Understanding financial resource curse conjecture in developing economies: Insights from the rapidly emerging resource-abundant South Asian bloc

Understanding Financial Resource Curse Conjecture in Developing Economies: Insights from the Rapidly Emerging Resource-abundant South Asian Bloc

Stephen Taiwo Onifade (Ph.D.)
School of Finance and Accounting, Department of Economics, University of Vaasa, FI-65200, Vaasa-Finland
E-mail: stephentaiwo.onifade@gmail.com
ORCID ID (https://orcid.org/0000-0003-1497-7835)

Bright Akwasi Gyamfi (Ph.D.)
School of management, Sir Padampat Singhania University
Bhatewar, Udaipur-313601, Rajasthan, India
E-mail: brightgyamfi1987@gmail.com

Abstract

Natural resources are often associated with economic growth and development. However, the channels of this association can be inherently complex and intriguing. Thus, requiring in-depth deciphering. While the bulk of the literature is deeply rooted in the popular resource curse theory, this contribution specifically explores the financial resource curse (FRC) conjecture. The contribution succinctly encapsulates the followings: (i) A synopsis of resource curse conjecture, (ii), Resource curse and financial resource curse in perspective, (iii) Pathways to assessing the validity of FRC with empirical illustration from the case of the rapidly emerging south Asian economies. (iv), Concluding remarks.

Keywords: Financial development; Natural resources; Resource curse; Globalization; Economic growth & Development; Emerging economies

Key points:

- A synopsis of resource curse conjecture.
- Resource curse and financial resource curse in perspective.
- Pathways to assessing the validity of financial resource curse conjecture.

1. Introduction

Attaining sustainable economic growth lies at the central focus point of macroeconomists and policymakers for authorities across the globe. Several economies in the Southern Asian region including Bangladesh, India, Nepal, Pakistan, and Sri Lanka among others have witnessed tremendous economic growth in the last few decades. The available statistics from the World Bank show that these countries recorded an increase in average annual gross domestic product (GDP) growth rate from about 3.3% in 2001 to about 5.7% in 2010 (WDI, 2020). Some of the countries like India, Bangladesh,

and Nepal even recorded annual growth rates of 6.5% and above in 2018 (WDI, 2020). As the quest for economic expansion continues to rise in the region, researchers across boards are increasingly devoting time to understand growth trends and further decipher growth inducing factors. This is often done to facilitate the designing of policy recommendations to ensure continuity of the integral benefits from economic expansion such as higher per capital income and greater possibility of improvement in general societal welfare from rising consumption level among others (Bishop & Formby, 1994; Islam et al. 2003).

Some studies have examined different growth inducing factors and some studies have also highlighted the specific roles of natural resources among other variables (Havranek et al. 2016; Gerelmaa & Kotani, 2016). Several other studies have also been carried out on the environmental aspects of the natural resources' discussion (Haseeb et al. 2021; Onifade et al. 2021; Gyamfi et al. 2021). However, overall, a vast majority of these studies only focus on the economic development side of the natural resource discussion especially from the natural resources curse (NRC) conjecture thereby leaving many other facets of the discussion unaddressed (Fleming et al. 2015; Gallego et al. 2020).

Many economies depend on activities in their primary sectors including mineral extractions, agricultural land use, and other resource mining activities for economic progress. The primary sector is often a major generator of foreign exchange earnings alongside other economic benefits in not just the resource rich countries alone but usually among nations that are at their early stage of economic growth (Gerelmaa & Kotani, 2016; Onifade, 2022). This has motivated several researchers to focus on examining the likely positive or negative economic impacts of natural resources. In most cases, the negative impacts of natural resource as supported by the NRC conjecture have dominated the economic literature (Carmignani, 2013; Allcott & Keniston, 2014). However, in recent times, given the rising importance of financial sector in countries where primary sector plays significant roles including those in the South Asian region and others across the globe, financial resource curse (FRC) conjecture is gradually becoming an important aspect in the resource curse discussion.

It is possible for resource rents to help boost liquidity in an economy thereby enhancing the lending capacity of financial institutions to various economic agents that need funds. This is a logical intuition on how natural resources can facilitate financial development. However, there are arguments that the extent to which this is practicable depends on many other factors such as the quality of available institutions and other macroeconomic indicators (Dwumfour & Ntow-Gyamfi, 2018). Hence, there is no consensus on the question of whether natural resources are a blessing or curse for financial developments. Instead, the question requires further investigations among countries.

2. A synopsis of Financial Resource Curse (FRC) in the Natural Resource Curse (NRC) Perspective

The natural resource curse (NRC) and financial resource curse (FRC) conjectures provide the basic theoretical underpinnings for this expository. These theories, especially the NRC have drawn a wide range of scholarly contributions over the past couple of years due to the intrigues and ambiguities surrounding the economic growth trajectories of most resource abundant economies across the globe. The NRC conjecture describes the situation whereby resource abundant nations or areas do not exhibit the level of economic expansion that is often seen among the nations that are not as endowed

as them (Sachs & Warner, 2001; Auty, 1997; Sachs & Warner, 1995). On the other hand, the FRC conjecture relates natural resources to financial development by establishing the influential roles of the former on the latter. Unlike the NRC that focusses on economic development, the main argument of the FRC is that the financial system and credit infrastructure can be underdeveloped in a nation that pays less attention to other sectoral development due to resource abundance.

However, as earlier noted, there is no general answer or a consensus on the question of whether natural resources are a blessing or curse for financial developments. On the contrary there is a need to empirically dig into this question among countries. Thus, moving on to the empirical literature, various results have been documented on the roles of natural resources among nations and these attempts are generally carried out to examine the validity of the NRC. For example, natural resource windfalls have been reported to have worsen economic development (Sachs & Warner, 2001; Carmignani, 2013; Gerelmaa & Kotani, 2016; Fu et al. 2019). Others have shown that natural resources produce positive economic outcomes (Brunnschweiler, 2008; Allcott & Keniston, 2014; Gyamfi, 2022).

As for empirical evidence on the financial resource curse (FRC) aspect, the literature is also characterized by lack of consensus on the link between these variables e.g Guan et al. (2020) for China, Dogan et al. (2020) for Developed countries, and Dwumfour & Ntow-Gyamfi (2018) for African countries. In a nutshell, while the NRC is a well-researched concept in the literature, the FRC conjecture remains a grey area. Hence, Dwumfour and Ntow-Gyamfi (2018) have argued that researchers need to pay adequate attention to the influence of natural resources on the financial sector as this sector plays a significant role in many economies.

3. Empirical Illustration

Here, we provided paths to assessing the validity of FRC with brief empirical illustration from the case of the rapidly emerging south Asian economies. Different approaches can be adopted to create an empirical analysis for the understanding of the NRC conjecture. However, it is very paramount for researchers to be familiar with the basics of any intended methodologies to be adopted vis-à-vis their general assumptions, compatibility with variables' data structures, and their strengths/weakness among other issues. Three baseline models were used for a simple empirical illustration for the understanding of the FRC conjecture based on four separate measures of natural resources namely Forest Rent (LFOR), Natural Gas Rent (LNGR), Coal Rent (LCOR), and Oil Rent (LOILR). The data used covers 2000 and 2020 period for 5 South Asian economies namely Bangladesh, India, Nepal, Pakistan, and Sri Lanka. The data are openly available in the World Bank Development Indicator (WDI, 2022).

$$LFD = f(LCOR + LFOR + LNGR + LOILR) \text{ ------ (Model 1)}$$

$$LFD = f(LCOR + LFOR + LNGR + LOILR + LTO) \text{ ------ (Model 2)}$$

$$LFD = f(LCOR + LFOR + LNGR + LOILR + LTO + LRGDP) \text{ ------ (Model 3)}$$

In the models, FD denotes financial development and *L* represents natural logarithm operations. Since trade is arguably indispensable in resource-rich economies (Onifade, 2023; Onifade et al. 2023), both Trade Openness (LTO) and economic growth (LRGDP) were controlled for. Following major necessary preliminary investigations in panel data analysis (Dogan et al. 2020; Onifade et al. 2022), we applied the Augmented Mean Group (AMG) technique and the Method of moment quantile

regression (MMQR) technique to illustrate whether natural resources rent induces FRC in the south Asian economies.

4. Further Discussions and Concluding Remarks

Following the AMG and quantile MM estimations, the findings in (See Table1 and Table 2) indicate that the individual identified forms of resources rent (coal rent, forest rent, natural gas rent and oil rent) increases financial development. These results contradict the FRC conjecture and are consistent with the financial resource blessing hypothesis. The latter argues that financial expansion is positively correlated with an economy's inventory of natural resources. This finding suggests that earnings from natural resources are being put to good use in the economy. That is to say, the developing nations (South Asia economies) will receive a monetary windfall as a result of rents from their natural resources. The banks' ability to extend credit is bolstered by the influx, which boosts their deposit balances. This means that the financial growth of the sample countries is supported by the rents from their natural resources. This boon, however, cannot be separated from the work of institutional reformers. Moreover, trade openness as well as economic growth were seen to have a positive relationship with financial development at Models 2 and 3 for the AMG and all the quantiles from the MMQR. These findings could be interpreted as showing that heterogeneity or quantile regression provides extremely accurate measurements of the conditional probability. Consistent with the concept of a beneficial relationship involving per capita income, trade openness, and regional financial development. Moreover, this outcome affirms the findings of Dogan et al (2020), Asif et al (2022) and Elheddad (2019).

In conclusion, resource earnings can boost liquidity which can in turn foster banks' capabilities to extend financial assistance to economic agents thereby contributing to overall financial development of nations. While this illustration provides a simple understanding of the FRC conjecture, there are certain limitations in this illustration that researchers can pay attention to in subsequent studies. Several factors must be controlled in a typical model within the FRC framework. For instance, issues like better institutional quality may influence FD perhaps to lessen potential adverse effects of resource revenues on FD especially among resource-rich economies. Quality institutions can provide efficient regulations of contracts and encourage smooth financial transactions that center on borrowing and lending among economic agents. Factors like inflation and globalization among others can also be incorporated in subsequent studies within the FRC framework.

List of Tables

Table 1. AMG Technique Outcomes

Dep Var. FD	Model 1	Model 2	Model 3
LCOR (Coal Rent)	0.076*	0.088*	0.096**
LFOR (Forest Rent)	0.444**	0.642***	0.472***
LNGR (Natural Gas Rent)	0.057*	-0.161***	-0.130***
LOILR (Oil Rent)	0.328***	0.257**	0.225**
LTO (Openness)		1.483***	1.271***

LGDP (Growth)			0.302
Constant	-0.906***	-6.649***	-7.721***

Source: Authors computations. Note: *, **, and *** denote 10%, 5% and 1% respectively.

Table 2. Method of Moment Quantile Regression Outcome (Model 3)

	Location	Scale	MMQ1	MMQ2	MMQ3	MMQ4	MMQ5	MMQ6	MMQ7	MMQ8	MMQ9
LCOR	0.096**	0.028*	0.085*	0.125*	0.113**	0.098**	0.090**	0.084**	0.075**	0.068**	0.061*
LFOR	0.472**	0.087**	0.604**	0.383**	0.42188	0.466**	0.492***	0.508***	0.538***	0.560***	0.581***
LNGR	0.130**	0.047	0.076*	0.179*	0.159**	0.134**	0.120**	0.111**	0.095**	0.083*	0.072**
LOILR	0.225**	0.103*	1.930***	0.330**	0.287**	0.233**	0.201**	0.182**	0.147**	0.121*	0.096
LTO	1.271***	0.043	1.408*	1.226***	1.245***	1.268***	1.281***	1.289***	1.304***	1.315***	1.325***
LGDP	0.302	0.557***	0.773	0.873**	0.637**	0.344	0.174	0.071	0.123	0.261	-0.396*
Cons	-7.721***	4.288***	-12.525*	-12.115***	-10.294***	-8.039***	-6.730***	-5.938***	-4.446***	-3.389***	-2.348*
Obs.	135	135	135	135	135	135	135	135	135	135	135

Source: Authors computations. Note: Obs. (Observation) *, **, and *** denote 10%, 5% and 1% respectively.

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