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Working Paper Africa's lockdown dilemma: High poverty and low trust

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WIDER Working Paper 2020/76

Africa's lockdown dilemma

High poverty and low trust

Eva-Maria Egger, Sam Jones, Patricia Justino, Ivan Manhique, and Ricardo Santos*

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Abstract: The primary policy response to suppress the spread of COVID-19 in high-income countries has been to lock down large sections of the population. However, there is growing unease that blindly replicating these policies might inflict irreparable damage to poor households and foment social unrest in developing countries. We investigate this concern using Afrobarometer data from 2019 for 30 sub-Saharan African countries. We create a multidimensional index of lockdown readiness based on living conditions and explore its relationship with forms of trust and the potential for social unrest. The index reveals that just 6.8 per cent of households overall and 12.2 per cent in urban areas meet all conditions for a lockdown. We further show that weak readiness is not offset by high levels of social trust, which can be vital for effective public health interventions. As such, strict lockdown policies may not only be difficult to enforce, but also heighten the risks of conflict.

Key words: COVID-19, lockdown policies, poverty, social unrest, sub-Saharan Africa, trust

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1 Introduction

The primary policy response to suppress the spread of COVID-19 in high-income countries has been to lock down large sections of the population. As the disease spreads in lower income countries, similar policies have been applied or considered. However, there is growing unease that replicating policies from high income countries might inflict irreparable damage on households and even foment social unrest. In sub-Saharan Africa (SSA), many need to leave their homes daily to access clean water, sanitation facilities, food, and jobs. High levels of economic informality and urban un(der)employment (Ebrahim 2020; Ray et al. 2020; Armah-Attoh et al. 2020; Sen 2020; Were 2020) mean that many families live on a hand-to-mouth basis, with limited savings, and are unable to work from home (Dingel and Neiman 2020). These challenges are particularly stringent in poor and high-density urban neighbourhoods (Raju and Ayeb-Karlsson 2020).

In this note, we quantify the extent to which pre-exiting socio-economic conditions shape the suitability of strict lockdowns across SSA. Using harmonized Afrobarometer data from 2019, covering 30 countries,¹ we construct a simple multidimensional lockdown readiness index. The index reveals that just 6.8 per cent of households overall and 12.2 per cent in urban areas meet all the conditions for a lockdown. The readiness index correlates with other aggregate indicators of development, including GDP per capita, but with important variations across countries.

Given the low readiness of African economies to enact lockdown policies effectively, we explore the extent to which trust might offset some of the costs of imposing a lockdown, or at least help facilitate public health interventions. Indeed, the need to slow down the transmission of COVID-19 poses a classic collective action problem: if everyone stayed at home, everyone would benefit. But, if not monitored, some individuals may be able to free ride on others complying with the lockdown. External intervention is therefore necessary (Olson 1971). Studies suggest that such collective action problems can be solved more effectively where populations trust political leaders, police, and health workers (Gambetta 1988; Buseh et al. 2015; Algan et al. 2018; Godlee 2020), as well as their fellow citizens (Alesina and Giuliano 2011). These two dimensions of trust (in institutions and in fellow citizens) have been shown to drive economic prosperity (Knack and Keefer 1997; Algan and Cahuc 2014) and democracy (Putnam 1993; Nannicini et al. 2013). The importance of trust has been highlighted in the present crisis by Bargain and Aminjonov (2020) and Brodeur et al. (2020) for Europe and the USA, respectively. And there is ample evidence of the key role of trustworthy local actors in rallying their communities behind political decisions during previous public health emergencies (Blair et al. 2017; Elston et al. 2017; Santos and Novelli 2017; Nuriddin et al. 2018; Vinck et al. 2019).

Our results reveal that trust and lockdown readiness tend to go hand in hand, suggesting that lower readiness is not compensated by trust. This provides a stark warning against relying on top-down lockdown measures that are often hard to understand for the poorest populations, who may not trust their governments, and who are also likely to suffer economically from lockdowns and the overall economic impacts (Sumner et al. 2020). As we show, in these contexts, strict lockdowns that are not accompanied by adequate welfare measures may result in heightened social tensions and civil unrest.

¹ The Afrobarometer 2019 dataset contains 34 countries. We exclude North Africa (3) for regional focus and Mauritius as an outlier.

2 A measure of lockdown readiness

We define lockdown readiness as the ability of households to stay at home and avoid public spaces without irreversible damage to their health and welfare. For analytical tractability, we consider five minimum components of being ready for lockdown—namely that, w*ithin* the household, the family has access to: (1) safe drinking water; (2) basic sanitation; (3) a source of reliable energy; (4) a means of information or communication (e.g. a mobile phone); and (5) a form of employment that provides sufficient income not to go without cash on a frequent basis.² If the first three criteria are not met, then almost all household members will need to make multiple daily trips outside the home to places where other people congregate (e.g. communal taps).³

But even if basic needs such as water and sanitation are in place, this does not ensure there is food on the table, and families living hand-to-mouth would still struggle to stay locked down. Thus, we define a household as 'fully ready' if all five conditions are met and as 'partially ready' if at least the first three conditions are met—meaning they have at least basic facilities to spend long periods of time within the home.

To estimate the level of lockdown readiness across SSA, we use the harmonized data from the most recent round of the Afrobarometer (Afrobarometer Data 2019), which covers 37,696 people in 30 countries. Panel (a) of Table 1 presents basic summary statistics and Panel (b) shows the pooled means for the five variables that comprise the lockdown readiness index, differentiating between urban and rural areas. Almost 70 per cent of the sample have basic sanitation, half have electricity, but only 41 per cent have access to safe drinking water. A much smaller proportion have access to all three basic public services simultaneously (Panel c). The share of households that are partially ready is just 30 per cent overall and a little over half in urban areas.

Most households across the sample (88 percent) have a mobile phone or a telephone, but only 14 percent report having a stable source of income. This is a critical constraint, leading to, on average, only 6.8 percent of SSA households being fully prepared for a lockdown scenario. This percentage drops to just 2.5 per cent in rural areas, due to low basic service penetration and few stable sources of (cash) income. Realistically, therefore, strict lockdowns may only be possible in (some) urbanized settings, which are also areas where the need for social distancing is greater due to higher population densities.

² The survey asks whether the respondent has gone without cash income. We consider those who reply 'always' or 'many times' as being in a casual/irregular job and thus not prepared for lockdown, even if they say that they currently work.

³ The first four dimensions are included in the 'home environment for protection' (HEP) index proposed and assessed for 54 developing countries by Brown et al. (2020), a study released as we finalized ours.

Table 1: Pooled statistics from Afrobarometer Data 2019

| | Mean | SD | Urban | Rural | Country min | Country max |
|-----------------------------------|--------|-------|-------|-------|----------------|----------------|
| (a) Descriptive statistics | | | | | | |
| Age | 30.7 | 11.8 | 29.9 | 31.3 | 27.6 | 33.4 |
| Female (%) | 50.7 | 50.0 | 50.5 | 50.9 | 49.5 | 52.6 |
| Years of education | 7.2 | 4.6 | 8.8 | 5.9 | 2.5 | 10.5 |
| (b) Lockdown readiness 'inputs' | | | | | | |
| Access to clean water (%) | 41.4 | 49.3 | 61.9 | 25.0 | 11.8 | 86.1 |
| Access to sanitation (%) | 68.1 | 46.6 | 81.8 | 57.1 | 41.7 | 92.9 |
| Access to electricity (%) | 50.8 | 50.0 | 78.3 | 28.8 | 13.5 | 91.3 |
| Access to phone (%) | 88.3 | 32.1 | 95.1 | 82.8 | 54.6 | 98 |
| Not cash constrained (%) | 14.2 | 35.0 | 19.8 | 9.8 | 1 | 39.7 |
| (c) Lockdown readiness | | | | | | |
| Fully ready (%) | 6.8 | 25.2 | 12.2 | 2.5 | 0.6 | 24.6 |
| Partially ready (%) | 30.0 | 45.8 | 52.4 | 12.1 | 6.5 | 72.1 |
| Number of dimensions | 2.6 | 1.4 | 3.4 | 2.0 | 1.4 | 3.8 |
| (d) Trust | | | | | | |
| Institutional trust | 0.8 | 99.2 | -16.6 | 14.8 | -74 | 57.3 |
| Community trust (%) | 24.1 | 42.8 | 22.2 | 25.6 | 12.9 | 33.8 |
| Associativism | 1.1 | 100.2 | -19.0 | 17.2 | -62 | 44.3 |
| (e) Social unrest potential | | | | | | |
| Participated in protest (%) | 10.4 | 30.5 | 12.3 | 8.8 | 2.4 | 27.4 |
| Government narrows income gap (%) | 22.4 | 41.7 | 21.7 | 23.0 | 5.9 | 38.9 |
| Agree to curfew (%) | 61.2 | 48.7 | 58.9 | 62.9 | 38.9 | 83.4 |
| Observations | 38,838 | | | | | |
| | | | | | | |

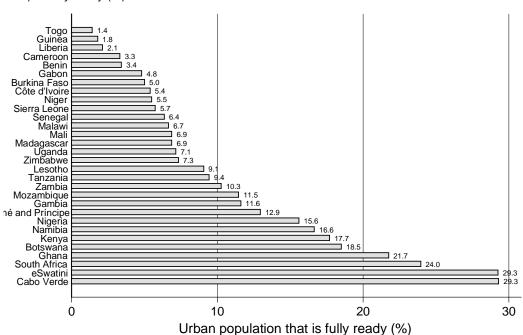
Notes: weighted by country population. Fully ready is defined as the household having simultaneously access to safe drinking water, electricity, sanitation, a (mobile) phone, and is not cash constrained. Partially ready refers to the first three components. The latent variable of institutional trust is constructed from answers to questions about trust in the president, the parliament, the police, and traditional leaders. The latent variable of associativism is constructed from information about membership in religious groups, voluntary associations, and community groups, as well as participation in community meetings. Community trust is defined as a 1 if the respondent answers 'always' to the question: 'when a vendor sells you a kg of maize, sorghum or beans, how sure are you that you get the correct amount?'. Participation in protest is equal to 1 if the respondent has once, several times, or often attended a demonstration or protest march in the year prior to the survey, and 0 otherwise. Government redistributive effectiveness is equal to 1 if the respondent thinks that the government is handling narrowing gaps between rich and poor fairly well or very well, and 0 otherwise. The curfew variable is equal to 1 if the respondent agrees or strongly agrees that 'when faced with threats to public security, the government should be able to impose curfews and set up special roadblocks to prevent people from moving around'.

Source: authors' calculations based on Afrobarometer round 7 (Afrobarometer Data 2019).

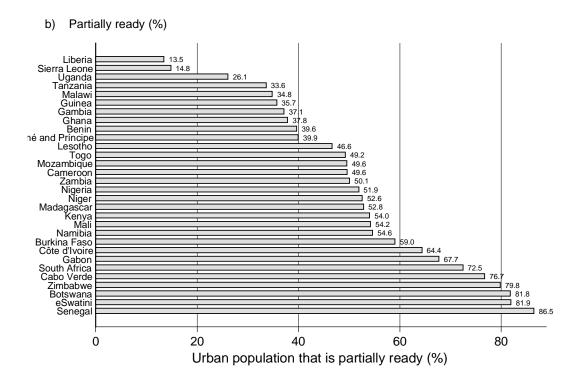
At the country level, it is unsurprising that the richest countries show the highest levels of urban readiness (Figure 1a). However, even in these cases, less than a third of the urban population is fully ready for lockdown. The ranking of countries is slightly different for partial readiness, capturing variation in access to basic services at home. The range of partial readiness is also much broader—from as low as 14 per cent in Liberia to more than 80 percent in Senegal. Country-specific results can be found in the appendix.

Although it is clear that our measure of lockdown readiness captures some generic features of economic development, there is not a one-to-one relationship between readiness and aggregate development indicators, such as real GDP per capita. As shown in Figure 2a, the cross-country relationship between aggregate income and full readiness is log-linear: approximately, doubling real incomes is associated with just a 5 percentage points increase in the share of the population that is fully ready. Furthermore, some nominally richer countries, such as Gabon, show weak lockdown readiness in relation to their income level. This has to do with wide inequalities in households' access to public services and markets, which may not be necessarily correlated with national GDP levels.





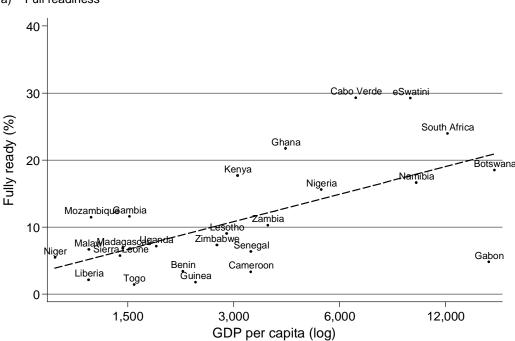
a) Fully ready (%)



Notes: weighted by country population. Full readiness is defined as the proportion of people that have simultaneously access to safe drinking water, electricity, sanitation, a (mobile) phone, and are not cash constrained. Partially ready are those who simultaneously have at least the first three of these five dimensions.

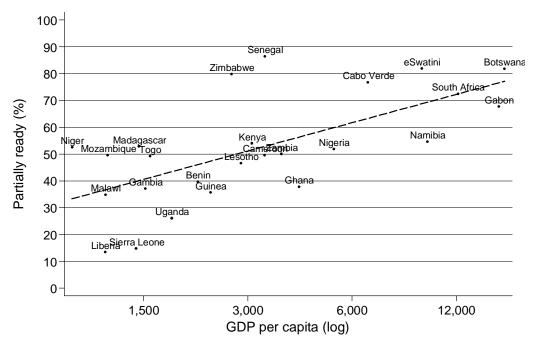
Source: authors' calculations based on Afrobarometer round 7 (Afrobarometer Data 2019).

Figure 2: Percentage of the population fully and partially ready for lockdown and GDP per capita



a) Full readiness

b) Partial readiness



Notes: weighted by country population. Full readiness is defined as the proportion of people that have simultaneously access to safe drinking water, electricity, sanitation, a (mobile) phone, and are not cash constrained. Partially ready are those who simultaneously have at least the first three of these five dimensions.

Source: authors' calculations based on Afrobarometer round 7 (Afrobarometer Data 2019) and World Development Indicators (World Bank 2020).

3 Trust, lockdown, and risk of social unrest

Adequate living conditions, a stable income, and access to information alone may not ensure that lockdowns are sustainable. Trust in national and local institutions and among citizens might play a crucial role both in enforcing lockdown measures and in providing a normative basis for less restrictive approaches to curtail the spread of the pandemic.

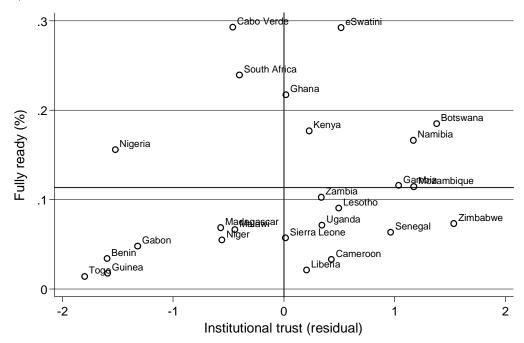
Trust is usually defined in the social sciences as encompassing two dimensions. The first, called institutional or vertical trust, is related to how citizens believe in the legitimacy and efficiency of institutions (Rothstein and Stolle 2008). To measure this dimension of trust, we combine answers to questions in the Afrobarometer about trust in the president, the parliament, the police, and traditional leaders. Following the literature, we apply latent trait modelling (Vandemoortele 2014) and normalize the derived variable to a zero mean and standard deviation of one. The second, often called generalized or horizontal trust, has to do with beliefs about whether other people have one's interests at heart (Gambetta 1988; Alesina and La Ferrara 2002). The Afrobarometer data does not include a direct measure of generalized trust so we rely on a question which asks: 'when a vendor sells you a kg of maize, sorghum or beans, how sure are you that you get the correct amount?'. This variable, which we use as a proxy for community trust, is coded as 1 if the respondent said 'always'.

Some studies have shown that trust in community members is shaped by the strength of civic society and capacity for collective action (Putnam 1993; Guiso et al. 2007; Alesina and Giuliano 2015; Aghajanian et al. 2020), a variable that may also be correlated with lockdown readiness. To measure this, we include a variable on membership of community organizations and meeting attendance, which

we label as associativism. This measure also often proxies for the capacity of communities for collective action. Organizations include religious groups, voluntary associations, and community groups. We use this measure as a latent continuous and normalized variable. Table 1 (d) shows descriptive statistics for these variables.

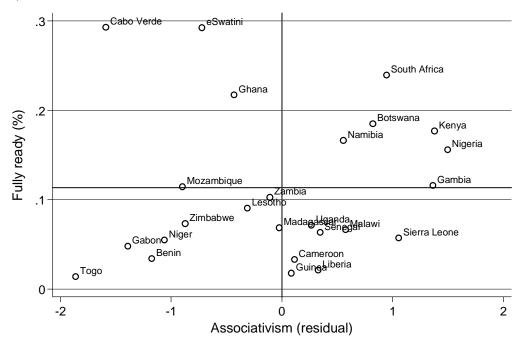
We present two sets of results. First, we plot lockdown readiness against the residuals of a crosscountry regression of the trust indicators on GDP per capita and individual characteristics. This shows whether there remains a correlation across countries between levels of trust and levels of lockdown readiness after removing any correlation between trust and other factors. Figure 3 reveals moderate positive relationships on average for institutional trust and associativism, which is especially apparent if one excludes the small (more homogenous) countries of eSwatini and Cabo Verde. Community trust shows a weak negative correlation, with some rich countries revealing very low levels of trust (Namibia, South Africa), while others experience high trust at very low levels of readiness (Gabon, Madagascar).

Figure 3: Full lockdown readiness and trust at the country level

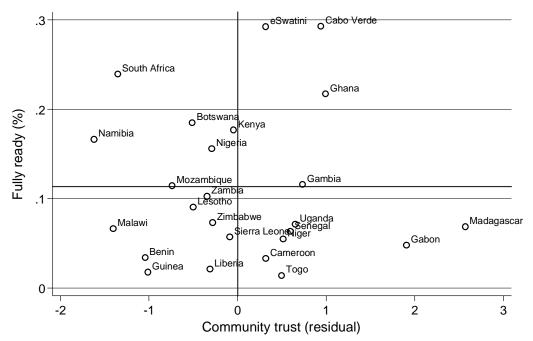


a) Institutional trust

b) Associativism



c) Community trust



Notes: The residuals come from a linear regression of average trust on log(GDP per capita), its squared term, age, sex, and education at the country level weighted by country population. Full readiness is defined as the proportion of people that have simultaneously access to safe drinking water, electricity, sanitation, a (mobile) phone, and are not cash constrained. Partially ready are those who simultaneously have at least the first three of these five dimensions.

Source: authors' calculations based on Afrobarometer round 7 (Afrobarometer Data 2019) and World Development Indicators (World Bank 2020).

This visual analysis provides a preliminary indication that low levels of readiness are unlikely to be offset by relatively higher levels of trust. To explore these relationships more formally, we set-up a

log-linear model, akin to a multi-way contingency table, from which the presence and direction of conditional associations between variables can be ascertained, without needing to decide which variables are dependent or independent as in a more conventional regression framework (see Agresti 2002). To do so, we dichotomize the latent trust variables (low and high), and further classify individuals into ordinal categories of age group, education, and country income groups (low and high). We then aggregate the individual-level dataset into unique groups formed from all possible combinations between these categories, counting the number of observations within each group.⁴ The (log) of this count serves as the dependent variable of interest, and we focus on which interactions— if any—between categories improve in a simple model in which we assume all variables are mutually independent. Intuitively, this approach represents an extension of a chi-squared type analysis—of a two-way contingency table—to a more complex setting.

Table 2 reports the main results from this analysis. Column (1) presents the marginal model, which assumes all variables are independent. Column (2) adds all two-way interactions as well as the three-way interactions between income, trust, and readiness. The second model, the preferred specification, shows positive conditional associations between the two measures of trust, associativism, and readiness. This confirms the earlier insight—higher trust appears to be positively associated with higher readiness, after controlling for a range of confounding factors.

| | (1) | (2) | (3) | (4) |
|---------------------------------------|----------|------------------|-----------|----------|
| | Baseline | Full interaction | By income | group |
| | | | Low | High |
| Fully ready | 0.002*** | 0.159*** | 0.176*** | 0.303*** |
| | (0.001) | (0.015) | (0.016) | (0.051) |
| Institutional trust | 0.497** | 0.908 | 0.880 | 0.691** |
| | (0.144) | (0.121) | (0.116) | (0.114) |
| Associativism | 0.224*** | 0.866 | 0.830* | 0.668*** |
| | (0.065) | (0.083) | (0.083) | (0.082) |
| Community trust | 0.836 | 1.007 | 1.107 | 1.132 |
| | (0.427) | (0.145) | (0.146) | (0.279) |
| Income group | 0.864 | 1.177 | | |
| | (0.971) | (0.149) | | |
| Years of education | 1.263*** | 1.039*** | 1.005 | 1.073*** |
| | (0.038) | (0.010) | (0.009) | (0.013) |
| Age | 0.826*** | 0.967*** | 0.968*** | 0.966*** |
| | (0.009) | (0.002) | (0.002) | (0.003) |
| Fully ready # Institutional trust | | 1.234** | 1.196 | 1.217 |
| | | (0.132) | (0.133) | (0.274) |
| Fully ready # Associativism | | 1.134 | 1.134 | 1.065 |
| | | (0.095) | (0.095) | (0.116) |
| Fully ready # Community trust | | 1.180* | 1.190* | 0.819 |
| | | (0.112) | (0.124) | (0.175) |
| Institutional trust # Associativism | | 1.199** | 1.353*** | 1.074 |
| | | (0.091) | (0.119) | (0.124) |
| Institutional trust # Community trust | | 1.019 | 0.889 | 1.181 |
| | | (0.130) | (0.120) | (0.243) |
| Associativism # Community trust | | 0.858 | 0.805* | 0.770 |
| | | (0.132) | (0.100) | (0.202) |

Table 2: Log-linear model results

⁴ We undertake the aggregation at the country level to ensure sufficient degrees of freedom and allow for country-specific analysis. This is not reported due to space limitations but is available upon request.

| Fully ready # Income group | | 2.008*** | | |
|--|---------|----------|---------|---------|
| | | (0.354) | | |
| Institutional trust # Income group | | 0.759 | | |
| | | (0.166) | | |
| Associativism # Income group | | 0.723** | | |
| | | (0.102) | | |
| Community trust # Income group | | 1.087 | | |
| | | (0.159) | | |
| Fully ready # Institutional trust # Income group | | 0.975 | | |
| | | (0.237) | | |
| Fully ready # Associativism # Income group | | 0.941 | | |
| | | (0.129) | | |
| Fully ready # Community trust # Income group | | 0.741 | | |
| | | (0.180) | | |
| Country dummies | Yes | Yes | Yes | Yes |
| Observations | 2727 | 2727 | 1462 | 1265 |
| Pseudo log-likelihood | -9349.7 | -9631.3 | -4466.1 | -4957.8 |
| AIC | 18769.4 | 19300.7 | 8956.3 | 9937.7 |

Notes: significance level * p<.10, ** p<.05, *** p<.01; weighted by country population. Coefficients are log odds ratios. Institutional trust and associativism are dummy variables equal to 1 if the value is above the mean of the latent variable. The latent variable of institutional trust is constructed from answers to questions about trust in the president, the parliament, the police, and traditional leaders. The latent variable of associativism is constructed from information about membership in religious groups, voluntary associations, and community groups, as well as participation in community meetings. Community trust is defined as a 1 if the respondent answers 'always' to the question: 'when a vendor sells you a kg of maize, sorghum or beans, how sure are you that you get the correct amount?'. Fully ready is defined as the household having simultaneously access to safe drinking water, electricity, sanitation, a (mobile) phone, and is not cash constrained. Partially ready refers to the first three components.

Source: authors' calculations.

Taken together, these results lead to two important observations. First, social trust in SSA is not enough to ensure lockdown compliance without government intervention. Second, in light of the positive association between low levels of trust and weak lockdown readiness, it is possible that severe economic deprivation among those not prepared for the lockdowns may lead to non-compliance with lockdown and possibly a backlash against distrusted institutions, risking social unrest.

At this moment in time, we cannot predict whether lockdown policies being implemented in SSA in contexts of high poverty and economic vulnerability will result in unrest and violence. However, the association between deprivation, low trust, and civil unrest is well documented in the literature (see Justino 2009, 2012; Verwimp et al. 2019), and some simple preliminary correlations support our concern. In Table 3, we use a simple logit model with country fixed effects to examine the correlation between readiness, trust, and three variables in the Afrobarometer data that proxy for unrest potential: whether individuals participated in a protest in the year prior to the interview; perceptions of government's ability to narrow gaps between the rich and the poor;⁵ and tolerance of curfews, an important dimension of lockdowns across SSA. Table 1 (e) shows descriptive statistics for these variables.

Table 3 shows that both institutional trust and lockdown readiness are negatively associated with protest participation—only in urban areas in the case of lockdown readiness—and positively associated with optimistic views about government's redistributive policies and with acceptance of

⁵ This variable measures individual preferences for redistribution and perceptions about redistributive justice, which have been found to be strong determinants of protest participation (Justino and Martorano 2019).

curfews. These results confirm our previous discussion that low trust—particularly, in institutions and low lockdown readiness are correlated: with a higher probability of protest participation, especially in urban areas; with negative views about redistributive policies, an important determinant of civil unrest in other parts of the world (Justino and Martorano 2019); and with suspicion of curfews, a key element in lockdown interventions in SSA. Community trust has only a weak influence on the risk of civil unrest, and more so in rural areas. Associativism, which was seen to be positively correlated with readiness, moves in an opposite direction to institutional trust with regards to protest participation, suggesting that mistrust in institutions may motivate social tensions which in turn require collective action capacity to act upon—such as participating in protests. The probability of protests may thus be reduced in areas of low institutional trust and low readiness when collective action is weaker.⁶

While these results are simple correlations and would need to be refined further with causal analysis and more current data on the spread of COVID-19 and associated policies to restrict it, they suggest that implementing strict and prolonged lockdowns in contexts of low trust and high economic vulnerability—which tend to go together—may trigger social tensions and potentially civil unrest.

⁶ Similar results were found and discussed in detail for Latin America in Justino and Martonaro (2019).

Table 3: Lockdown readiness, trust, and civil unrest, logit models (odds ratios)

| | Participatio | n in protest | | Governmer | nt is narrowing i | income gap | Curfew is b | Curfew is better than free movement | | | |
|----------------------------|--------------|--------------|----------|-----------|-------------------|------------|-------------|-------------------------------------|----------|--|--|
| | Pooled | Rural | Urban | Pooled | Rural | Urban | Pooled | Rural | Urban | | |
| Institutional trust | 0.817*** | 0.809*** | 0.825*** | 1.671*** | 1.629*** | 1.723*** | 1.106*** | 1.072*** | 1.150*** | | |
| | (0.017) | (0.024) | (0.024) | (0.027) | (0.036) | (0.042) | (0.015) | (0.019) | (0.022) | | |
| Associativism | 1.651*** | 1.611*** | 1.711*** | 1.062*** | 1.055*** | 1.074*** | 1.015 | 1.010 | 1.018 | | |
| | (0.033) | (0.047) | (0.048) | (0.016) | (0.021) | (0.025) | (0.013) | (0.018) | (0.020) | | |
| Community trust | 0.922* | 0.837*** | 1.014 | 1.163*** | 1.192*** | 1.113** | 0.968 | 0.967 | 0.976 | | |
| - | (0.043) | (0.055) | (0.066) | (0.038) | (0.052) | (0.057) | (0.028) | (0.037) | (0.043) | | |
| Number of ready dimensions | 0.981 | 1.014 | 0.917*** | 1.039*** | 1.045** | 1.052** | 1.030** | 1.039** | 1.040** | | |
| | (0.019) | (0.029) | (0.024) | (0.015) | (0.020) | (0.023) | (0.012) | (0.017) | (0.018) | | |
| Female | 0.710*** | 0.740*** | 0.679*** | 0.962 | 0.952 | 0.979 | 1.090*** | 1.122*** | 1.050 | | |
| | (0.028) | (0.042) | (0.036) | (0.028) | (0.037) | (0.043) | (0.027) | (0.038) | (0.038) | | |
| Years of education | 1.045*** | 1.039*** | 1.053*** | 0.996 | 1.004 | 0.988** | 1.012*** | 1.013*** | 1.007 | | |
| | (0.005) | (0.008) | (0.008) | (0.004) | (0.005) | (0.006) | (0.003) | (0.005) | (0.005) | | |
| Age | 0.985*** | 0.984*** | 0.987*** | 0.995*** | 0.994*** | 0.997 | 1.005*** | 1.004*** | 1.005*** | | |
| 0 | (0.002) | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.001) | (0.001) | (0.002) | | |
| Urban or rural area | 1.363*** | | | 0.954 | | | 0.920*** | | | | |
| | (0.065) | | | (0.032) | | | (0.027) | | | | |
| Country dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | | |
| Observations | 38831 | 21579 | 17252 | 38831 | 21579 | 17252 | 38831 | 21579 | 17252 | | |
| Pseudo R-squared | 0.094 | 0.089 | 0.101 | 0.081 | 0.072 | 0.101 | 0.055 | 0.048 | 0.067 | | |

Notes: significance level * p<.10, ** p<.05, *** p<.01; weighted by country population. Coefficients are log odds ratios. All regressions include gender, age, and years of education of respondent as controls and urban/rural location in the pooled regressions. Dependent variables are defined as dichotomous variables. Participation in protest is equal to 1 if the respondent has once, several times, or often attended a demonstration or protest march in the year prior to the survey, and 0 otherwise. Government redistributive effectiveness is equal to 1 if the respondent thinks that the government is handling narrowing gaps between rich and poor fairly well or very well, and 0 otherwise. The curfew variable is equal to 1 if the respondent agrees or strongly agrees that 'when faced with threats to public security, the government should be able to impose curfews and set up special roadblocks to prevent people from moving around'. The trust/associativism variables are the same as in Table 2.

Source: authors' calculations.

4 Conclusion

This note developed a simple index of lockdown readiness and applied it to harmonized survey data collected in 2019 in 30 sub-Saharan African countries. The index revealed that less than two in ten urban households and less than one in ten rural households across SSA are fully ready for a prolonged lockdown. We investigated whether social trust could support compliance with lockdown or other containment measures, but found no evidence for a trust offset, suggesting that strict lockdown policies may be even more difficult to enforce where readiness is lowest.

What are the implications of these findings? First, given that low readiness is crucially determined by a lack of a regular income (or savings), basic social protection measures in the form of food or cash transfers must be considered as *essential* complementary measures alongside social distancing policies. Lockdowns in contexts of high poverty without adequate safety nets are likely to compound the collective action problems associated with the containment of COVID-19 among those that face a trade-off between exposure to the virus and securing their livelihoods. Similar to other fragile contexts (Taydas and Peksen 2012; De Juan and Bank 2015; Justino and Martorano 2018), welfare policies may support livelihoods and reduce the potential for unrest in communities where lockdown readiness is low. This is all the more important since poorer populations across SSA generally exhibit low trust towards their governments.

Second, in addition to safety nets, the need for effective communication and community engagement cannot be considered an optional extra. While it is not possible to find 'off the shelf' solutions to build trust, the results in this paper show strong evidence that top-down administrative measures to contain the virus risk backfiring with a potential for a rise in civil unrest among the poorest communities that may be economically worst hit and thus most vulnerable. Close engagement with local communities and innovative thinking around how to contain the virus are critical. And here there may be a silver lining—if governments prove effective in handling the crisis, public trust in government could increase as a consequence (Flückiger et al. 2019).

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Appendix – Country-specific results

| Country | Ν | Water (%) | Sanitation (%) | Electricity (%) | Phone (%) | Not cash constrained (%) | Fully ready (%) | Partially ready (%) | Ready dimen- sions | Institu- tional trust | Commu- nity trust (%) | Associa- tivism | Protest partici-pation (%) | Government narrows income gap (%) | Agree to curfews (%) |
|------------------------|------|--------------|-------------------|--------------------|--------------|--------------------------------|-----------------------|---------------------------|--------------------------|-----------------------------|-----------------------------|--------------------|----------------------------------|--|-------------------------------|
| Benin | 1159 | 50.7 | 62.9 | 60 | 94.6 | 5.8 | 3.3 | 37.7 | 2.7 | -0.2 | 23 | -0.3 | 10.1 | 22.8 | 58 |
| Botswana | 1117 | 95.1 | 95.6 | 83.3 | 97.5 | 21.6 | 18.4 | 81.3 | 3.8 | 0.2 | 20.7 | -0.1 | 13.4 | 36.6 | 48.5 |
| Burkina Faso | 1146 | 69.2 | 89.1 | 69.2 | 97.3 | 6.3 | 5.3 | 60.3 | 3.3 | 0.3 | 19.5 | -0.3 | 21.2 | 15.6 | 80.5 |
| Cabo Verde | 1093 | 85.5 | 91.8 | 94.9 | 96.3 | 35.7 | 30.7 | 78 | 4 | -0.2 | 28 | -0.6 | 21.2 | 16.2 | 41.1 |
| Cameroon | 1154 | 51.1 | 85.3 | 89.3 | 97.2 | 5.9 | 3.6 | 47.1 | 3.3 | -0.2 | 20.9 | -0.2 | 13.4 | 12.6 | 68.5 |
| Côte d'Ivoire | 1170 | 73.5 | 83.8 | 84.2 | 96.8 | 7 | 4.9 | 64.8 | 3.4 | 0.1 | 25 | -0.2 | 9 | 18.4 | 54.1 |
| eSwatini | 1120 | 90.1 | 92.1 | 91.1 | 99 | 35.5 | 30 | 81.8 | 4.1 | -0.3 | 21.2 | -0.3 | 9.9 | 27.6 | 55.2 |
| Gabon | 1178 | 71.9 | 87.9 | 96.5 | 97.8 | 6 | 5 | 67.8 | 3.6 | -0.8 | 29.5 | -0.7 | 17.5 | 6.4 | 54.9 |
| Gambia | 1146 | 46.4 | 92.8 | 59.2 | 97.6 | 22.8 | 11.8 | 37.1 | 3.2 | 0.5 | 30.3 | 0.3 | 4.6 | 42.7 | 75.1 |
| Ghana | 2254 | 47.7 | 55.5 | 94.9 | 97.9 | 48.5 | 22.7 | 38.5 | 3.4 | -0.2 | 25.8 | -0.3 | 6.3 | 39.3 | 79.2 |
| Guinea | 1092 | 45.4 | 85 | 78.1 | 95.8 | 2.8 | 1.9 | 37.4 | 3.1 | -0.3 | 19.9 | -0.2 | 9.4 | 5.8 | 77.8 |
| Kenya | 1526 | 60.7 | 86.4 | 81.7 | 93.7 | 27.7 | 16.4 | 52.6 | 3.5 | -0.3 | 18.9 | 0.2 | 14.6 | 19.8 | 49.6 |
| Lesotho | 1026 | 67.1 | 90 | 61.2 | 96 | 13.5 | 9.1 | 47.1 | 3.3 | -0.2 | 16.3 | -0.2 | 17.9 | 26.3 | 55.7 |
| Liberia | 1173 | 30.1 | 64.8 | 40.9 | 93.6 | 9.5 | 2.1 | 14.2 | 2.4 | -0.3 | 17.1 | 0.2 | 7.4 | 27.5 | 73.4 |
| Madagascar | 1133 | 62.7 | 86.1 | 78 | 82.4 | 9 | 6.9 | 53.1 | 3.2 | -0.6 | 28.2 | 0 | 6.5 | 4.5 | 80 |
| Malawi | 1132 | 48.9 | 68.8 | 54.8 | 82.8 | 15.8 | 8.1 | 33.9 | 2.7 | -0.3 | 14.5 | 0.1 | 14.9 | 11.3 | 55.7 |
| Mali | 1111 | 62.4 | 95.7 | 82.2 | 97.3 | 9.7 | 7.8 | 56.2 | 3.5 | -0.1 | 31 | -0.4 | 17.8 | 17.4 | 75.2 |
| Mozambique | 2303 | 58.3 | 86.4 | 70.3 | 88.3 | 16.5 | 11.6 | 49.7 | 3.2 | 0.2 | 18.8 | -0.1 | 12 | 32.3 | 43.9 |
| Namibia | 1157 | 69.2 | 65.6 | 65.9 | 96.1 | 27.2 | 17.2 | 54.1 | 3.2 | 0 | 13.8 | -0.4 | 13.8 | 24.1 | 50.5 |
| Niger | 1127 | 61.3 | 88.1 | 77.3 | 90.2 | 7.2 | 6.2 | 53.1 | 3.2 | 0.2 | 30.4 | -0.6 | 15.5 | 17 | 78.9 |
| Nigeria | 1561 | 58.1 | 86.4 | 91.1 | 97.1 | 26.9 | 15.7 | 51.8 | 3.6 | -0.8 | 17.7 | 0 | 16.8 | 12.4 | 70.3 |
| São Tomé e Príncipe | 1142 | 48.9 | 66.8 | 85.7 | 91.3 | 28.1 | 13.1 | 42.1 | 3.2 | -0.6 | 25.1 | -0.5 | 7.6 | 13.9 | 46 |
| Senegal | 1136 | 89.7 | 97.3 | 90.7 | 99.7 | 6.6 | 6.3 | 85.4 | 3.8 | 0.4 | 31.3 | -0.2 | 14.6 | 26.2 | 71.7 |
| Sierra Leone | 1155 | 24 | 68.9 | 44 | 88.4 | 13.3 | 4.7 | 14.7 | 2.4 | -0.1 | 24.1 | 0.3 | 4.9 | 15.3 | 80.4 |
| South Africa | 1728 | 89.9 | 89.6 | 84.1 | 96.4 | 32 | 25.5 | 73.8 | 3.9 | -0.5 | 12.6 | 0 | 26.2 | 20.1 | 40.4 |
| Tanzania | 2253 | 40.4 | 78.2 | 70.1 | 96.1 | 25 | 9.1 | 33.8 | 3.1 | 0.3 | 25.5 | 0.1 | 2.1 | 31.4 | 44.8 |
| Togo | 1151 | 52.9 | 88.2 | 93.7 | 97.4 | 1.7 | 1.5 | 48.6 | 3.3 | -0.8 | 21.4 | -0.5 | 16.2 | 8.6 | 56.6 |
| Uganda | 1155 | 32 | 65.9 | 60.4 | 93.8 | 20 | 6.9 | 23.9 | 2.7 | -0.2 | 21.6 | 0 | 9.2 | 9.5 | 67.9 |
| Zambia | 1145 | 59.8 | 91.7 | 69.3 | 90.1 | 15.9 | 10.1 | 48.9 | 3.3 | 0 | 21.4 | -0.3 | 5.4 | 17.3 | 71.7 |
| Zimbabwe | 1095 | 90.5 | 95.3 | 88.6 | 97.9 | 8.6 | 7.2 | 80.2 | 3.8 | -0.2 | 14.4 | -0.4 | 5.6 | 13 | 27.2 |

Table A1: Summary statistics of main variables by country for urban population

| Country | Ν | Water (%) | Sanitation (%) | Electricity (%) | Phone (%) | Not cash constrained (%) | Fully ready (%) | Partially ready (%) | Ready dimen- sions | Institu- tional trust | Commu- nity trust (%) | Associa- tivism | Protest partici- pation (%) | Government narrows income gap (%) | Agree to curfews (%) |
|------------------------|------|--------------|-------------------|--------------------|--------------|--------------------------------|-----------------------|---------------------------|--------------------------|-----------------------------|-----------------------------|--------------------|--------------------------------------|--|----------------------------|
| Benin | 1159 | 15.5 | 23.7 | 16.3 | 89.3 | 3.5 | 0.2 | 3.6 | 1.5 | 0.1 | 28.7 | 0.1 | 10 | 20.1 | 57.5 |
| Botswana | 1117 | 62.4 | 74 | 54.1 | 90.1 | 14.7 | 9.6 | 48 | 2.9 | 0.6 | 24 | 0.2 | 10.2 | 45.3 | 56.5 |
| Burkina Faso | 1146 | 8.9 | 39.1 | 3.7 | 90.5 | 1.3 | 0 | 0.6 | 1.4 | 0.6 | 34.7 | -0.2 | 12.7 | 31.9 | 76.7 |
| Cabo Verde | 1093 | 74.5 | 71.7 | 85.4 | 89.2 | 21 | 14.6 | 52.3 | 3.4 | -0.2 | 34.8 | -0.4 | 12.1 | 16.4 | 48.2 |
| Cameroon | 1154 | 23.8 | 82.8 | 50.9 | 89.8 | 7.4 | 2 | 17.2 | 2.5 | 0.1 | 26.1 | 0 | 10.5 | 18.7 | 57.3 |
| Côte d'Ivoire | 1170 | 29.2 | 46.3 | 41.1 | 90 | 3.6 | 1.4 | 17.7 | 2.1 | 0.3 | 30.8 | 0.1 | 5.2 | 17.7 | 61.7 |
| eSwatini | 1120 | 58.1 | 73.6 | 77.7 | 96 | 15.5 | 8.2 | 41.4 | 3.2 | 0 | 27.2 | -0.1 | 6.4 | 29.4 | 55.6 |
| Gabon | 1178 | 20.3 | 69.4 | 36.4 | 84.3 | 1.7 | 0.4 | 12 | 2.1 | -0.7 | 35.1 | -0.5 | 11.6 | 4.5 | 58.7 |
| Gambia | 1146 | 53 | 93.1 | 53.7 | 98.6 | 21.4 | 15 | 46.5 | 3.2 | 0.4 | 33.4 | 0.3 | 8.3 | 29.3 | 70.5 |
| Ghana | 2254 | 10.8 | 25 | 71.9 | 90.2 | 30.7 | 3.2 | 7.4 | 2.3 | 0.1 | 32.8 | 0.2 | 6.1 | 33.5 | 81.5 |
| Guinea | 1092 | 14.8 | 54.3 | 4.5 | 88.8 | 0.3 | 0 | 1.6 | 1.6 | 0 | 32.8 | 0.4 | 14.6 | 12.3 | 66.8 |
| Kenya | 1526 | 34.1 | 80.9 | 23.5 | 87.3 | 16.7 | 3.1 | 13.9 | 2.4 | 0 | 24.6 | 0.4 | 9.4 | 20.5 | 50.7 |
| Lesotho | 1026 | 9.2 | 62.8 | 15.9 | 89.3 | 4 | 0.3 | 3.5 | 1.8 | 0 | 16.9 | 0.2 | 12.7 | 26.1 | 57 |
| Liberia | 1173 | 13.3 | 25.8 | 2.3 | 74.5 | 5.1 | 0.2 | 0.2 | 1.2 | 0 | 18.2 | 0.7 | 7.1 | 29.3 | 69.4 |
| Madagascar | 1133 | 33.4 | 62.7 | 7.1 | 46.4 | 4.7 | 0.5 | 3.8 | 1.5 | -0.2 | 35.6 | 0.3 | 3.9 | 6.6 | 84.9 |
| Malawi | 1132 | 9.5 | 41.9 | 3.6 | 56.4 | 3.8 | 0.2 | 0.8 | 1.1 | 0 | 14.9 | 0.5 | 4.4 | 14.2 | 61.9 |
| Mali | 1111 | 25.6 | 81.8 | 8.9 | 92.9 | 3.2 | 0.1 | 4.8 | 2.1 | 0.3 | 32.9 | 0.1 | 7.7 | 20.8 | 83.4 |
| Mozambique | 2303 | 20.2 | 66.9 | 23.8 | 73.1 | 8 | 1.8 | 8.4 | 1.9 | 0.5 | 17.2 | 0 | 12.6 | 39 | 46.4 |
| Namibia | 1157 | 51.4 | 21.9 | 27.5 | 89.2 | 13.3 | 3.5 | 12.6 | 2 | 0.4 | 16.6 | 0 | 10.6 | 25.1 | 52.8 |
| Niger | 1127 | 4.6 | 30.5 | 10.3 | 71.2 | 1.4 | 0.1 | 1.8 | 1.2 | 0.4 | 31.6 | -0.2 | 7 | 17.1 | 77.2 |
| Nigeria | 1561 | 31.9 | 73 | 65.8 | 91.1 | 20.5 | 5.6 | 21 | 2.8 | -0.4 | 22.1 | 0.2 | 19 | 17.5 | 70.6 |
| São Tomé e Príncipe | 1142 | 18.4 | 42.5 | 73.6 | 86.2 | 27.3 | 5.1 | 12.5 | 2.5 | -0.4 | 24.3 | -0.2 | 6.2 | 15.9 | 51.9 |
| Senegal | 1136 | 65.3 | 82.4 | 45 | 94.1 | 3.5 | 2.6 | 39.3 | 2.9 | 0.7 | 38.5 | 0.2 | 10.6 | 29.4 | 72.5 |
| Sierra Leone | 1155 | 16.5 | 57.5 | 12.6 | 74.2 | 6.2 | 1.1 | 5.3 | 1.7 | 0.2 | 28.2 | 0.5 | 6.7 | 26.2 | 73.5 |
| South Africa | 1728 | 52.7 | 71.1 | 82.1 | 95.4 | 16.3 | 8.1 | 38.8 | 3.2 | -0.4 | 11.1 | 0.1 | 30.5 | 20.3 | 42.9 |
| Tanzania | 2253 | 9.9 | 55.9 | 11.6 | 85 | 16.6 | 1.2 | 3.9 | 1.8 | 0.5 | 23.8 | 0.5 | 2.7 | 30.7 | 48.4 |
| Togo | 1151 | 15.6 | 44.9 | 36.9 | 87.2 | 1.3 | 0.1 | 10.8 | 1.9 | -0.3 | 23.7 | 0.1 | 8.6 | 14.2 | 60 |
| Uganda | 1155 | 4.2 | 38.1 | 3.1 | 76.8 | 8.6 | 0.1 | 0.7 | 1.3 | 0.3 | 20.4 | 0.2 | 3.4 | 15.9 | 67.1 |
| Zambia | 1145 | 23.8 | 84.1 | 7.5 | 66.2 | 8.1 | 1.6 | 4.1 | 1.9 | 0.2 | 20.3 | 0.4 | 2.4 | 16.8 | 68.6 |
| Zimbabwe | 1095 | 33.7 | 67.2 | 9.8 | 89.1 | 4.4 | 0.6 | 7.1 | 2 | 0.2 | 19.1 | 0.2 | 3.9 | 21.1 | 46.6 |

Table A2: Summary statistics of main variables by country for rural population