



## The impact of natural resource rents, geopolitical risk, and economic policy uncertainty on green growth in Iraq Country

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### Abstract

**Background and Objective:** Natural resource rents can act as a dual factor; on the one hand, they provide financing for green projects, and on the other hand, they may lead to dependence on polluting industries and reduce incentives to invest in sustainable technologies. Geopolitical risk in resource-rich countries, especially in unstable regions, can lead to uncertainty in investments and a decrease in the willingness to develop green economic projects, which contributes to the weakening of sustainable growth. Uncertainty in economic policies, especially in the field of environmental regulations and taxation, can lead to reduced investor confidence and delays in the implementation of green initiatives, thus affecting sustainable economic growth.

**Methodology:** This study examines the effects of natural resource rents, geopolitical risk, and economic uncertainties, and other control variables such as financial development, foreign trade, foreign direct investment, and fixed capital formation on green economic growth in Iraq using an auto-explanatory model with wide lags (ARDL) and seasonal data over the period 1995-2022.

**Results and Findings:** The results of the model estimation show that natural resource rents, geopolitical risk, and economic policy uncertainty have a negative and significant effect on green economic growth in this have coutry. Also, financial development, foreign trade, foreign direct investment, and fixed capital formation have a positive and significant effect on green economic growth in Iraq country.

**Keywords:** Natural resource rents, geopolitical risk, economic policy uncertainty, green growth, Iraq.

### Extended Abstract

#### Introduction

Green economic growth seeks economic development and prosperity while at the same time paying attention to environmental sustainability and the conservation of natural resources. Conventional economic growth often comes at the expense of the environment, leading to issues

such as climate change, pollution, habitat destruction and resource depletion. Green economic growth aims to decouple economic growth from environmental degradation, enabling sustainable development. Green economic growth emphasizes the efficient use of natural resources, promoting the adoption of renewable energy, recycling and circular economy principles. This helps to reduce resource scarcity and reduce the environmental impact of economic activities. Natural resource rents can act as a double agent; on the one hand, they provide financing for green projects, and on the other hand, they may lead to dependence on polluting industries and reduce incentives to invest in sustainable technologies. Geopolitical risk in resource-rich countries, especially in unstable regions, can lead to uncertainty in investments and a decrease in the willingness to develop green economic projects, which contributes to the weakening of sustainable growth. Uncertainty in economic policies, especially in the field of environmental regulations and taxation, can lead to a decrease in investor confidence and a delay in the implementation of green initiatives, and consequently, affect sustainable economic growth.

### **Methodology**

In this study, the autoregressive long-lag regression (ARDL) model will be used to analyze the research pattern. The ARDL approach is a popular econometric technique that is used to estimate the long-run and short-run relationships between variables in a time series framework, especially when the stationarity levels of the research variables are zero and  $\neq 1$ . This method includes short-run relationship, covariance analysis, long-run relationship, and error correction coefficient, and allows researchers to examine the effects of independent variables in the short and long run. In this study, oil rents are used as an indicator of natural resource rents, the Global Geopolitical Risk Reference Index (GPR) is used to construct historical geopolitical risk (GPRH), and a composite index of three policy variables (government spending, exchange rate, liquidity) to calculate economic policy uncertainty, and other control variables such as foreign trade, foreign direct investment, and credit granted to the private sector by the banking sector as an indicator of financial development and gross fixed capital formation on the reduction of greenhouse gas emissions as an indicator of green economic growth in Iraq during the period 1995-2022.

### **Results and Discussion**

According to the results in the long term, the estimated coefficient of natural resource rent is -6.4722 and its probability value is 0.0145, which indicates that natural resource rent has a negative and significant effect on green economic growth in Iraq in the long term. Also, in the long term, the estimated coefficient of geopolitical risk is -48.6867 and its probability value is 0.0027, which indicates that geopolitical risk has a negative and significant effect on green economic growth in Iraq in the long term. Because geopolitical risks, especially in a region like the Middle East, can have destructive effects on green economic growth in Iraq in the long term. The estimated coefficient of economic policy uncertainty is -0.3239 and its probability value is 0.0215, which indicates that economic policy uncertainty has a negative and significant effect on green economic growth in Iraq in the long term. To examine the sub-hypotheses of the research in the long term, the estimated coefficient of foreign trade is 1.3155 and its probability value is 0.0084, which indicates that foreign trade has a positive and significant effect on green economic growth in Iraq in the long term. The estimated coefficient of fixed capital formation is 0.2436 and its probability value is 0.0181, which indicates that fixed capital formation has a positive and significant effect on green economic growth in Iraq in the long term. The estimated coefficient of foreign direct investment is 274.9596 and its probability value is 0.0485, which indicates that foreign direct investment has a positive and significant effect on green economic growth in Iraq in the long term. The estimated coefficient of financial development is 31.4855 and its

probability value is 0.0014, which indicates that financial development has a positive and significant effect on green economic growth in Iraq in the long term. Therefore, the results obtained from the estimation are in line with the secondary objectives of the present study in the long term.

### **Conclusion**

Geopolitical risk can seriously affect Iraq's oil exports and revenue sources and prevent investment in green economic projects. Therefore, Iraqi politicians can solve this problem by providing financial incentives and facilities for investors, investing in modern irrigation, developing tourist areas and establishing agricultural processing centers, attracting foreign investment and creating jobs in the productive sectors, in order to diversify the Iraqi economy through the development of non-oil sectors such as agriculture, tourism and manufacturing industries; also, negotiating with neighboring countries to create common markets and facilitate trade and membership in regional and international organizations to increase cooperation and reduce geopolitical risks for regional cooperation to create new markets and reduce dependence on global markets that are affected by geopolitical risks. Natural resource rents in Iraq create a strong dependence on oil revenues and prevent diversified and sustainable economic development. This dependency can discourage investment in green economy projects. Therefore, governments could consider establishing a national fund to invest in green economy projects, with the aim of reducing dependence on oil revenues and sustainable development that is funded by alternative sources of oil rents, such as value-added tax, corporate income tax, and land tax.

Uncertainty in Iraq's economic policies, particularly in the areas of the environment and the green economy, hinders long-term investment and sustainable development. This uncertainty could include changes in laws, fiscal policies, or government support that make investors hesitant. Therefore, the government can create a transparent framework (including the development of clear and documented policies in the field of green economy, including laws, regulations, and government support that are in simple language and understandable to everyone, including foreign investors), predictability in the budget (allocating a sustainable and predictable budget for projects related to the green economy), clear and transparent management mechanisms for the implementation of green economy projects, and strong connections with international organizations and leading countries in the field of green economy, for investing in the green economy with the aim of reducing uncertainty and creating confidence for investors, thereby promoting sustainable development and growth of the green economy in this country.

### **Declarations**

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**Conflict of Interest:** The authors declare no conflict of interest.

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