quality across various institutional and economic contexts. Second, it includes inflation as a control variable to capture the influence of macroeconomic conditions that potentially affect human resource quality, resulting in a more comprehensive model. Third, it uses the Human Resources Competitiveness Index from the IMD World Competitiveness Center as an alternative measure of human resource quality. In contrast to previous studies that generally used the Human Development Index of [Emara \(2020\)](#), [Scholl and Schermuly \(2020\)](#), [Urbina and Rodríguez \(2022\)](#), and the human capital index of [\(Costa, Pádua, & Moreira, 2023\)](#); [Diebolt, & Hippe, 2019](#); [Sarto, Saggese, Viganò, & Mauro, 2020](#)) this index provides a broader perspective because it measures human resource competitiveness through aspects of talent, skills, workforce readiness, and adaptability to global change.

This study aims to obtain new empirical evidence that comprehensively explains how corruption and political stability affect the quality of human resources in Europe, America, and Asia, and fills the research gap. The results are expected to enrich the existing literature by providing a cross-continental perspective on the relationship between corruption, political stability, and the quality of human resources. Furthermore, these findings are expected to provide a basis for governments to determine practical policies related to controlling corruption and creating healthy and conducive political stability that can be implemented to improve the quality of human resources to ensure sustainability.

2. Literature Review and Hypotheses Development

2.1 Human Capital Theory

This study uses the Human Capital Theory developed by [Becker \(1964\)](#) as the primary theoretical foundation. This theory explains that the quality of human resources is the result of sustained investment in education, health, and skills development. However, the effectiveness of these investments is influenced by the quality of governance and economic conditions. From this perspective, corruption reduces the effectiveness of human capital investments through misuse and inefficient allocation of public resources, particularly in the education and health sectors, thus hindering improvements in HR quality ([Emara, 2020](#); [Hoa, 2020](#)). Conversely, political stability creates policy certainty that supports the sustainability of investment in human capital through the provision of more effective and consistent public services ([Ouedraogo, Tabi, Ondoa, and Jiya, 2022](#)). Therefore, countries with low levels of corruption and good political stability tend to have higher quality HR because they are able to manage public resources more efficiently ([Khan and Naeem, 2020](#); [Liu, Modrek, and Sieverding, 2019](#)). Meanwhile, high inflation reflects macroeconomic instability that reduces household purchasing power, increases investment costs in education and health, and narrows the government's fiscal capacity to finance public services that support human capital formation ([Habib, Awolaja, Aworinde, Dafuleya, and Ogunsumi, 2025](#)). Thus, Human Capital Theory not only explains the importance of investing in human capital but also emphasizes that the returns on such investments are significantly influenced by the quality of governance and economic stability. When corruption is suppressed, political stability is maintained, and inflation is controlled, investments in education, health, and skills development will result in more optimal human capital accumulation. Conversely, failure to create a conducive institutional and economic environment will reduce the efficiency of human capital investment, thus hindering improvements in human resource quality. Therefore, this study argues that controlling corruption, strengthening political stability, and maintaining price stability are complementary prerequisites for supporting the development of quality and sustainable human resources.

2.2 Corruption and Quality of Human Resources

Human resources are a key element of an organization that needs to be developed through education and training to produce professional and qualified individuals to maintain sustainable development. According to [Darmawan, Mardikaningsih, Sinambela, Arifin, Putra, and Hariani \(2020\)](#), quality human resources are individuals who possess high professionalism and good work skills, characterized by adaptive insight and competence, effective communication, discipline, integrity, objectivity in decision making, and the ability to mentor others. However, efforts to improve the

quality of human resources often face various structural obstacles, one of which is corruption ([Emara, 2020](#); [Urbina, & Rodríguez, 2022](#)). Corruption, defined as the abuse of public office for personal or group interests by [Gorsira, Denkers, and Huisman \(2018\)](#) and [Transparency \(2025\)](#), has been shown to hinder human development through distortions in the allocation of public resources and reducing the effectiveness of public services that can occur in various sectors such as: the pharmaceutical industry, media, education, banking, government, and even sports organizations ([Arif, & Rawat, 2018](#); [Capasso, Cicatiello, & Santoro, 2022](#); [Castro, & Pinho, 2021](#); [Fhima, Nouira, & Sekkat, 2023](#); [Thompson, 2018](#)). Therefore, its eradication requires a comprehensive approach through top-down strategies, such as strengthening anti-corruption institutions and regulations, as well as bottom-up strategies through public participation, media oversight, the use of technology for transparency, and anti-corruption education to build a culture of integrity ([Boufounou, Eriotis, Kounadeas, Argyropoulos, & Pouloupoulos, 2024](#); [Brusca, & Aversano, 2018](#); [Campbell, 2020](#)).

From the perspective of Human Capital Theory [Becker \(1964\)](#), corruption acts as a factor that weakens the effectiveness of public investment in the education and skills development sectors, which should be the main foundation for the formation of quality human capital. Corruption committed by certain officials through budget manipulation, either in the form of markups or diversion of funds, often involves collusion with the private sector in fictitious projects or the procurement of substandard educational facilities. As a result, the resulting educational facilities are of low quality or even non-existent, thus disrupting the teaching and learning process, reducing the motivation of educators and students, and limiting the accumulation of individual knowledge and competencies. Furthermore, corrupt practices also encourage the birth of public policies that do not support the strengthening of human capital, because budget allocations are directed more toward projects that benefit certain groups rather than education and skills training for the community. In the long term, this condition hinders the process of developing quality human resources, reduces national productivity, and weakens the potential for sustainable economic growth ([Duerrenberger, & Warning, 2018](#); [Sahnoun, & Abdennadher, 2020](#)).

Various cross-country studies consistently show that corruption negatively impacts the quality of human resources, such as studies conducted by [Hoa \(2020\)](#) in Vietnam, [Abdulla \(2021\)](#) in the United States, [Linhartova and Pucek \(2024\)](#) in Central, [Emara \(2020\)](#) in Egypt, and [Khan and Waqas \(2020\)](#) in developing countries, which found that increased corruption can reduce the quality of human capital through inefficient public spending, weakened governance, and reduced access to and quality of education and health services. These findings strengthen the argument of Human Capital Theory that the higher the level of corruption, the lower the effectiveness of human capital investment, so that the quality of human resources tends to decline. In summary, all these studies have in common that corruption is a structural barrier that undermines the quality of human resources by weakening the effectiveness of public resource management, although there are differences in the mechanisms emphasized. However, these studies were conducted in different contexts, ranging from developing countries, developed countries, to specific regions, according to the quality of institutions, governance capacity, and level of economic development of each country. In addition, most studies use the Human Development Index or Human Capital Index as a proxy for human resource quality. Based on this explanation, the formulation of the hypothesis is as follows:

H₁: Corruption has a negative effect on the quality of human resources

2.3 Political Stability and Quality of Human Resources

Political stability is a crucial factor in supporting human resource development because it creates a conducive environment for the formulation and implementation of long-term public policies. Political stability is defined as a condition in which the government system and political institutions are able to function effectively without significant disruption due to conflict, violence, or political uncertainty ([Agheli & Taghvace, 2022](#)). In a stable political environment, the government has a greater capacity to maintain the sustainability of development policies, increase the effectiveness of public spending, and strengthen the quality of institutions responsible for the provision of education and health services. Political stability also reduces uncertainty that can hinder investment, including investment in

education, training, and workforce skills development. Furthermore, a stable political environment allows the government to allocate resources more consistently to strategic sectors that support human capital development. Therefore, political stability not only contributes to economic growth and investment ([Cox, & Weingast, 2018](#); [Hamdaoui, Ayouni, & Maktouf, 2022](#); [Alshubiri, 2022](#); [Sabir, & Khan, 2018](#)). But also plays an important role in creating conditions that support improving the quality of human resources through policy sustainability, strengthening institutional capacity, and optimizing public services, especially in the fields of education and health.

From the perspective of Human Capital Theory [Becker \(1964\)](#), political stability is a crucial prerequisite for long-term investment in education, health, and skills development, which serve as the foundation for developing high-quality Human Resources (HR). Political stability creates policy certainty, enabling the government to allocate resources consistently and sustainably to support HR development. Conversely, political instability increases policy uncertainty, disrupts the implementation of education and health programs, and shifts budget priorities toward conflict resolution or short-term interests. These conditions reduce the effectiveness of human capital investments and hinder improvements in HR quality. Therefore, Human Capital Theory explains that the benefits of human capital investments will be optimal when supported by a stable political environment and effective governance. However, this relationship is not always linear. From the perspective of Institutional Theory [North \(1990\)](#), the benefits of political stability depend heavily on the quality of the institutions that manage public resources. Political stability will only improve HR quality if accompanied by transparent governance, an effective bureaucracy, and strong accountability. Conversely, political stability in a system with low institutional quality can perpetuate inefficiencies, reinforce political patronage, and slow down education and health reforms, thus limiting their benefits to HR development. The relationship between political stability and human resource quality is also influenced by various contextual factors, such as the level of economic development, government fiscal capacity, bureaucratic quality, level of corruption, and development disparities between regions.

Literature on the impact of political stability on human resource quality is still relatively limited. Several studies that specifically examine the impact of political stability on human resource quality have produced consistent findings. [Ouedraogo, Tabi, Ondo, and Jiya \(2022\)](#) demonstrated that political stability promotes human capital development through the sustainability of public policies in African countries. The study's primary contribution is demonstrating the importance of political stability as a prerequisite for effective investment in the education and health sectors, although its scope is limited to the African region, thus limiting the generalizability of its findings. [Liu, Modrek, and Sieverding \(2019\)](#) found that political conflict in Egypt negatively impacted public mental health, which in turn reduced the quality of human capital. This study broadens understanding of the indirect mechanisms of the relationship between political stability and human resource quality, but focuses more on the impact of conflict and therefore fails to capture the influence of political stability under relatively normal governance conditions. [Rakolobe and Teise \(2025\)](#) demonstrated that political instability in Lesotho disrupted the consistency of education policy implementation, thus hindering improvements in human resource quality. This study's contribution lies in explaining the importance of policy consistency, but the single-country context limits the applicability of the results to countries with different institutional characteristics. These limitations indicate that the relationship between political stability and human resource quality requires further testing, particularly in the context of developing countries with diverse institutional characteristics like Indonesia. This testing is important because political stability does not necessarily automatically lead to improved human resource quality; instead, it depends on the government's ability to maintain policy consistency and manage public resources effectively. Based on this explanation, the formulation of the hypothesis is as follows:

H₂: Political stability has a positive effect on the quality of human resources

3. Research Methodology

This research is a quantitative study focusing on 62 countries in Asia, Europe, and America with an observation period of 2020-2024 because it encompasses the COVID-19 pandemic and post-pandemic

recovery phase, marked by significant changes in economic, political, and governance conditions. This period was also marked by inflationary pressures and various public policy adjustments that could potentially impact human resource quality. Therefore, this period provides a relevant context for analyzing the influence of corruption, political stability, and inflation on human resource quality. Countries in the African region were not included because they were not surveyed by the IMD World Competitiveness Center. Furthermore, 2025 data was not analyzed because it was not available until the study was completed in January 2026. This research was conducted with the consideration that previous research on the influence of corruption and political stability on HR quality with inflation as a control variable was still partial and only focused on certain regions or countries, so the research results were still exclusive. The selection of 62 countries as samples was based on purposive sampling, with three main criteria: (1) countries surveyed by the International Institute for Management Development (IMD) World Competitiveness Center and have HR competitiveness index data, (2) have corruption perception index data from Transparency International, (3) have political stability index data and inflation data from the World Bank. Furthermore, based on these criteria, the total number of observation panels during the 2020-2024 period was 310 observation.

This study uses human resource quality as the dependent variable and corruption and political stability as independent variables. Corruption, political stability, and inflation were chosen because they theoretically play a role in determining human resource quality. Corruption reduces the effectiveness of investment in the education and health sectors through misuse and inefficient budget allocation, thus hampering human resource quality. Political stability creates policy certainty and supports the sustainability of investment in education, health, and skills development, thereby boosting human resource quality. Inflation is included as a control variable because it reflects macroeconomic conditions that can influence human resource quality through public purchasing power, investment in education and health, and government fiscal capacity. The operational definition and measurement of each variable are further explained in the following Table 1.

Table 1. Operational definition and measurement of variables

Variables	Operational Definition	Measurement	Scale	Data Source
Quality of Human Resources	human resources possessing the knowledge and competencies to support their work, thus achieving high competitiveness, as assessed by an index score	Human resource quality is measured using the Human Resource Competitiveness Index. This measurement is used because it better reflects the quality of HR compared to other measurements, because this measurement describes the level of HR absorption by industry at the global level.	Ratio	International Institute for Management Development (IMD) World Competitiveness Center

Variables	Operational Definition	Measurement	Scale	Data Source
Corruption	the abuse of authority by the executive branch, resulting in losses to the state, which is assessed using an index score.	Corruption is measured using the Corruption Perception Index, which refers to research (Adam, 2020 ; Cooray and Dzhumashev, 2018). This measurement is used because it is the most widely used indicator to describe the level of public sector corruption based on the perceptions of experts and businesspeople. The CPI is able to capture corrupt practices that are difficult to observe directly and provides consistent and comparable data across regions and time periods.	Ratio	Transparency International
Political Stability	situation in which the government or political system is protected from actions such as significant unrest, violence, and chaos, as reflected in the index score	Political stability is measured using the Political Stability Index, based on research (Agheli and Taghvae, 2022 ; Aydin, 2022). Political stability is measured using the Political Stability Index because this index is able to describe the level of government stability, political security, as well as the risk of conflict, violence, and change of government that can influence the implementation of public policy.	Ratio	World Bank

Variables	Operational Definition	Measurement	Scale	Data Source
Inflation	general increase in the prices of goods and services over a specific period, expressed as a percentage.	Inflation is measured using the inflation rate based on research (Adaramola and Dada, 2020; Khan and Waqas, 2020). This measurement is used because it directly reflects general changes in the prices of goods and services, which affect people's purchasing power and economic stability. The inflation rate is also the most commonly used macroeconomic measure to assess price pressures.	Ratio	World Bank

This study uses panel data regression because it combines time and individual dimensions, thereby increasing the number of observations, reducing potential bias due to unobserved heterogeneity, and producing more efficient parameter estimates than cross-sectional or time-series regressions alone. Regression model selection is carried out in stages using the Chow Test, the Hausman Test, and the Lagrange Multiplier (LM) Test. The Chow Test is used to determine whether the Fixed Effect Model is more appropriate than the Common Effect Model, the Hausman Test is used to choose between the Fixed Effect Model and the Random Effect Model based on the assumed correlation between individual effects and independent variables, while the Lagrange Multiplier Test is used to evaluate whether the Random Effect Model is more appropriate than the Common Effect Model. This approach ensures that the estimation model used is the most appropriate model for the characteristics of the research panel data.

$$QHRit = a + b1Corpit + b2PSit + b3Iit + etit \quad (1)$$

The panel data regression model for this study is as follows in Formula 1 above. Information: QHR as Quality of Human Resources, Corp as Corruption, PS as Political Stability, I as Inflation, et as error term, and it as Panel Data. Furthermore, this study conducted additional tests by testing the regression models separately on each continent to identify whether the impact of corruption and political stability on human resource quality, with inflation as a control, is uniform or significantly different. Furthermore, this study conducted a robustness test to ensure that the main estimation results were consistent and insensitive to changes in estimation methods. The robustness test procedure was performed by re-estimating the model using robust standard errors to address potential heteroscedasticity and autocorrelation in panel data. Next, the robust estimation results were compared with the main estimation results based on the direction of the coefficients, the level of statistical significance, and the magnitude of the influence of each variable. The research results were considered robust if the coefficient signs and variable significance remained consistent across both estimation models.

4. Results and Discussions

4.1 Results

4.1.1 Descriptive Statistics

This study involved 62 countries in Asia, Europe, and America surveyed by the Institute for Management Development (IMD) World Competitiveness Center for the period 2020-2024. The complete results of the descriptive statistical test are presented in the following Table 2.

Table 2. Summary descriptive statistics

Variables	N	Minimum	Maximum	Mean	Std. Dev
Quality of HR	310	20.93	100.00	62.36	16.47
Corruption	310	13.00	90.00	58.64	17.91
Political Stability	310	11.79	100.00	71.42	24.60
Inflation	310	0.07	135.42	5.87	11.13
Valid N (listwise)	310				

Descriptive statistics in Table 2 show that Switzerland ranks highest in human resource quality with an index of 100, supported by stable governance, innovative education, and efficient healthcare (Hubschmid-Vierheilig, Rohrer, and Mitsakis, 2020). Conversely, Mongolia ranks lowest due to limited educational infrastructure, geographic disparities, and fiscal capacity (Dembereldorj, Gompil, and Davaadorj, 2023). In terms of corruption, Denmark demonstrates transparent and accountable governance, while Venezuela faces high corruption due to centralized power and weak institutions, which undermine public services and human resource development (Petrenko, Zverhovskaya, Pavlichenko, Petrenko, and Sybiha, 2019; Roht-Arriaza and Martínez, 2019). In terms of political stability, Singapore performs best through a strong government, efficient bureaucracy, and high legitimacy, which encourage investment in human resources and workforce transformation (Hwang, 2020). Conversely, Venezuela experiences serious political instability due to power conflicts and the erosion of democracy, resulting in the collapse of public services and a social crisis (Kirikkaleli, 2020). In terms of inflation, Argentina recorded the highest rate due to inconsistent macroeconomic policies, which reduced purchasing power and access to education and nutrition (Hernández and Luzzi, 2023), while Bahrain, with the lowest inflation, was able to maintain price stability and expand fiscal space for human resource development.

4.1.2 Panel Data Regression Model Estimation and Hypothesis Testing

Panel data estimation to find the best regression model must be done through the Chow Test, Hausman Test and Lagrange Multiplier Test. The complete results of the panel data regression model estimation test using the Chow Test, Hausman Test, and Lagrange Multiplier Test are presented in Table 3.

Table 3. Result of the panel data regression model estimation test

Description	Chow Test	Chow Test	Hausman Test	Hausman Test	Lagrange Multiplier Test	Lagrange Multiplier Test
Description	Statistic	Prob	Statistic	Prob	Statistic	Prob
Cross-section F	83.404765	0.0000				
Cross-section random			19.164382	0.0018		
Cross-section Breusch-Pagan					19.164382	0.0000

The Chow test results indicate that the selected model is a fixed-effects model, while the Hausman test and the Lagrange multiplier test yield fixed-effects and random-effects models. Therefore, the selected and appropriate panel data estimation model is the fixed-effects model. Next, we tested the hypothesis using a fixed effects model. The complete results of the hypothesis testing using the fixed effects model are presented in Table 4.

Table 4. Main test results based on OLS regression and hypotheses testing results

Variables	Main Model			Conclusion
	t-statistic	Sig		
Corruption	-0.851	-22.545	0.000***	Supported
Political Stability	-0.053	-1.965	0.050*	Not Supported
Inflation	-0.077	-1.868	0.063*	
Adjusted R-squared	0.772			
Sig F-statistic			0.000***	

Table 4 shows that the main model test indicates that corruption have a significant negative effect on human resource quality, thus supporting H_1 . Furthermore, political stability have a significant negative effect on human resource quality, thus not supporting H_2 . The test results also confirm that the regression model is feasible and significant. The Adjusted R-Square value indicates that variations in human resource quality can be explained by corruption and political stability, while the remainder is influenced by other factors.

4.1.3 Hypotheses Testing for Each Continent

Furthermore, this study conducted tests for each continent. This aimed to determine whether corruption and political stability, as measured by inflation, had the same or different impacts on human resource quality across the continents. The complete results of the hypotheses testing for each continent are presented in Table 5.

Table 5. Hypotheses testing results for america, europe, and asian continent

Continent	Variables	Coefficient	t-Statistic	Sig	Conclusion
America	Corp	0.678	4.854	0.000	Not Supported
	PS	0.101	0.820	0.417	Supported
	I	-0.027	-0.494	0.624	
	Adj R-squared	0.791	0.791	0.791	
	Sig F-statistic	0.000	0.000	0.000	
Asian	Corp	0.697	11.063	0.000	Not Supported
	PS	-0.105	-2.723	0.008	Not Supported
	I	-0.204	-2.328	0.022	
	Adj R-squared	0.634	0.634	0.634	
	Sig F-statistic	0.000	0.000	0.000	
Europe	Corp	-0.898	-20.824	0.000	Supported
	PS	0.170	3.158	0.002	Supported
	I	-.253	-1.992	0.048	
	Adj R-squared	0.833	0.833	0.833	
	Sig F-statistic	0.000	0.000	0.000	

The results of the test on the influence of corruption and political stability, controlled for inflation, on the quality of human resources in each continent (Asian, Europe, and the America) showed heterogeneous results. In the America, corrupt practices and political stability had a positive impact on the quality of human resources, although the effect of political stability was not significant. Furthermore, in the Asian region, corruption had a positive influence and political stability had a negative influence on the quality of human resources. Finally, in the Europe region, corruption had a negative influence on the quality of human resources, while political stability had a positive influence on the quality of human resources.

4.1.4 Robustness Test

Robustness tests were conducted to determine whether the research findings in the main study were consistent. Robustness tests were conducted using different measures of human resource quality. The

new measure for human resource quality uses the Human Development Index ([Emara, 2020](#); [Scholl and Schermuly, 2020](#); [Urbina and Rodríguez, 2022](#)). The results of the robustness tests are presented in the following Table 6.

Table 6. Robustness test results

Variables	Main Model			Robustness Test		
	t-statistic	Sig	Coefficient	t-statistic	Sig	
Corp	-0.851	-22.545	0.000***	-0.317	-18.854	0.000***
PS	-0.053	-1.965	0.050*	-0.040	-2.726	0.007***
I	-0.077	-1.868	0.063*	-0.003	-0.567	0.571*
Adjusted R-squared	0.772			0.700		
Sig F-statistic			0.000***			0.000***

Table 6 presents the results of a model robustness test by replacing the measurement of human resource quality with the Human Development Index (HDI) as a proxy. The test results indicate that corruption and political stability have a negative and significant effect on human resource quality. This finding is consistent with the main findings of the study. Empirically, these results indicate that increased corruption is correlated with a decline in human resource quality, while increased political stability actually decreases human resource quality. Furthermore, inflation has a negative effect on human resource quality.

4.2 Discussion

4.2.1 Main Findings

The results of the main test indicate that hypothesis 1 is empirically supported. This means that increased corruption can lead to a decline in the quality of human resources. This finding is consistent with robustness testing. Based on Human Capital Theory by [Becker \(1964\)](#), the quality of human resources is the result of long-term investments in education, health, and skills development. Corruption is a major factor hindering the development of quality human resources. One of the main ways corruption hinders human resource development is by reducing investment in the education and health sectors. Corrupt governments often divert public funds intended for building schools, universities, hospitals, and vocational training centers to the private pockets of certain officials or groups, resulting in inadequate facilities, both in terms of building quality and available equipment. Transparency International reports that countries with high corruption indices, such as Nigeria and Venezuela, experience a lack of quality schools and poor health services due to leakage of public funds due to corruption.

Corruption also directly reduces the quality of teachers and lecturers, which are key factors in human resource development. In countries with high levels of corruption, many teachers and lecturers are appointed not based on their abilities, but because of political connections or bribery. This leads to a decline in the quality of teaching. Corruption in the education sector often takes the form of bribery in the form of the buying and selling of diplomas and academic grades. This creates a workforce that holds academic degrees but lacks real skills and competencies. In countries with high levels of corruption, such as Indonesia and India, the practice of buying and selling diplomas still occurs, leading to a decline in the quality of university graduates.

Corruption often also creates an unfair environment, where only those with political connections or the ability to pay bribes can obtain quality education and jobs, while the majority of ordinary people remain left behind. When a country is highly corrupt, top graduates and professionals often choose to emigrate to cleaner and more promising countries, thereby depriving their home countries of qualified human resources. This "brain drain" phenomenon is particularly evident in countries like Venezuela and several African nations, where many doctors, engineers, and academics choose to work abroad because the domestic environment is not conducive to developing their skills due to corruption. These findings strengthen the research results conducted by [Hoa \(2020\)](#) in Vietnam, [Abdulla \(2021\)](#) in the United States, [Linhartova and Pucek \(2024\)](#) in European countries [Emara \(2020\)](#) in Egypt, and [Khan and Waqas \(2020\)](#) in developing countries. Thus, the results of this study strengthen the Human

Capital Theory that the success of investment in human capital is not only determined by the size of the investment, but also by the quality of governance that ensures resources are allocated efficiently and on target.

The main test results indicate that Hypothesis 2 is not supported, where political stability has a negative and significant effect on human resource quality. This result is also consistent with the robustness test, indicating that the relationship is stable across various model specifications. This finding indicates that political stability does not always result in improved human resource quality. Based on Human Capital Theory by [Becker \(1964\)](#), investment in education, health, and skills development will only result in optimal human capital accumulation if supported by stable political stability, which gives rise to adaptive and accountable public policies oriented towards improving the quality of services (including education and health services). Thus, political stability is not an end in itself, but rather a means to create an environment that supports effective human capital investment.

Under certain conditions, strong and long-term political stability can weaken oversight and accountability mechanisms, increasing the risk of inefficiency, nepotism, and resource allocation not based on public needs. This situation has the potential to reduce the effectiveness of investments in the education and health sectors and encourage the appointment of officials, educators, and health workers based on political proximity rather than competence. Furthermore, governments with strong political stability tend to exert significant control over the education and research systems, which can stifle innovation and slow policy reform, thus hampering human resource development. However, empirical evidence demonstrating that political stability negatively impacts human resource quality has yet to be found. In fact, several post-communist countries in Eastern Europe experienced strong political stability with dominant parties in government, but still experienced corruption in education budget allocations, which has resulted in a decline in human resource quality.

The results of this study indicate that the quality of governance is more important than political stability itself. Political stability will benefit human resource development if accompanied by transparency, accountability, and continuous policy evaluation. Conversely, if political stability strengthens elite dominance, reduces public oversight, and weakens the reform process, human capital accumulation will be suboptimal. This finding contrasts with research by [Rakolobe and Teise \(2025\)](#) in Lesotho, [\(Ouedraogo, Tabi, Ondo, & Jiya, 2022\)](#) in Africa, and [Liu, Modrek, and Sieverding \(2019\)](#) in Egypt, which found that political stability enhances human capital development. These differences indicate that the influence of political stability is highly dependent on the quality of institutions, governance capacity, and the characteristics of the political system in each country.

The results of the test, which included inflation as a control variable, showed that inflation was identified as having a negative impact on the quality of human resources. This finding supports the research of [Habib, Awolaja, Aworinde, Dafuleya, and Ogunsumi \(2025\)](#), which stated that inflation can have an impact on the decline in the quality of human resources. Inflation is understood as a general and sustained increase in the prices of goods and services, which reduces purchasing power and, consequently, impacts the quality of human resources. When inflation increases, people's real incomes decline, thereby limiting their purchasing power for basic needs, such as nutritious food, health care, and education. Consequently, poor nutrition, reduced access to health care, and reduced educational opportunities can hinder individuals' physical and cognitive development, ultimately reducing the overall quality of human resources. Furthermore, inflation creates economic uncertainty, which impacts investment behavior at both the household and government levels. Households tend to shift spending from long term investments (education and training) to short term consumption to maintain living standards. Meanwhile, the government faces fiscal pressures due to increasing public spending, which often forces the budget to be diverted from human development to subsidies or routine expenditures. This situation negatively impacts the quality of education and human resources.

4.2.2 America Region

In several Latin American countries, corruption is often integrated into political patronage systems, where public funds are misappropriated to finance social programs for political favors. Paradoxically,

this practice can encourage investment in the education and health sectors, thus contributing to human resource development, as seen in Brazil (Mensalão, Lava Jato, and Bolsa Família) and Mexico (CONAFE and Oportunidades), despite budget leakages ([Cuèllar and Stephenson, 2022](#); [Goldstein and Drybread, 2018](#)). However, corruption remains detrimental in the long term, reducing bureaucratic efficiency and public trust. Political stability, on the other hand, plays a strategic role in improving human resource quality through conducive, consistent, and long-term governance. Countries with high stability, such as Uruguay and Costa Rica, demonstrate strong institutional capacity to manage education, health, and workforce training policies sustainably, thus supporting inclusive and competitive human resource development ([Azar, 2022](#)). However, empirical evidence specifically stating that corruption and political stability have a positive influence on the quality of human resources in the Americas has not yet been found.

4.2.3 Asia Region

In the Asian context, corruption has been shown to have a positive effect on human resource development. This finding indicates that corruption can drive improvements in human resource quality. This finding is due to the weak governance of most Asian countries, resulting in a culture of corruption that continues to thrive and influence development (including human development). Empirical evidence from [Tyagi \(2019\)](#) shows that the practice of "seat buying" at private institutions in India can increase the number of graduates while supporting the development of educational facilities that can foster human resource development. On the other hand, political stability in Asia also negatively impacts human resource quality. This condition occurs because many Asian countries still have authoritarian leadership, such as China, Korea, Vietnam, Laos, Turkmenistan, Tajikistan, Saudi Arabia, and Iran, which significantly restricts public freedom and participation. As a result, human resource development is hampered. Study by [George \(2020\)](#) revealed that while political stability in Laos is relatively stable, human resource quality still lags behind due to limited reforms and transparency.

4.2.4 European Region

In developed European countries, corruption has a negative impact because it undermines key foundations such as transparency, accountability, the rule of law, and meritocracy, thus reducing public trust, bureaucratic efficiency, and the quality of human resource development ([Spruyt, Van Droogenbroeck and Kavadias, 2024](#)). Cases in Italy, Spain, France, and Germany demonstrate that corruption not only impacts the economy but also weakens institutions and human capacity. Conversely, political stability plays a crucial role in improving human resource quality by supporting long-term education policies, sustainable investment, and cross-sector collaboration. Countries such as Germany, Sweden, and the Netherlands, including Finland with its inclusive education system, demonstrate that stable and democratic governance can produce superior, adaptive, and competitive human resources ([Wang, Feng, and Chang, 2024](#)). However, empirical evidence specifically stating that corruption has a negative influence and political stability has a positive influence on the quality of human resources in the European region has not yet been found.

The differences in the effects of corruption and political stability on human resource quality in the Americas, Asia, and Europe are primarily due to differences in institutional quality, governance effectiveness, levels of economic development, and public policy priorities in each region. In Europe, relatively strong institutions mean that corruption directly reduces the effectiveness of investments in education and health, while political stability supports the sustainability of human resource development policies. Conversely, in the Americas and Asia, heterogeneity in characteristics across countries, such as differences in bureaucratic capacity, levels of public investment, and governance quality, makes the relationship more complex, so that the effects of corruption and political stability on human resource quality do not always follow the same pattern. Therefore, these findings indicate that the impact of these two variables is highly dependent on the institutional and development contexts in each region.

5. Conclusions

5.1 Conclusion

This study uses 310 observations from 62 countries in Asia, Europe, and the Americas during the period 2020–2024. In aggregate, the primary research findings indicate that corruption and political stability have a significant negative effect on human resource quality. However, regional analysis reveals heterogeneity. In the Americas, corruption and political stability have a positive effect on human resource quality, although the effect of political stability is not significant. In Asia, corruption has a positive effect, while political stability has a negative effect. Conversely, in Europe, corruption has a negative effect and political stability has a positive effect on human resource quality. These differences indicate that the relationship between institutional factors and human resource quality is influenced by the characteristics of governance, economic conditions, and institutional capacity in each region.

Theoretically, these findings add to the literature on Human Capital Theory by ([Becker, 1964](#)) by demonstrating that the influence of corruption and political stability on human capital quality is not universal. The effectiveness of investments in education, health, and skills development is strongly influenced by the surrounding institutional context. Thus, institutional quality is a crucial factor determining the success of the human capital accumulation process and explains why the relationship between these variables can differ across regions.

Practically, the research findings indicate that policies for improving human resource quality need to be tailored to the characteristics of each region. In Europe, where corruption has been shown to negatively impact human resource quality and political stability to positively impact human resource quality, governments need to prioritize strengthening governance, transparency, and policy stability to increase the effectiveness of investments in education and health. In Asia, the finding that corruption has a positive effect and political stability has a negative effect indicates that human resource quality is more influenced by the effectiveness of policy implementation and institutional capacity than by political conditions alone. Therefore, bureaucratic reform, improving the quality of public services, and strengthening institutional accountability need to be a primary focus. Meanwhile, in the Americas, the positive effects of corruption and political stability suggest that other factors, such as institutional quality, innovation, and economic capacity, may be more dominant in determining human resource quality. Therefore, governments need to strengthen public budget oversight and ensure that investments in education, health, and skills development are carried out efficiently and on target. These findings also provide implications for oversight institutions, parliaments, and civil society organizations to strengthen oversight and evaluation mechanisms for human resource development policies in accordance with the institutional context of each region, so that human capital investments can produce more optimal improvements in quality, productivity, and competitiveness.

5.2 Research Limitations

This study's limitations lie in the scope of the data used, which only covers 62 countries across three continents. The country selection was based on the availability of survey data from the International Institute for Management Development (IMD), making it unable to comprehensively represent the conditions of all countries worldwide. This limited regional coverage has the potential to impact the generalizability of the research results, particularly for countries not included in the study sample and with differing economic, social, and institutional characteristics. Furthermore, the reliance on IMD survey data also means that the research is heavily influenced by the completeness and consistency of the data available for each country.

5.3 Suggestions and Directions for Future Research

Future research is recommended to expand the geographic scope by including more countries from various regions, particularly those in Africa. This expanded regional coverage is expected to provide a more comprehensive picture of the differences in economic, digitalization, social, political, culture and institutional characteristics between countries, thus allowing the research results to have a stronger level of generalizability. Furthermore, future research is also recommended to develop a more holistic empirical model by incorporating other relevant variables, such as the quality of governance,

the level of digitalization, cultural factors, and institutional quality. The use of more diverse methodological approaches, such as longitudinal analysis, moderation, mediation, or mixed methods approaches, can also be used to gain a deeper and more comprehensive understanding of the relationships between the variables studied.

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Author Contributions

HD played a role in developing the research concept, compiling the literature review, developing the methodology, and writing the main manuscript. KK was responsible for collecting and analyzing the interpretation of research results to strengthen the study discussion. Meanwhile, SS contributed to data processing. KK also participated in the revision and refinement process of the manuscript prior to publication. All authors have read, reviewed, and approved the final version of the submitted manuscript.

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