

The role of trust and poverty in the compliance to the social distancing measures in times of COVID-19 in Africa

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- **How do poverty, institutional, interpersonal trust affect the effectiveness of the restrictive measures adopted by African countries during the pandemic?**

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- Previous studies find that compliance relies on:
 - The level of poverty, with poor complying less (Bargain and Ulugbek, 2020; Chiou and Tucker, 2020; Gitmez et al., 2020; Wright et al., 2020);
 - The trust in government, other citizens and health policies (Bargain and Ulugbek, 2020; Brodeur et al., 2020);
 - The belief and trust in science (Briscese et al., 2020; Maloney and Taskin, 2020);
 - The expectation of the duration of the restrictions (Briscese et al., 2020)
- Few studies have analyzed these relationships in African.

Africa Context

- Poverty in Africa
 - SSA is the region in the world with the highest concentration of people living in extreme poverty (Headcount ratio=40%)
 - Forecasts suggest that nearly 26 million people in SSA will fall into extreme poverty in 2020 due to COVID 19
- Confidence in Africa
 - SSA- the region with the largest Corruption Perception Index
 - Confidence played an important role in the adoption of preventive measures against Ebola in Sierra Leon, Liberia and DRC

We combine several rich data from different sources:

- Google Human Mobility Index
- Stringency Index from Oxford COVID-19 Government Response Tracker (OxCGRT);
- Poverty headcount and other socioeconomic measures taken from Our World In Data (OWID);
- Trust in institutions and other citizens, constructed based on data from Afrobarometer-2019, round 7;
- Daily number of related recoveries of COVID-19 by country, from Humanitarian Data Exchange (HDX);
- The government effectiveness from the World Governance Indicators (WDI)

$$Mob_{it} = \alpha + \Theta Mob_{it-1} + \beta_1 Stringency_{it} + \gamma Stringency_{it} \times \\ (\text{Interperson Trust}_i + GovTrust_i + GovEffec_i + Poverty_i) + \\ \beta_2 Recov_{it-1} + \mu_i + v_t + \varepsilon_{it}(1)$$

- X_{it} is the variable X for country i on day t
- X_i is the variable X for country i

Variables	Retail and Recreation	Grocery and Pharmacy	Transit Stations	Parks	Working places	Residence
Stringency	-0.523*** (0.146)	-0.681*** (0.187)	-0.394*** (0.103)	-0.343*** (0.086)	-1.024*** (0.120)	0.223*** (0.050)
Stringency#Inst. trust	-0.049** (0.023)	-0.053** (0.025)	-0.104*** (0.021)	0.033 (0.021)	-0.034 (0.031)	0.042*** (0.012)
Stringency#Govern. effect.	-0.056 (0.043)	-0.048 (0.055)	0.017 (0.033)	0.044 (0.030)	-0.221*** (0.053)	0.016 (0.021)
Stringency#Inter. trust	0.684** (0.324)	0.792* (0.409)	0.264 (0.229)	0.300 (0.198)	1.769*** (0.281)	-0.242* (0.127)
Recoveries t_{-1}	-0.021 (0.241)	0.316 (0.355)	0.387* (0.232)	-0.370** (0.144)	-0.179 (0.277)	0.181** (0.086)
Stringency#Poverty	0.006*** (0.001)	0.009*** (0.001)	0.006*** (0.001)	0.005*** (0.001)	0.009*** (0.001)	-0.003*** (0.000)
Retail and Recreation t_{-1}	0.682*** (0.052)					
Grocery and Pharmacy t_{-1}		0.537*** (0.068)				
Transit Stations t_{-1}			0.650*** (0.041)			
Parks t_{-1}				0.721*** (0.029)		
Working places t_{-1}					0.473*** (0.046)	
Residence t_{-1}						0.545*** (0.043)
Constant	9.492*** (2.239)	10.057*** (2.592)	8.104*** (1.541)	8.812*** (1.496)	13.364*** (2.269)	-5.914*** (0.868)
Observations	2,253	2,253	2,253	2,253	2,253	2,253
Countries	18	18	18	18	18	18
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Day FE	Yes	Yes	Yes	Yes	Yes	Yes
Within R-squared	0.689	0.537	0.678	0.695	0.482	0.557

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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- The restrictive measures imposed by the governments have a potential of increasing social distancing;
- Institutional Trust reinforces the effect of the restrictive measures; Inline with the literature (Bargain and Aminjonov, 2020; Brodeur et al., 2020)

- The restrictive measures imposed by the governments have a potential of increasing social distancing;
- Institutional Trust reinforces the effect of the restrictive measures; Inline with the literature (Bargain and Aminjonov, 2020; Brodeur et al., 2020)
- Interpersonal trust weakens significantly the effect of the restrictive measures; This result is contrary to what Brodeur et al (2020) find and other literature, but is inline with Deopa & Fortunato (2020) and can be related to Oosterho & Palmer (2020) results.
- Poverty weakens the effect of the restrictive measures. Inline with Bargain and Ulugbek (2020)

- The government should apply policies that increase the awareness of people about the compliance of measures of social distancing;
- The government should promote social protection policies, e.g. in form of cash or food transfers, that can release some of the burden poor families face, and enable some measures of social distancing;

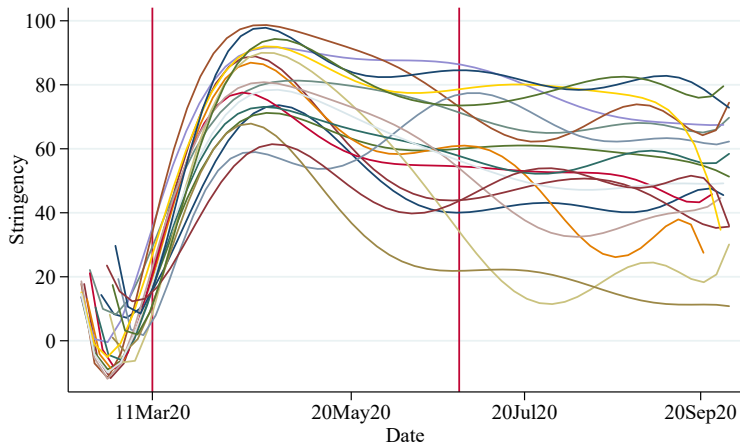
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- The government should promote social protection policies, e.g. in form of cash or food transfers, that can release some of the burden poor families face, and enable some measures of social distancing;
- The government should be aware that a higher level of trust among people can reduce the effectiveness of the measures.

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Thanks

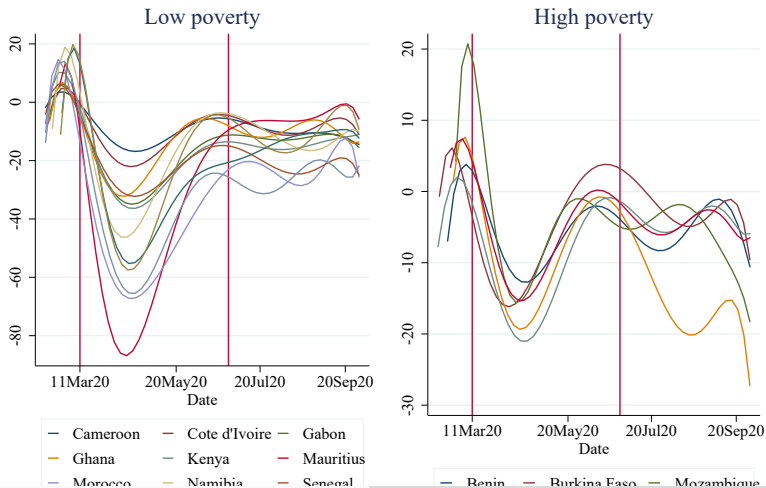
For questions and comments please contact:
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Stringency Index



— Benin — Burkina Faso — Cameroon — Cote d'Ivoire — Gabon

Mobility: Work



Variables	Retail and Recreation	Working places	Retail and Recreation	Working places	Retail and Recreation	Working places
Retail and Recreation $t-1$	0.842*** (0.027)		0.726*** (0.047)		0.682*** (0.052)	
Stringency	-0.131*** (0.030)	-0.218*** (0.051)	-0.350*** (0.086)	-0.497*** (0.082)	-0.523*** (0.146)	-1.024*** (0.120)
Stringency#Inst. trust	0.007*** (0.003)	0.012*** (0.004)	-0.001 (0.013)	0.023 (0.021)	-0.049** (0.023)	-0.034 (0.031)
Stringency#Govern. effect.	-0.033*** (0.009)	-0.066*** (0.015)			-0.056 (0.043)	-0.221*** (0.053)
Stringency#Inter. trust	-0.039* (0.021)	-0.024 (0.030)	0.318** (0.135)	0.485*** (0.176)	0.684** (0.324)	1.769*** (0.281)
Recoveries $t-1$	0.472*** (0.103)	0.586*** (0.197)			-0.021 (0.241)	-0.179 (0.277)
Stringency#Poverty	0.000*** (0.000)	0.001*** (0.000)	0.003*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.009*** (0.001)
Working places $t-1$		0.657*** (0.060)		0.578*** (0.041)		0.473*** (0.046)
Constant	3.614*** (0.993)	5.450*** (1.717)	8.692*** (1.856)	10.577*** (1.645)	9.492*** (2.239)	13.364*** (2.269)
Observations	2,254	2,254	2,574	2,574	2,253	2,253
R-squared	0.925	0.762	0.944	0.557	0.689	0.482
Countries	18	18	18	18	18	18
Country FE	No	No	Yes	Yes	Yes	Yes
Day FE	No	No	Yes	Yes	Yes	Yes

Standard errors in parentheses
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