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Do Natural Resource Revenues Hinder Financial Development? The Role of Political Institutions

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Summary. — We hypothesize that natural resource revenues may deteriorate contract enforcement if political institutions are weak. As poor contract enforcement leads to low financial development, resource revenues may hinder financial development in countries with poor political institutions, but not in countries with comparatively better political institutions. We provide empirical support for this hypothesis based on within-country variation in our sample covering the period 1970–2005 and 133 countries. Our results are robust to the use of additional control variables, different samples, and alternative measures of financial development and political institutions.

Key words — natural resources, political institutions, financial development

1. INTRODUCTION

There is a large literature discussing whether natural resource revenues are a curse or a blessing for economic development (see van der Ploeg, 2011, for a survey). In this paper we focus on the question of whether natural resource revenues are a curse or a blessing for financial development, i.e., for the functioning and size of financial markets and intermediaries. [1] The financial sector and especially banks in natural resource-rich countries may be flushed with liquidity originating from tax receipts deposited by governments, or directly deposited by state owned or privately owned companies operating in the resource sector. Therefore, all else being equal, one might expect more bank credits to firms and households, and more developed financial markets in resource-rich countries.

In this paper we however argue that all else might not be equal. We build our theoretical argument on two important strands of the economics literature. First, based on their own early work (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997, 1998), La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000), and Djankov, McLiesh, and Shleifer (2007) show that contracting institutions that regulate transactions between creditors and debtors are a key determinant of financial development. In the absence of strong contracting institutions, creditors find it difficult to enforce contracts, and debtors may have little incentive to repay their debt. As a result private investors and banks might be reluctant to borrow in the first place, even when highly liquid. Second, Engerman and Sokoloff (1997) and Acemoglu, Johnson, and Robinson (2001) argue that political institutions are to a considerable degree determined by historical events, e.g., the mortality of early colonial settlers, and that they are a main determinant of long-run economic development. [2] Sound political institutions allow citizens to keep the political leaders accountable and to protect them from expropriation by the government. Hence political institutions can be an important constraint for a country's ruling elite. Acemoglu, Johnson, and Robinson (2005), and Acemoglu and Robinson (2012) therefore argue that the quality of political institutions is an important determinant of the quality of contracting institutions and the economic policies chosen by the elite. Inspired by these ideas, Bhattacharyya and Hodler (2010) argue that the quality of political institutions also determines how natural resource revenues affect economic policy choices and corruption. They present a theoretical model that predicts that higher natural resource revenues increase corruption by the political leaders if political institutions are weak, but not if political institutions are strong. They provide empirical evidence in support of this prediction. [3]

Our theoretical argument, which is based on the contributions discussed above, starts with a trade-off that a country's political leaders and, possibly, other members of the elite may face. They may have an incentive to establish the sound contracting institutions necessary for a well-functioning financial market. But contract enforcement is costly and requires the politicians in government to prioritize accordingly by allocating sufficient funds to the judicial system and the relevant ministries, and by appointing highly skilled ministers and judges with "good" intentions. The elite may thus face a tradeoff between fostering contract enforcement, on the one

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hand, and engaging in rent seeking behavior, on the other hand. Whether natural resource revenues are a curse or a blessing for financial development is therefore likely to depend on how natural resource revenues affect the elite's support for contract enforcement.

In resource poor countries, the elite can only rely on the nonresource sector for their revenues. Having weak contracting institutions would probably lower investments (Djankov *et al.*, 2007), thereby reducing output in manufacturing and services. Low output in these nonresource sectors would severely damage the governments' revenue prospects. Therefore, the political leaders of resource poor countries may choose to foster contract enforcement even if they only care about the rents they can appropriate from the private sector. In particular, they may do so independently of whether or not they are constrained by sound political institutions.

In contrast, in resource-rich countries the elite may not need thriving nonresource sectors to enrich themselves. They can directly appropriate natural resource revenues. Hence, in the absence of sound political institutions, the political leaders' incentives for fostering contract enforcement are much weaker in resource-rich than in resource poor countries. However, in resource-rich countries with sound political institutions, the situation is more difficult. There, the elite may also want to engage in rent seeking and neglect contract enforcement, but they know very well that voters can hold politicians accountable and may punish them at the polls when choosing socially harmful policies. Hence, despite all the natural resource revenues, the political leaders may well choose to foster contract enforcement and limit rent seeking behavior in order to secure further terms in office.[4]

Based on this theoretical argument we hypothesize that natural resource revenues hinder financial development in countries with poor political institutions, but not in countries with comparatively better political institutions. This hypothesis is in line with The Economist's (2011) expectation that oil rich Nigeria might see less corruption and red tape, but more financial development after the first reasonably free and fair elections in April 2011.

In this paper we test the above hypothesis systematically using panel data covering the period 1970–2005 and 133 countries. The use of panel data is a significant departure from most existing studies on financial development and the resource curse, which typically present results driven by cross-country variation. Our fixed effect and instrumental variables estimates confirm that the relationship between natural resource revenues and financial development depends on the quality of political institutions. In particular, we find that resource revenues are negatively associated with financial development in countries with weak political institutions, but that this negative association decreases and eventually vanishes as political institutions improve. Our main results hold when we control for country fixed effects, time varying common shocks, per capita income, and various additional covariates. They are also robust across different samples as well as to the use of various alternative measures of financial development and political institutions.

In addition, we also look into the potential transmission mechanism through which natural resource revenues may hinder financial development in countries with weak political institutions. Consistent with our theoretical argument, we find evidence that natural resource revenues hinder financial development in countries with weak political institutions by lowering the quality of contracting institutions. Our empirical findings and those in Bhattacharyya and Hodler (2010) are also consistent with the notion that rent seeking activities may be a major reason for why natural resource revenues lower the quality of contracting institutions in the presence of weak political institutions. We however acknowledge that our empirical findings could also be consistent with alternative explanations for why natural resource revenues lower the quality of contracting institutions if and only if political institutions are weak.

Our paper is not only related to the contributions on which our theoretical argument is based, but also to other contributions to the large literature on the determinants of financial development (see Beck & Levine, 2005, for a survey). La Porta *et al.* (1998) show that legal origin is a good predictor of the efficiency of the legal system in protecting private property rights and enforcing contracts. They find that British common law countries are likely to have a better developed legal system which promotes financial development. Inspired by the work of Acemoglu *et al.* (2001) and Beck, Demirgüç-Kunt, and Levine (2003) find that differences in early settler mortality can explain cross-country variation in financial development among former colonies. The studies of Acemoglu and Johnson (2005) and Herger, Hodler, and Lobsiger (2008) suggest that colonial history mainly affects today's financial development through its effect on political institutions. Guiso, Sapienza, and Zingales (2004) in contrast argue that social capital and informal rules that govern social interaction play a crucial role in financial development. By using country fixed effects, we indirectly control for legal origin, colonial history, and social capital, and thereby ensure that our results cannot be driven by these well-established determinants of financial development.

In another related paper Rajan and Zingales (2003) propose the interest group theory of financial development. Their theory predicts that incumbent financiers are likely to use their market power to oppose financial development in order to avoid competition. Further, they predict that the incumbent financiers' opposition will be weaker in the presence of trade and financial openness. They find evidence in support of their theory using data from 24 countries and selected years from 1913 to 1999. Baltagi, Demetriades, and Law (2009) provide further evidence that trade and financial openness promote financial development; and Chinn and Ito (2006) find evidence that financial openness promotes equity market development in countries with a sound legal system. Our theoretical argument is related to Rajan and Zingales', but in ours it is incumbent political leaders rather than incumbent financiers who are responsible for depressed financial markets in certain circumstances. We show that our results hold when we control for trade and financial openness.

There are recent contributions studying the effects of political institutions or natural resources on financial development and financial structure. Girma and Shortland (2008) and Huang (2010) find positive effects of political institutions on financial development, and Bhattacharyya (2013) finds that democratization leads to a more market-based financial system. Beck (2012) shows that banks in resource-rich economies are more liquid but give fewer loans to firms. Firms in these economies use less external finance, and a smaller share of them uses bank loans even though their demand for credit is similar to the demand of firms elsewhere. He argues that these findings point toward a supply constraint and suggests that there could be a financial resource curse. However, none of these contributions is looking at the interplay between political institutions and natural resources in shaping financial development, which is at the heart of our paper.

Furthermore, our paper is related to the resource curse literature, in particular to those contributions that study how the