Natural Resources, Financial Development and Sectoral Value Added in a Resource Based Economy

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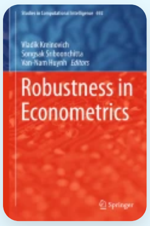

Robustness in Econometrics

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Abstract

This chapter vestigates the effects of natural resource dependence and financial development on the sectoral value added in a resource based economy, Yemen. We allow the effect of these two factors to be different for the growth of agricultural, manufacturing and service sectors respectively. We remark on one hand that natural resource curse hypothesis is strongly supported. The agricultural and manufacturing sectors are affected by this phenomenon which implies the existence of Dutch disease symptoms in Yemen. On the other hand, financial sector development does not play an important role in fostering real sectors activities. The service sector is the only sector that benefit from the financial sector development in Yemen. This finding opens up a new insight for Yemeni economy to sustain sectoral growth by controlling the level of natural resource dependence and proactiveness sectoral strategy for financial sector development.

Notes

1. Other regional countries such as Saudi Arabia, Oman and Kuwait do not have other important real sectors in their economy besides oil

2. The first bank was established in the north of Yemen in 1962

3. The Dutch disease phenomena works when natural resources booms increase domestic income and, consequently the demand for goods, which generate inflation and appreciation of the real exchange rate making much of the manufacturing industry uncompetitive in the world market

4. See [6, 9] for recent literature survey of the curse of natural resources

5. Manufacturing is a subsector of industry sector; however, we focus on its separate contribution due to its importance in our study

6. According to the Central Statistical Organization of Yemen, there were eighteen Yemeni and international commercial and Islamic banks, thirty exchange companies, and nineteen insurance corporations and pension funds operating in Yemen in 2012

7. Oil revenues in Yemen include the concession commissions that the government receives from oil production companies, tax charges on foreign oil companies that operate in Yemen, and grants that the government receives from oil companies after signing contracts (Yemeni Ministry of Finance)

8. We focus on financial intermediaries due to the absence of stock market in Yemen

9. Yemeni unification took place on May 22, 1990, when the People's Democratic Republic of Yemen (also known as South Yemen) was united with the Yemen Arab Republic (also known as North Yemen), forming the Republic of Yemen (known as simply Yemen)

10. Angelini and Marcellino [4] argued that this simple treatment of the unification problem has been used widely in empirical macroeconomic analyses in Europe. It is based on the economic reasoning that East Germany's economy represented very small portion of the unified Germany economy in real GDP terms in 1991

11. Evidence of the validity of this treatment comes from the fact that the economy of former Southern Yemen accounted for only 17.3% of real GDP of united Yemen. Additionally, the economy of united Yemen is largely based on the market system which was followed by the Northern part before unification

12. The same approach is applied to Eqs. (5) and (6) respectively

13. Figures of CUSUM and CUSUMQ are available upon request

14. A simple univariate regression applied by IMF (2013) of the real effective exchange rate on real oil prices for the period 1995–2012 suggested that a 1% increase in oil prices leads to a real appreciation of Yemeni Rial about 0.3%

15. This measure is considered to be the broadest measure of financial intermediation and includes three types of financial institutions: the central bank, deposit money banks and other financial institutions. Although this measure does not represent the effectiveness of the financial system, but by assuming that the size of the financial intermediary system is positively correlated with the financial system activities, this can be used for constructing PCA as a measure of financial development for robustness check

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