

## CONTEXT

- The role of the state in promoting development has been discussed at length. Despite the variety of perspectives, existing studies agree in some common characteristics of the state that are favourable to promoting development.
- However, as a result of the events over the last decades, increasing attention has been brought to the implications that a failure of the state to fulfil these features bears on development, which became the core of the discourse on fragile states. Despite the mounting number of existing analytical tools, the concept of state fragility remains obscure and the quantification efforts do not fall short of criticism.

## CONCEPT OF STATE FRAGILITY

### State pathologies

according to Besley and Persson's (2011) model of state fragility

#### State ineffectiveness

*In enforcing contracts, protecting property, providing public goods and raising revenues*

#### Political violence

*Either in the form of repression or civil conflict*

Besley, Timothy and Persson, Torsten. 2011. "Fragile States and Development Policy." *Journal of the European Economic Association* 9 (3):371-398.

**There is state fragility when the country exhibits either state ineffectiveness or political violence, or both pathologies at the same time. The higher their level, the greater the degree of fragility.**

## MEASURE OF STATE FRAGILITY

State ineffectiveness		Political violence	
Elements	Proxies	Elements	Proxies
Contract enforcement	Rule of law	Repression	Physical integrity
	Regulatory quality		Empowerment rights
	Independence of judiciary		Political terror scale
	Control of corruption	Civil conflict	Major episodes of civil violence
Protection of property	Property rights enforcement		Armed conflict
Public goods provision	Government effectiveness		Coups d'état
	Public health expenditure		Revolutionary wars
	Access to improved water	Ethnic wars	
Authority	Failure of state authority		

**Principal components analysis provided a score on state ineffectiveness for 158 countries, and on political violence for 166 countries for period 1993-2012.**

## METHODS AND DATA

- Econometric methods (OLS; IV) were used to estimate a standard growth regression to which a single index of state fragility was added.
- On a second stage, this index was replaced by two indices, one for state ineffectiveness and another for political violence.
- Finally, an interaction term between the two symptoms was added, in order to test whether they have an interactive effect on growth.
- The control variables follow the general practice in the literature.

## KEY FINDINGS

- There is a negative and significant effect of state ineffectiveness on growth, which is robust to: excluding outliers, adding new controls, including a measure of the quality of institutions, and taking endogeneity into account by using IV methods with different instrumentation strategies.
- The sign and significance level of the coefficient for political violence vary across specifications.

Overall time period: 1993-2012

	Cross-country data; OLS estimations						Panel data; FE estimations			
	20-year		10-year				5-year		10-year	
	1993-2012	1993-2002	1993-2002	2003-2012	2003-2012	5-year	10-year	5-year	10-year	
State fragility (v1)	-0.00661 (0.196)	-0.568*** (0.207)		0.0527 (0.219)			-0.142 (0.782)		0.0499 (0.771)	
State fragility (v2)		-0.109 (0.0860)	-0.353*** (0.0985)		-0.108 (0.0982)		-0.127 (0.500)		0.190 (0.429)	
Nr observations	91	91	86	86	79	79	225	225	195	195
R <sup>2</sup>	0.400	0.409	0.443	0.459	0.597	0.602	0.392	0.392	0.505	0.507
State ineffectiveness	-0.303*** (0.110)	-0.346** (0.147)	-0.383*** (0.144)	-0.416*** (0.146)	-0.373*** (0.118)	-0.444*** (0.107)	-0.461 (0.629)	-0.581 (0.656)	0.751 (0.516)	0.716 (0.539)
Political violence	0.185* (0.0998)	0.188* (0.0979)	-0.101 (0.114)	-0.102 (0.113)	0.277*** (0.0930)	0.302*** (0.0817)	-0.00722 (0.310)	-0.131 (0.303)	-0.202 (0.332)	-0.257 (0.454)
SI x PV		-0.0286 (0.0802)		-0.0281 (0.0863)		-0.0583 (0.0427)		0.172 (0.188)		0.0499 (0.217)
Nr observations	91	91	86	86	79	79	225	225	195	195
R <sup>2</sup>	0.455	0.458	0.456	0.458	0.659	0.671	0.396	0.402	0.519	0.519

Notes: Cluster robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. State fragility (v1) is the first principal component obtained from applying PCA to the two indices. State fragility (v2) is the first principal component obtained from applying PCA to all the dimensions used in the two indices. The control variables used are: the initial level of real per capita GDP, the level of educational attainment for population 15 and over, the change in and variability of the net barter terms of trade index, a measure of geography from Bosworth and Collins (2004), the initial level of the log(1+inflation/100), the initial level of budget balance, and the Sachs and Warner's (1995) measure of trade openness. The variability of terms of trade and the measure of geography were not included in the panel analysis.

## CONCLUSIONS AND IMPLICATIONS

- The results of regression analysis show no robust effect of fragility on growth when a single index is considered.
- When using two separate indices, one finds a robust negative and significant impact of state ineffectiveness. However, the non-significant effect of political violence indicates that the complex link with growth needs further investigation.
- This contributes to a better understanding of the role of governance in promoting growth, but also suggests the way forward. Namely, it concurs to the argument that, in order to unpack the complexity of state fragility and its effects, one should consider its different dimensions.