Are natural resources cursed? An investigation of the dynamic effects of mineral fuels exports on governance and competition

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Extended Abstract

The resource curse literature maintains that reliance on extractive industries may have a deleterious effect on long run growth, as testified by the poor long run economic performance of several resource dependent countries (see, for instance, Sachs and Warner, 1995, 1997 and 2001). Yet, experience also points to the success stories of countries that succeeded in harnessing their resource wealth to achieve sustained economic growth. By and large, the latter benefited from more favourable initial conditions, with higher initial incomes and better institutional quality. This suggests that the effects of resource dependence may be positive or negative depending on the ability of civil society and of a country's institutions to govern the consequences of resource dependence. It is also possible that, regardless of initial conditions, resource dependence may have the power to influence institutional development, which in turn will determine a country's growth potential following resource booms. This would occur, for instance, if the availability of revenues from resource exports allowed natural resource exporters to outbid other constituencies in shaping the content of laws and regulations, in a mechanism similar to that described by Olson (1965) Stigler (1971) and Peltzman (1976). The ultimate consequence of this *de facto* political power would be the alteration of the entire governance system of a country, in a way that is unfavourable to the diffuse protection of property rights (Acemoglu, Johnson and Robinson, 2005), thus dampening entrepreneurship, as well as incentives to invest and innovate in other sectors of the economy.

This paper examines the nature of the dynamic interaction between resource dependence, measured as the share of mineral fuels in total exports, and the evolution of six dimensions of institutional quality. These are based on the Governance and Anti-Corruption Project of the World Bank Institute, which estimates six indicators (Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption), covering 212 countries and territories for the period 1996 to 2009. In order to test whether resource dependence also undermines a level playing field in the economy, the analysis also examines the effects of resource dependence on the perceived intensity of competition, based on the World Economic Forum indicator for competition in local markets for the period 1998-2009. The analysis also takes a closer look at the Russian case by comparing the effects of resource dependence on Russian institutions with worldwide averages,

as well as exploiting regional Russian data on regulatory capture for the period 1995-2000 (Slinko et al, 1995).

Using a system estimator - based on the work of Arellano and Bover (1995) and Blundell and Bond (1998) – this paper applies a dynamic panel data model controlling for multiple aspects - including the level of economic development, size of government, trade openness, country fixed effects, and others -, as well as for the path dependence of institutional outcomes, by including the lagged value of the institutional variable and by controlling for the potential endogeneity between resource dependence and institutions. Results indicate that a high degree of resource dependence is associated with worse government effectiveness, as well as with reduced levels of competition across the economy. Estimation of short and long run elasticities suggests that government effectiveness and the intensity of domestic competition decrease over time as the dependence on natural resources increases. The effect seems quite relevant, with a 1% increase in the average worldwide share of fuel exports in total exports leading to a 0.16% decrease in government effectiveness in the short run, and to a 0.23% decrease in the long run. When considering competition in the local market, an increase of 1% in the share of fuel exports in total exports would be associated to a decrease of 0.77% in the competition indicator in the short run, while in the long run this decrease would be of 0.9%. The effect in the case of Russia appears smaller than the global for government effectiveness and much larger for the intensity of competition in local markets. A 1% increase in the share of fuel exports in total exports of the country would lead to a 0. 09% decrease in government effectiveness in the short run, and to a 0.12% reduction in the long run. When considering competition in the local market, an increase of 1% in the share of fuel exports in total exports would be associated to a decrease of 9.4% in the competition indicator in the short run, while in the long run this decrease would be of 11.1%. These findings would seem to lend support to a negative long run effect of resource dependence. The two channels identified are the reduction in the ability of state institutions to perform their functions and the undermining of a level playing field across non-resource sectors.

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