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A blessing or a curse? Causal link between primary exports and institutional quality

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Introduction

Many researches have long investigated how institutions could affect long-term growth;

But we wanted to take one step back and try and understand what could determine institutions

Colonial heritage | Climate | Trade openness | Resource endowment

Introduction

We also know that (based on the HO model) resource-rich countries tend to export primary product goods;

Then we argued whether the relationship between **resource endowments** and **institutions** also holds for the association between **primary exports** and **institutions**;

We know that such a connection might differ between developing and more advanced economies.

Introduction

To evaluate the impact of primary product exports on institutional quality for a set of countries from 1997 to 2019.

Identification strategy

Since countries’ commodity exports might, at the same time, cause and be affected by institutional quality, it is crucial to search for exogenous natural variations in primary product exports in combination with econometric modeling techniques.

Identification strategy

The identification strategy in this paper uses China's accession to the WTO in 2001 as a natural experiment to study the relationship between primary trade and the quality of a country's institutions.

Identification strategy

Chen (2009) stresses that the accession of China to the WTO means that the country's imports would all face the same tariffs and barriers to trade, thus making each country's commerce with China a reflex of its comparative advantages, not its political power.

Empirical strategy

Our baseline model is:

$$Inst_{it} = \alpha_0 + \alpha_1 lnX_{it} + \sum \beta V + \varepsilon_{it}$$

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IV approach through the 2SLS. The first- and second-stage econometric models follow:

$$lnX_{it} = \lambda_0 + \lambda_1 lnchinaM_t + \sum \eta V + \upsilon_{it}$$

$$Inst_{it} = \alpha_0 + \alpha_1 ln\hat{X}_{it} + \sum \beta V + \varepsilon_{it}$$

Exclusion restriction

Data

Institutional quality (i.e. voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; and control of corruption) – **World Bank WGI**

Trade flows – **WITS**

GDP and resource rent – **World Bank**

Latitude and landlocked dummy – **CEPII**

Results

Table 4. IV regression results: full sample

	First stage	Second stage							OLS
Dependent variable	Log of primary exports	Voice and Accountability	Political Stability and Absence of Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Average institutional index	Average institutional index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log of Chinese imports	0.1532***								
	(0.0279)								
Log of primary exports		-0.5797***	-0.6958***	-0.9239***	-0.7408***	-0.8879***	-1.0847***	-0.8188***	-0.0725***
		(0.1428)	(0.1395)	(0.1926)	(0.1614)	(0.1857)	(0.2220)	(0.1666)	(0.0153)
Obs	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127	1,127
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-sq	0.5634								0.4450
Adjusted R-sq	0.5615								0.4426
Partial R-sq	0.0262								
F-stat	30.1444								179.80
p-value	0.0000								0.0000

Note: Standard errors in parentheses. ***p<0.01. Column (1) reports the first-stage regression results. According to the Weak identification test (Cragg-Donald Wald F Statistic) we observe no serious estimated bias induced by weak IV. Columns (2)–(8) report the second stage regression results. Control variables are natural resources rents; log of per capita GDP; latitude, and the landlocked dummy. Column (9) shows OLS estimation results with no correction for endogeneity bias. Figures rounded to four decimal places.

Results

Table 5. IV regression results: developing economies

	First stage	Second stage							OLS
Dependent variable	Log of primary exports	Voice and Accountability	Political Stability and Absence of Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Average institutional index	Average institutional index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log of Chinese imports	0.1735***								
	(0.0416)								
Log of primary exports		-0.5124***	-0.5950***	-0.9308***	-0.9002***	-0.9461***	-0.9678***	-0.8087***	-0.1648***
		(0.1576)	(0.1651)	(0.2335)	(0.2219)	(0.2230)	(0.2264)	(0.1890)	(0.0192)
Obs	529	529	529	529	529	529	529	529	529
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-sq	0.6114								0.4237
Adjusted R-sq	0.6077								0.4182
Partial R-sq	0.0321								
F-stat	17.3631								76.91
p-value	0.0000								0.0000

Note: Standard errors in parentheses. ***p<0.01. Column (1) reports the first-stage regression results. According to the Weak identification test (Cragg-Donald Wald F Statistic) we observe no serious estimated bias induced by weak IV. Columns (2)–(8) report the second stage regression results. Control variables are natural resources rents; log of per capita GDP; latitude, and the landlocked dummy. Column (9) shows OLS estimation results with no correction for endogeneity bias. Figures rounded to four decimal places.

Concluding remarks

Our results indicate that as countries focus upon commodity based exporting goods, they cause a reduction in the effectiveness of their institutions.

We expand the aforementioned association to the ‘foreign trade of primary goods – institutional framework’ nexus	We use a natural experiment to identify the causal effect of primary trade on institutional quality	We measure the quality of institutions from multiple dimensions

Concluding remarks

This paper is helpful to policymakers aiming to improve a country's level of institutional quality through trade specialization.

A trade policy focused on a more diverse exporting agenda requires investment in technology, human capital, etc. We know this comes at a price, but our results show that these investments could enjoy the benefits of stronger, more effective institutions.

What we are working on

Expanding the timespan;

Considering a larger number of economies;

Disaggregating exports into different product categories

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