

ENERGY TRANSITION AND EXPORT DIVERSIFICATION IN OIL-DEPENDENT COUNTRIES: THE ROLE OF STRUCTURAL FACTORS

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Overview

The contribution of carbon assets (including oil and gas) to the economic prosperity of oil-exporting countries is significant. In contrast, a critical evaluation of economies that depend on oil revenues reveals that, on average, they have not benefited much from exploiting their natural endowments. Various elements have been challenging in oil countries' management of their wealth, including the Dutch disease, the volatility of resource revenues, weak skills transfer, among others. A suggested pathway for oil countries to mitigate this new set of challenges is to diversify their economies. Diversification of oil economies should also ensure the energy security of the global economy in the path of the energy transition. For countries relying on oil-export revenues, diversification would help transform hydrocarbon revenue into other forms of assets while protecting economies from commodity price volatility.

Methods

In this paper, we hypothesize that differences in structural characteristics can generate differences in the diversification paths of oil countries. This should explain why economies that exploit the same natural resource, oil, can differ significantly concerning their export baskets. Some countries having initially similar characteristics may converge towards the same level of diversification. On the other hand, they may also have diverging track records of diversification. To test this hypothesis, we first investigate whether diversification efforts that have been put by the oil-exporting countries have been converging as a whole over time. Then, we examine whether the diversification paths of individual countries create convergence clubs with different steady-state levels of diversification. Additionally, we use ordered logit models to investigate the factors behind the formation of the convergence clubs and discuss how these factors can help improve the resilience of oil-exporting countries in the future.

Results

Despite the evidence of a correlation we show between economic resilience and diversification, countries' export diversification paths have shown little progress and have even declined in some oil countries. Our convergence analysis suggested that overall diversification efforts in oil-exporting countries have diverged but that they can be clustered into three convergence clubs with different paths and levels of diversification. We find that improvements in commercial and financial fields are associated with higher odds of being in a high diversification club. Good institutional quality and infrastructure are also found to be correlated with high diversification. Countries with a higher stock of human capital and level of R&D tend to belong to the clusters with higher diversification levels. However, economies with adverse macroeconomic conditions (e.g. inflationary environment) have higher odds of being in a low diversification club.

Conclusions

Traditional oil-exporting countries (such as Gulf Cooperation Council countries) have been implementing structural reforms and increasing efforts to diversify their economies away from exhaustible resources. Many of them have launched strategic plans or visions in this direction. For instance, Saudi Arabia's Vision 2030 aims to enhance local content, support national products and expand the industrial base in the country to promote the production of new products. Also, in line with the Vision's Financial Sector Development Program, it is aimed to strengthen financial institutions to support the growth of the private sector and stimulate investment. On the other hand, the National Transformation Program aims to improve the government's operational efficiency and enhance

the infrastructure to improve economic enablers. As shown in this paper, all these policy measures and reforms would help increase the likelihood of countries having a more diversified and resilient economy.

References