

## Exploring the Resource Curse Hypothesis: Empirical Insight from Turkmenistan<sup>1</sup>

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### ABSTRACT

This study analyzes the effects of natural resource rents on GDP growth in Turkmenistan using annual data for the period 1990-2019. The ARDL model and the bounds testing approach are employed to examine the short and long-run relationships among the variables. The results show a long-run positive effect of natural gas rents on growth: a 1% increase in gas revenues is associated with a 2.3% rise in GDP growth. In contrast, oil rents negatively affect growth, with a 1% increase linked to a 3.1% decline.

In the short run, the lagged values of gas rents exhibit a statistically significant negative impact. Specifically, the one-period lag coefficient is  $-0.74$ , indicating a short-run contractionary effect. Conversely, the one-period lag of oil rents has a positive and significant influence on growth. The error correction term confirms that 55% of deviations from long-run equilibrium adjust within a year, validating the model's stability. These findings suggest that while natural gas may support growth in the long term, oil dependency could be detrimental. Effective resource revenue management, institutional reform, and economic diversification are essential to avoid the resource curse. Turkmenistan must reduce its reliance on oil and allocate gas revenues strategically to achieve sustainable development.

**Keywords:** Resource curse hypothesis, Natural resource revenues, Economic growth

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