Financial Development and Environmental Degradation in the South Asian Region

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This study evaluates the possible long-term effects of financial development on environmental degradation. It emphasizes how financial development, institutional structures, and foreign investment determine the level of green development. The research uses the deductive approach. The data is extracted from the World Bank Statistics. The sample comprises seven countries in the South Asian region, and information is gathered from 2000 to 2020. Foreign direct investment, broad money supply, and domestic credit to the private sector are used to evaluate financial development. Energy use, CO2 emissions, greenhouse gas emissions, and the depletion of natural resources are used to measure environmental degradation. The data are analyzed using panel data linear regression analysis. The researcher's findings conclude that Financial Development has a negative relationship with the four measures of Environmental Degradation in the South Asian region. This article reviews the relationship between financial development and environmental degradation in South Asia. In contrast to previous literature, the authors provide a broad money supply as an economic development variable instead of bank credit to the private sector. Also, this article reviews recent data up to the year 2020. Future researchers can develop an alternative methodology to study only using secondary data, and future researchers can use primary data for this type of study.

Keywords: *CO2 Emissions, Environment Degradation, Financial Development, Foreign Direct Investment, Natural Resource Depletion and Education*

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Introduction

Background of the Study

The group of institutions, products, and markets that make up the financial industry. It also consists of the legislative and regulatory framework that permits transactions to be carried out via credit extensions. Development of the financial sector primarily focuses on reducing "costs" associated with the financial system. The emergence of financial contracts, intermediaries, and markets is the outcome of this process of lowering information acquisition costs, contract enforcement costs, and transaction execution costs. Different kinds and combinations of information, transaction, and enforcement costs, along with various regulatory, legal, and tax regimes, have driven multiple types of agreements, intermediaries, and marketplaces in different nations at different periods. As a result, financial sector development happens when financial instruments, markets, and intermediaries reduce the effects of information, enforcement, and transaction costs and consequently perform the essential roles of the financial sector in the economy more effectively.

Environmental degradation is the deterioration of the environment due to resource depletion, including poor soil, water, and air quality, ecosystem disruption, habitat loss, wildlife extinction, and pollution. This definition includes any environmental transformation or disturbance deemed harmful or undesirable.

The topic of sustainable financial development has been widely discussed in recent years. Along with numerous other issues, environmental pollution affects the economic growth and the well-being of the people. In addition to being harmful to people, pollution affects resource depletion and increases the frequency of natural disasters brought on by rapid climate change. Among the effects of environmental pollution are degradation of the land, soil, water, and atmosphere. The overuse of fossil fuel burning for home and commercial energy needs is one of the leading causes of environmental degradation. Other significant factors include the waste generated at industrial sites and the harmful fumes from vehicles. Additionally, policymakers should consider deforestation, soil erosion, and resource loss.

Fundamentally, human activities like agriculture, transportation, manufacturing, and energy production lead to environmental deterioration. Over the past 20 years, there has been a significant growth in energy use and greenhouse gas emissions, which poses a very substantial global concern. Energy can be considered a requirement for economic activity since it is one of the main inputs for people and businesses. Higher energy levels will inevitably be utilized as globalization progresses, raising carbon emissions (Shahbaz et al., 2018).

The financial sector is one of the engines behind economic growth. Even nations with little financial resources can use them effectively with a solid management structure. Utilizing financial resources effectively encourages innovation in the finance industry, boosting economic growth (Furuoka, 2015). The growth of the financial and economic systems is closely related (Sadorsky, 2011). Investors find well-managed financial sectors more appealing and help the stock market and the economy by boosting economic activity. The financial sector stimulates Foreign Direct Investment inflows by fostering economic growth, which completes a development cycle by fostering even more economic growth (Azam, 2016).

Moreover, this paper emphasizes the necessity of institutional reforms in nations with high carbon and GHG emissions, high rates of natural resource depletion, and high energy usage concentration to highlight institutional quality and education's significant roles in sustainable financial development. It suggests ramifications for banks in screening enterprises that borrow money for a greener economy.

Research Problem Identification and Justification

One of the most significant issues facing the globe today is environmental degradation. The key drivers of world economic growth and major emerging market nations have a significant potential to contribute to environmental deterioration due to increased economic activity. This study thoroughly examines the potential long-term effects of financial development on environmental deterioration. It emphasizes how financial development, institutional structures, and foreign investment

determine the level of green development. This field of study has an empirical deficit. My investigation revealed that there had never been any studies on "Financial Development and Environmental Degradation in South Asian Countries."

When looking at the research gap, here are some main reasons for this study. First, the researcher uses a new variable to measure Financial Development. It is Broad money. The researcher selected this as a variable because the World Bank identifies Broad Money as an indicator to measure the depth of financial institutions. A comprehensive yet relatively straightforward conceptual 4x2 framework was created by the World Bank's Global Financial Progress Database to assess financial development throughout the world. Financial depth, access, efficiency, and stability are the four sets of proxy variables this framework identifies as characteristics of a healthy financial system. These four factors are then evaluated for the financial institutions and financial markets, which comprise the financial sector's two main pillars. According to my findings in previous research, they have not used this as a variable for measuring financial development. The following reason for the research gap is that most researchers have taken the data until 2019. However, researchers have used data from 2020 as well.

Problem Statement

The study focuses on whether financial development is related to environmental degradation over time in South Asian countries. The financing network becomes broader as the finance industry develops, reducing financial costs. This encourages businesses to borrow money to boost output. As a result, energy use increases, and so do carbon emissions. Therefore, it may be said that financial growth significantly affects environmental deterioration. The Environmental Kuznets Curve best captures the relationship between financial development and environmental quality (EKC). The severe financial crisis currently affecting Sri Lanka and the world due to the COVID-19 pandemic has shown that shocks to the financial system affect the entire economy. Therefore, if the financial sector contributes significantly to an economy's

overall health is acceptable. This raises the research question of whether financial growth influences environmental deterioration over time.

Research Objective

Consequently, the purpose of this study is to respond to the research question, does financial development have a relationship with environmental degradation in the South Asian context? Therefore, the objective of this study is to examine the relationship between financial development and environmental degradation in the South Asian context.

Significance of the study

The world economy's dynamics are evolving quickly and developing, and growth-leading economies now play a more significant part. Environmental degradation is a process that affects the health of the environment in general and the natural environment's ability to support biological variety. This process may start entirely naturally or be sped up or triggered by human activity. The advancement of technology is a significant factor in global financial development. The environment's quality may be related to financial development. The relationship between financial development and environmental degradation in the South Asian region is therefore examined through this study. Therefore, the government should oversee the distribution of loans for R&D, green financing, and efficient production that minimizes resource consumption and enhances environmental quality if financial development worsens environmental quality. Sustainability and environmental quality should not be compromised by financial development. Additionally, South Asian nations should encourage globalization to assist the influx of green technologies to improve environmental quality if financial development worsens environmental quality.

Literature Review

Numerous research findings on the relationship between financial development and environmental degradation in the South Asian region offer a thorough review of the potential long-term effects of financial development on environmental degradation. They emphasize how financial development, institutional structures, and foreign investment determine the level of green development.

Financial Development

Green finance and sustainable development in Europe (Afzal et al., 2022) an article researched by four authors suggests that four separate environmental degradation metrics have a negative link with financial development. In contrast, FDI and institutional quality seem to make the environmental measures worse. To slow down long-term environmental degradation, policymakers must create robust institutions and green financing regulations. As they proposed, this theory is applied in the European context, But the South Asian context is looked at in this study.

H2: There is a negative relationship between institutional quality and environmental degradation

Higher energy levels will inevitably be utilized as globalization progresses, raising carbon emissions (Shahbaz, Nasir, & Roubaud, 2018). One of the driving drivers for economic development is the banking industry. Even nations with little financial resources can use them effectively with a solid management structure. Utilizing financial resources effectively encourages innovation in the finance industry, boosting economic growth (Furuoka, 2015). The development of the financial and economic systems is closely related (Sadorsky, 2011). Investors find well-managed financial sectors more appealing and help the stock market and economy by boosting economic activity. The financial sector stimulates FDI inflows by fostering economic growth, which completes a development cycle by fostering even more economic growth (Azam, 2016). The financing network becomes more profound as the finance industry develops, lowering financial costs. This encourages businesses

to borrow money to boost output. As a result, energy use increases, and so do carbon emissions. Therefore, it may be said that financial development significantly contributes to environmental deterioration. The Environmental Kuznets Curve best captures the relationship between financial development and environmental quality. The global economy is affected by shocks to the financial system, as the financial crisis of 2008–2009 demonstrated. It is safe to argue that the financial sector contributes significantly to an economy's health.

Environmental Degradation

According to the researcher's findings in the South Asian context, some related articles were on Financial Development and Environmental Degradation in South Asian Countries.

'Fostering green finance for sustainable development in Asia' is one article that was researched by Ulrich Volz (2018). It will take a historic shift in investment away from resource-intensive businesses dependent on fossil fuels, greenhouse gases, and other natural resources to put Asian economies on the road toward sustainable development. The "green transition" will require the financial industry to take the lead. The necessity of greening the financial system and the function of financial governance is discussed in this paper. It provides an overview of green financial governance projects across Asia and evaluates the situation regarding green lending and investment in the region.

According to Pao and Tsai (Pao and Tasi, 2011), economic and financial progress first causes the environment to deteriorate (carbon emissions). However, over time, this deterioration slows down and, in some situations, even reverses. Like what Shahbaz discovered, there is a non-linear relationship between financial deterioration and environmental degradation (energy use and carbon dioxide emissions) in nations with varying levels of affluence. They also found that the rate of environmental deterioration increased because of FDI. Some scholars have used the term "Pollution Haven Hypothesis" to refer to these phenomena. Although increased greenhouse gas

emissions result from financial and economic progress, carbon emissions are under control after a certain point.

Further, it explains the concept of ‘Does financial development cause environmental pollution? (Md. Saiful Islam, 2022). Empirical evidence from South Asia’. This study uses energy consumption and per capita income as controls to examine how financial development (FD) affects CO2 emissions in five South Asian economies. This study used the second-generation unit root and cointegration tests, panel pooled generalized least square (GLS) estimate, pooled mean group (PMG) estimate, and Dumitrescu-Hurlin panel causality test to carry out the study using annual panel data for the years 1980–2018.

Conceptual Framework and Hypothesis Development

A conceptual framework represents the link between the variables, traits, or features we want to investigate. They are often created using a literature analysis of previous studies on your issue. They can be textual or visually presented as in Figure 1.

The following hypotheses were formulated based on the variables represented in the conceptual framework and line with the study's objectives.

H1: There is a relationship between financial development and CO2 gas emission

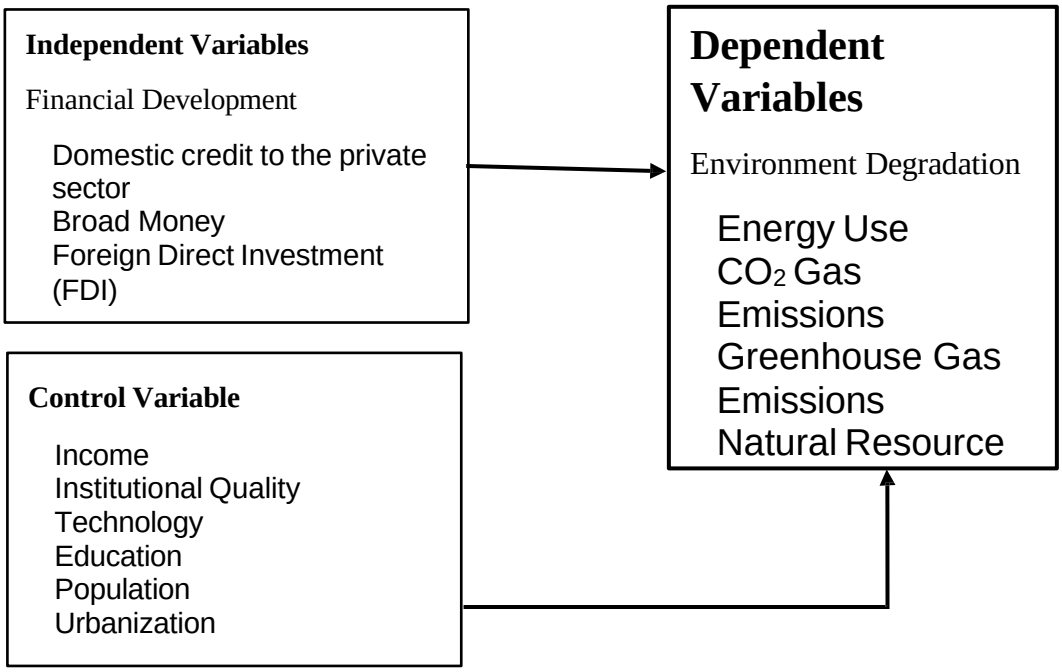
H2: There is a relationship between financial development and greenhouse gas emission

H3: There is a relationship between financial development and natural resource depletion

H4: There is a relationship between financial development and energy use

Figure 1

Conceptual Framework



This study also explores the relationship of institutional frameworks on the links between financial development and environmental sustainability. The justification for this is that institutional quality and the strength of regulatory frameworks are crucial. High-quality institutions are more likely to advance society's interests by pressing for legislation and regulations encouraging greener development. According to research, regulators significantly impact green investing policies study, which supports this, emphasizing institutions' crucial role in long-term environmental preservation. Even more recently, Ayesha Afzal, Ehsan Rasoulinezhad, and Zaki Malik (2021) asserted that financial development has a negative relationship with four different measures of environmental degradation, while FDI and institutional quality appear to worsen the environmental measures. Based on the evidence highlighted, the above hypothesis has been taken.

Methods

Research Design

Considering the literature reviewed above, financial development and environmental degradation are vital to consider in this study's context. Thus, previous studies have provided a platform to conduct this study and further clarify.

This study examines the philosophy of positivism. It emphasizes how financial development, institutional structures, and foreign investment determine the level of green development. Within this research, the researcher is following deductive research logic. Here, the researcher will see whether Ayesha Afzala, Ehsan Rasoulinezhadb, and Zaki Malik suggested a theory that financial development has a negative relationship with four different measures of environmental degradation. At the same time, FDI and institutional quality worsen environmental measures. Here, there is a quantitative approach. Quantitative research involves data, reasoning, and an impartial viewpoint. In contrast to divergent reasoning, detailed, convergent reasoning is the emphasis of quantitative research.

Operationalization

Table 1

Operationalization

Variable	Definition	Measurement/ Source	Evidence
Domestic Credit to the Private sector (DCP)	Domestic credit to the private sector is the term for money that financial institutions have given to the private sector in the form of loans, purchases of non-equity securities, trade credits, and other receivables	Domestic credit to the private sector, percent of GDP / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022)

	that create a claim to repayment.		
Broad Money (BM)	Broad money is the sum of currency outside banks; demand deposits other than those of the central government; the time, savings, and foreign currency deposits of resident sectors other than the central government; bank and traveler's chques; and other securities such as certificates of deposit and commercial paper.	World Bank	
Foreign Direct Investments (FDI)	Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, earnings reinvestment, and other capital.	Foreign Direct Investment (% of GDP) / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022)
CO_2 Gas Emission (CO_2)	Carbon dioxide emissions from solid fuel consumption refer mainly to emissions from coal as an energy source.	Carbon dioxide emissions per capita / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022)
Greenhouse Gas Emission (GHG)	Total greenhouse gas emissions in kt of CO2 equivalent are composed of CO2 totals excluding short-	Greenhouse emissions per capita / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad

	cycle biomass burning (such as agricultural waste burning and savanna burning) but including other biomass burning (such as forest fires, post-burn decay, peat fires, and decay of drained peatlands), all anthropogenic CH4 sources, N2O sources and F-gases (HFCs, PFCs, and SF6).		& Zaki Malik (2022)
Natural Resource Depletion (NRD)	Natural resource depletion is the sum of net forest depletion, energy depletion, and mineral depletion. Net forest depletion is unit resource rents times the excess of roundwood harvest over natural growth. Energy depletion is the ratio of the value of the stock of energy resources to the remaining reserve lifetime (capped at 25 years). It covers coal, crude oil, and natural gas. Mineral depletion is the ratio of the value of the stock of mineral resources to the remaining reserve lifetime (capped at 25 years). It covers tin, gold, lead,	Natural Resource Depletion (% of GNI) / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022)

	zinc, iron, copper, nickel, silver, bauxite, and phosphate.		
Energy Use (EU)	Energy use refers to primary energy before transformation to other end-use fuels, equal to indigenous production plus imports and stock changes minus exports and fuels supplied to ships and aircraft engaged in international transport.	Energy use per capita (kg of oil per capita) / World Bank	Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022)

Source of definitions: World Bank

Control Variables	
Income Level (GDP)	GDP per capita, current U.S. dollar
Institutional Quality (GV)	Government effectiveness index
Technology (TECH)	Mobile phone subscribers per 100 people
Population (POPU)	Population size, in millions
Urbanization (URB)	Urban population (% of total population)
Education (EDU)	Secondary school enrollment, percent of all eligible children

Population and Sample Framing

The researcher will use South Asian countries for this study's sample size. This study will discuss Financial Development and Environmental Degradation in the context of the South Asian region. In the South Asian region, many related research articles can be seen, but not those on financial development and environmental degradation. Within all eight countries, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, the researcher will use only seven countries for this research study. Afghanistan was removed from my sample due to a lack of data availability. The data includes a wide range of financial development and environmental

degradation measurements and a long list of control variables to adjust for confounding variables. Four proxies evaluate environmental degradation: energy usage, CO2 emissions, greenhouse gas emissions, and resource depletion. FDI, broad money, and domestic credit to the private sector are used to gauge financial development. The model considers income, institutional quality, technology, education, population, and urbanization. This study will explore the data of the seven countries during the period of 2000-2020. There could be some missing data for the variables mentioned above. Formulation

To see the relationship between Financial Development and Environmental Degradation, it is necessary to develop a model that will help the core objective of comparative analysis in the subject of the relationship between Financial Development and environmental degradation, using the dependent and independent variables, the following model can be

Model 01:

$$\mathbf{CO_{2\,it} = \beta 0_{it} + \beta_1 DCP_{it} + \beta_2 BM_{it} + \beta_3 FDI_{it} + \varepsilon_{it}}$$

Model 02:

$$\mathbf{GHG_{it} = \beta 0_{it} + \beta_1 DCP_{it} + \beta_2 BM_{it} + \beta_3 FDI_{it} + \varepsilon_{it}}$$

Model 03:

$$\mathbf{NRD_{it} = \beta 0_{it} + \beta_1 DCP_{it} + \beta_2 BM_{it} + \beta_3 FDI_{it} + \varepsilon_{it}}$$

Model 04:

$$\mathbf{EU_{it} = \beta 0_{it} + \beta_1 DCP_{it} + \beta_2 BM_{it} + \beta_3 FDI_{it} + \varepsilon_{it}}$$

CO_2 – CO_2 Gas Emission
GHG – Greenhouse Gas Emission
NRD – Natural Resource Depletion

EU – Energy Use

DCP – Domestic Credit to Private Sector

BM – Broad Money

FDI – Foreign Direct Investments

Findings of the study

Descriptive Statistics

A statistical summary of data gathering called "descriptive statistics" describes the simplified characteristics of all dependent and independent variables. The study's research methodology chapter states that the sample period was between 2000 and 2020. This study consists of secondary data. Measurements of dispersion and central tendency are available through descriptive statistics. While standard deviation, minimum, and maximum numbers represent dispersion, the mean measures central tendency. The table below gives a brief idea of the components of descriptive statistics.

Among the independent variables broad money has the highest mean value of 56.928 and the foreign direct investments have the lowest mean value of 2.015. When considering the dependent variables greenhouse gas emission has the highest mean value of 413068.640 and natural resource depletion has the lowest mean value of 1.021. Among the control variables population has the highest mean value while institutional quality has the lowest mean value.

Table 2

Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
DCP	147	.000	93.460	49.366	29.852
BM	147	.000	117.749	56.928	16.334
FDI	147	-.675	17.137	2.015	2.954
EU	147	.000	892.079	234.158	235.516
CO2	147	.000	2456300.049	251822.925	585558.153
GHG	147	.000	3394870.117	413068.640	860957.568
NRD	147	.001078	4.934	1.021	1.1991
GDP	147	229.4904	10561.613	2147.439	2220.417
GV	147	.000	4.000	2.153	1.502
TECH	147	.000	181.328	60.389	49.254
EDU	147	.000	100.335	43.045	30.924
POPU	147	279396.0	1380004385.0	229004170.272	416417887.976
URB	147	13.397	42.316	28.873	8.033
Valid N	147				

Source – Author Compiled

Correlation Test

Correlation measures the degree to which two sets of data are connected. The most used correlation measure among statisticians is the Pearson Correlation. Pearson Product Moment Correlation is its full name. It shows how variables are related linearly.

A correlation matrix would provide a general understanding of the correlations between the various study variables. There is no multi-collinearity if the coefficient of two variables is less than 0.8. Similarly, if it exceeds 0.8, there is significant multi-linearity. There is a significant link between the variables if the coefficient is less than 0.05 and the significance level is 95%. You may get a basic overview of the relationships between the variables from the information below.

Table 3

Correlation Analysis

Variables		**CO2 Emissions**	**Green House Gas Emission**	**Natural Resource Depletion**	**Energy Use**
Domestic Credit to Private Sector	Pearson Correlation	-.163*	-.162*	.406**	.102
	Sig. (2-tailed)	0.049	0.049	0	.217
	N	147	147	147	147
Broad Money	Pearson Correlation	.370**	.363**	.340**	-.164*
	Sig. (2-tailed)	0	0	0	.047
	N	147	147	147	147
Foreign Direct Investment	Pearson Correlation	-0.055	-0.072	-.198*	-.148*
	Sig. (2-tailed)	0.505	0.383	0.016	.043

	N	147	147	147	147
Income	Pearson Correlation	-0.155	-.187*	-.230**	-.318**
	Sig. (2-tailed)	0.061	.023	0.005	.000
	N	147	147	147	147
Governance	Pearson Correlation	-.164*	-.163*	.165*	.023
	Sig. (2-tailed)	0.047	0.049	0.045	.783
	N	147	147	147	147
Technology	Pearson Correlation	.265**	.262**	.187*	-.148
	Sig. (2-tailed)	0.001	0.001	0.023	.073
	N	147	147	147	147
Education	Pearson Correlation	-0.049	-0.083	-.192*	-.437**
	Sig. (2-tailed)	0.559	0.317	0.02	.000
	N	147	147	147	147
Population	Pearson Correlation	.928**	.947**	.174*	.207*
	Sig. (2-tailed)	0	0	0.035	.012
	N	147	147	147	147
Urbanization	Pearson Correlation	0.15	0.156	.400**	-.280**
	Sig. (2-tailed)	0.07	0.06	0	.001
	N	147	147	147	147

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source – Author Compiled

Discussion

As per Table 4.2 those results show the correlation of each dependents variables with each independent variable and each control variable. You may get a basic knowledge on the correlation between each dependent variable and the other variables one by one.

CO2 Emissions

According to the above table 4.2 Carbon emissions have a significant negative relationship with the Domestic Credit to Private Sector (DCP). Researchers have found that CO2 emission has a significant positive relationship with Broad Money (BM). But there is no significant relationship with Foreign Direct Investment (FDI). CO2 has an inverse relationship with one independent variable, positive relationship with one independent variable and there is no relationship with other variable out of the three independent variables. Therefore, we can't come to any suggestion because CO2 emission has a relationship with these three variables on three different ways. The relationship between carbon emissions and institutional quality is also an inverse relationship. The results also suggest that countries with bigger populations and higher rates of technological improvements happen face an increase in carbon emissions, while CO2 emissions not showing any significant relationship with the Gross Domestic Product (GDP), Education (EDU) and Urbanization (URB) of the 7 countries of the South Asian Region.

Green House Gas Emissions

Green House Gas emission follows a pattern like that of carbon emissions. The results indicate that Greenhouse Gas emissions (GHG) are the same as the results of the CO2 gas emission. Green House Gas emission also shows an inverse relationship with the Domestic Credit to Private sector, significantly positive relationship with the Broad Money and there is not any relationship with the Foreign Direct Investments. As per the above here also we can't come to an exact suggestion as this

variable reacts for the three independent variables in three different ways. The correlation between institutional quality and carbon emissions is also significant, suggesting that enforcing solid frameworks assists countries in bringing forth green programs. When considering about the relationship of the control variables to the greenhouse gas emission, income or the gross domestic production and the institutional quality has a significantly negative relationship. As per the results it shows that when there's an increasing trend of technology and the population it causes to greater the Green House Gas emission also. But the results of the greenhouse gas emission do not appear any significant relationship between education and urbanization.

Natural Resource Depletion

According to the results of table 4.2 Natural Resource Depletion (NRD) has given different results from the above two variables. Natural Resource Depletion has a significant positive relationship with both variables Domestic Credit to Private sector and Broad Money. But it has a significant inverted relationship with Foreign Direct Investments, suggesting that foreign inflows of investment decrease environmental degradation in the country. By considering these three types of relationships we can suggest that there is a positive relationship in between the natural resource depletion and financial development. When consider about the relationship of the control variables to the NRD there is a significant inverted relationship with GDP. Institutional quality appears to play an important role in reducing the depletion of resource and there's a significant positive relationship with the natural resource depletion. Also, the natural resource depletion has a positive relationship with the control variables technology, population, and urbanization. But there is an inverse relationship with the income or the GDP and the education of the countries.

Energy Use

Consumption of energy does not have a significant relationship with domestic credit to private sector and it mitigates that there is an inverse relationship between foreign direct investments and the energy consumption. One possible explanation is that as foreign investment increases, industries flourish and consumption of fossil fuels (for energy) decreases. But as per the results of the energy use has an inverse relationship with the country's broad money also. It mitigates that there is a significant negative relationship with the gross domestic products or the income, education level, and urbanization within the control variables. When the population increases the energy consumption of the country will also be increase, consumption of fossil fuels is further increased by growth of populations. It shows the regression results of the dependent variable energy consumption. But it has no role in mitigating this with control variables which are Institutional quality and the technology. Because there is no significant relationship of energy use of South Asian region, with the governance and the technological improvements.

Conclusion

Conclusion

This paper investigates the relationship between financial deepening and environmental degradation, considering the role of institutions in avoiding environmental degradation. Results suggest that Domestic credit to private sector has inverse relationship with the three independent variables because there's a negative relationship with two measures of the environmental degradation, positive relationship with one measure and there's no relationship with the other variable. As a summary of these relationships, it can be suggested that Domestic Credit to Private Sector (DCP) has an inverse relationship with the environmental degradation. It implies that when the DCP increases the environment pollution will reduce. When considering Broad Money (BM) there is a positive relationship with the three measures of the environmental degradation. There can be seen a positive

relationship with the remaining variable. Therefore, we can conclude that Broad Money (BM) has a positive relationship with environmental degradation. It says that when the BM increases in a country it causes a rise in environmental pollution. According to the results of the independent variable Foreign Direct Investments (FDI) appears to have no relationship with two measures and negative relationship with two other measures. The results suggest that Foreign Direct Investments has an inverse relationship with environmental pollution. It means when the FDI increases it causes to decrease the environmental degradation.

According to the above analysis finally we can conclude that there's a negative relationship between Financial Development and the Environmental Degradation. This result of the study in line with the results of the study done by Ayesha Afzal, Ehsan Rasoulinezhad & Zaki Malik (2022), George E. Halkos and Michael L. Polemis.

Managerial Implications

Results indicate that, there is some uncertainty in the relationship between institutional quality and environmental degradation. While institutional quality is helpful in reducing carbon emissions and greenhouse gas emissions, it does not seem to have a relationship on energy use. These results also imply that countries can pursue greener policies by putting in place strong institutions. Strong environmental protection institutions play a crucial role in ensuring that economic forces are kept in account and that new policies don't harm the environment. Education, as determined by secondary enrolment, has a significant inverse relationship with environmental degradation, according to a recurrent result. It implies that a decrease in environmental pollution results from an increase in secondary school enrollment. Focusing on post-primary education in particular will help countries create a more long-term sustainable environment.

Recommendations

However, in order to reduce, if not completely eradicate, long-term consequences on the environment, robust institutions must be linked with green finance practices. I've learned through this study that institutions' quality plays a big role in preventing environmental damage. This study has a wide range of useful applications. It can be applied to help in the formulation of financial regulations. It has brought attention to several types of environmental damage. This information can be used by authorities to implement required changes like implementing a tax on carbon emission. This can be executed from the vast factories that releasing tons of CO_2 to the environment. Also, it’s good to design appropriate education programs that much needed for the reduction of environmental degradation by the relevant authorities.

According to the regression results that researcher have gained; the four measures of the environmental pollution have a positive relationship with the density of the population. When the population increases, it may easily cause to a rise in the environmental pollution. Therefore, as people survive from the environment, we should give our contribution to protect the environment as we can. As examples by using public transports, we can reduce the overall poisonous gas emissions and can see a reduction of traffic congestions. Also, we can use recycle and reuse concepts as the human beings survive due to the environment.

Suggestions for future research

This study has revealed how institutions can prevent environmental harm, which provides justification for creating effective institutions. Additionally, it has emphasized how important education is to the preservation of the environment. These should be seen as chances for future study on this subject. More variables can

be incorporated into the model, f or example, increased variables for financial development or environmental degradation. Future research can choose a different sample; for example, it would be interesting to learn whether these results hold up in developing nations. Future researchers should develop an alternative methodology because this study only used secondary data and future researchers can use primary data for this type of study.

According to this study, the authors have explored the relationship between Financial Development and Environmental Degradation. Future research can be done to explore whether there's a relationship between Financial Development and Environmental Degradation by doing a regression analysis. Authors hope to do the the regression analysis and find whether there's a relationship between Financial Development and the Environmental Degradation.

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