

# ***IMPACT OF NATURAL RESOURCE ABUNDANCE ON ECONOMIC PERFORMANCE FROM A TECHNOLOGY INTENSITY PERSPECTIVE***

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## **Overview**

The association between natural resource abundance and economic performance has been an intriguing question for economists as well as the political philosophers such as Cantillon, Montesquieu and Jean Bodin for centuries. While some economists such as Rostow (1960), Alexeev and Conrad (2009) accentuate that the bounty of resources is a blessing and leads to prosperity, others such as Sachs and Warner (1995, 1997, 1999, 2001) and Auty (1990, 1993) utterly dissent to that view and blame abundance of natural resources as a culprit for economic contraction. Gelb, (1988), Gylfason et al. (1999) are among the ones who claim that, it is a curse. There are also some scholars who argue that it is neither a curse nor a destiny such as Lederman and Maloney (2007). In addition, Delacroix (1977) and Herb (2005) find no statistical evidence of natural resource curse.

The experiences of resource abundant countries have been very heterogeneous. There is a vast literature on the relationship between natural resource abundance and economic performance. These studies demonstrate that there is no consensus on the sign of the relation between the two variables. While some countries experience a miracle of plenty and enjoy an increase in their living standards, others are exposed to the paradox of plenty known as Dutch Disease. Dutch Disease is a paradoxical situation where a boom in one sector puts a drag on the growth of the other sectors, thereby deteriorating the overall growth rate of the economy. This boom might be related to natural resources or remittances as well as to direct foreign aid.

The aim of this study is to investigate the influence of natural resource discoveries or booms on manufacturing industries in 34 Organisation for Economic Co-Operation and Development (OECD) countries between the years 1989-2014, depending on the technology-intensity of sectors.

## **Methods**

We employ theoretical gravity models with fixed effects where we proxy manufacturing production (dependent variable) by exports, since countries export goods in which they have comparative advantage. We proxy booms in natural resources production (our key independent variable) by growth rate in contribution of all natural resources income to gross domestic product in a country (total natural resources rents). Trade data are gathered from the OECD Stan Database and are classified according to the ISIC technology intensity definition. We form the rest of the gravity model in accordance with the contemporary gravity literature. Employing the augmented gravity model of trade, the relationship between technology intensity and the existence of the paradox of plenty has been scrutinized.

## **Results**

The findings of the study report no evidence of Dutch Disease in any of the industrial classifications.

## **Conclusions**

Our findings suggest that for the 34 OECD countries there is no relation between the increase in natural resource rents and the manufacturing sector's performance. According to the authors this might be due to strong institutional setting and democracy as well as lack of voracity effects and rent seeking attitudes towards the windfall gains. Also wise management of the extra revenues by means of funds might have contributed to the stability of economic performance. Further analyses of these arguments may pose a complementary topic for future research.

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