Food prices and state repression

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Abstract

Russia's invasion of Ukraine and adverse effects of climate change on agricultural yields make food prices a growing concern. A spike in food prices is a relatively predictable source of societal discontent causing uprisings and protest involving large segments of the population. When food prices rise rapidly we make the case that it constitutes a strong motivation for leaders to preemptively re-establish control and assert power, and we therefore expect that spikes in food prices will be associated with increases in state repression due to anticipated dissent. Repression can take the form of more bureaucratic means to control civil society organizations when a threat is less imminent, or the state can use more coercive forms of state repression such as physical integrity rights violations when the threat to its power is more acute. This paper tests these arguments statistically in Africa from 1992-2019. Our preliminary results suggest that international food prices primarily affects the probability that a state will increase restrictions against civil society organizations, but not increase physical integrity rights violations. We propose that the effects of food prices on repression should be stronger when the urban population is large, but do not find that this is the case.

Introduction

Inflation in food prices since 2000 has come with pressing questions of whether this poses threats to political stability (Hendrix and Haggard, 2015). According to Brinkman and Hendrix (2011), over 30 countries experienced protests and riots related to food prices in 2007-08, including import dependent countries on the African continent such as Egypt and Morocco, as well as in Ethiopia, Burkina Faso, Senegal, Mozambique, Cote d'Ivoire and Guinea. In 2010-11, food price related demonstrations recurred in many Middle Eastern and African countries, including Algeria, Kenya, Libya, Somalia, Sudan, and Uganda (Salehyan et al., 2012). Goldstone (2011) draws long historical parallels between the role of food prices and the revolutions that swept the Middle East in 2011 and onwards, the so-called Arab spring, and previous "political earthquakes" going back centuries (p. 8). Rising food prices have fueled massive popular protests many places, and sometimes these have become revolutions that have led to the fall of powerful regimes.

A decade after the Arab Spring, the warning bells are again chiming because of anticipated spikes in food prices. After Russia went to war against Ukraine in February 2022, the world faces an impending food crisis. International food and feed prices could rise by up to 20 percent as a result of the war, triggering a likely jump in global malnourishment. The leader of the World Trade Organization warned already a month into the war against Ukraine that the conflict could soon lead to food riots in poor countries [1]. News stories repeatedly warn about instability in the wake of the curent global food crisis.[2] On CNN we can read that "from Pakistan to Peru, soaring food and fuel prices are tipping countries over the edge" [3], and the combination of Russian military aggression against Ukraine, the pandemic, and

[1] https://www.theguardian.com/world/2022/mar/24/war-ukraine-food-riots-poor-countries-wto-ngozi-okonjo-iweala-food-prices-hunger

[2] https://www.reuters.com/markets/commodities/surging-food-prices-fuel-protests-across-developing-world-2022-05-18/

[3] https://edition.cnn.com/2022/04/09/business/food-fuel-prices-political-instability/index.html

poor weather has upended agriculture and threatened food security for millions of people globally. Countries in Africa and the Middle East are particularly heavily dependent on food imports from the Black Sea region, which make the situation on the African continent particularly acute. Droughts and conflict in countries like Ethiopia, Somalia, South Sudan and Burkina Faso have created a food security crisis for more than a quarter of the continent's population, according to the International Committee of the Red Cross.[4] Moving forward, climate change will continue to affect yields and make prices fluctuate more strongly than in the past. Food security is therefore an increasing concern in Africa as well as many other parts of the world, and it is an anticipated source of social unrest.

Many studies have tried to ascertain whether (and sometimes how) changes in food prices leads to conflict, and much of existing literature confirm through empirical studies that a positive correlation exists between food prices and social unrest (Rudolfsen, 2021; Fjelde, 2015; Hendrix and Haggard, 2015; Bellemare, 2015). However, the risk of social unrest when food prices go up is not a new idea – even outside academic circles. Indeed, we assume that this is something that is on many elites' minds when they hear of possible price shocks on staple goods that the population relies on. Food is irreplaceable, and although urban poor populations and countries relying heavily on food imports are the most vulnerable, food prices have mass relevance. In Africa in particular, the countries have become more dependent on food imports over time, and the sensitivity to this problem is therefore increasing.

Civil and political society have the potential to channel collective dissent around food-related grievances. In a recent study, Rudolfsen (2021) builds on the food price-conflict literature and asks under what conditions increasing food prices lead to urban unrest. She focuses on how repression of those organizations in civil society that help mobilize and channel dissent could make a difference in subsequent urban unrest. Her empirical results find that repression of societal organizations does indeed decrease the likelihood of unrest

[4]https://www.icrc.org/en/document/across-africa-disaster-goes-largely-unnoticed-food-security-crisis

when food prices rise.

In the current study, we take a step back and ask two related but unanswered questions from this study, namely, first, whether there is systematically higher state repression when food prices are going up, and second, whether particular types of countries are more susceptible to food riots and therefore to such repression? We argue that a regime can be expected to increase the level of repression in anticipation and fear of widespread food riots and demonstrations. This fear is not without merit, given the many examples of large-scale protests over food prices that call for the leaders' removal and that sometimes succeed in toppling the sitting regime. We think there is a direct relationship between spikes in food prices and preemptive repression, as well as an additional effect of food prices in circumstances when grievances are particularly widespread, such as when there is a large urban population.

This paper contributes to the research on food security by asking whether increases in food prices can spur state repression. We also contribute to a growing literature that considers how state repression can be enacted *preemptively*, in anticipation of future threats. Such preemption was initially found to be an important explanation of repression in countries with a large youth population (Nordås and Davenport, 2013), and has later also been found to increase repression in countries with conflict across international borders (Danneman and Ritter, 2014) and after oil has been discovered (Carey et al., 2022). In the current paper, we extend this logic to food prices, as a factor that is relatively predictably associated with an increased threat to states in the form of mass protest.

So far, we find that there is an association between international food prices and "softer" repression, meaning more restrictive practices against civil society organizations (CSOs), but no effect on more severe repression (physical integrity rights violations). When increasing food prices are indeed associated with more repression, this has policy implications. It suggest a need for intensifying monitoring and prevention of repressive state behavior during times when global food prices shift. If we do not see an increase in social unrest in the wake

of food price hikes, therefore, this could be an indication that the population is actively suppressed through coercive means, and/or that they have had their civil rights restricted, particularly the right to organize, to quell dissent.

Previous research

Repression include policies and practices government agents use to stop non-state persons within their jurisdiction from participating in their own governance (Ritter, 2014). Severe forms of repression can be in the form of torture, violent policing, surveillance, curfews, restrictions on speech, and other actions that undermine people's ability to vote, protest, or participate in society. One of the most commonly used measures of state repression, the political terror scale (PTS)[5] focuses on arbitrary arrests, disappearances, torture, and killings by states against their own citizenry, so called physical integrity violations (Wood and Gibney, 2010). However, repression can arguably also take the form of more bureaucratic means to control civil society organizations, such as regulations to prevent formation of organizations, or to restrict their activities and funding. These types of restrictions have become more common with time (Chaudry, 2022), and can arguably be a supplement or alternative to more coercive or violent means of control. However, less is know about what drives the use of these types of bureaucratic restrictions on freedoms.

When trying to explain state repression, the basic assumption is that states or leaders want to protect the *status quo policy* and the current distribution of power. Further, previous literature assume that state leaders respond to threats to this objective (Davenport, 2007). Scholars commonly imply an informal decision calculus (a rational choice model) in which state leaders are considering how to meet threats to the *status quo* (Hill and Jones, 2014). The primary ingredients in the decision calculus are *costs* of repression, weighted against

[5] www.politicalterrorscale.org

benefits, and sometimes considering the probability of success, and alternatives of applying repression. Considering these factors together, the assumption is (in simplified form) that repressive state behavior is expected when benefits exceed costs, alternatives are poor or unavailable, and the probability of success is high. Most theoretical discussions therefore consider –explicitly or implicitly– that state leaders are able to weight the costs and benefits of using repression, and to assess what works to protect the *status quo* against threats. Threats that states should be expected to care about are typically behavioral challengers in the form of dissent (protest) and violent opposition (insurgency and civil war). Preempting such threats could be the preferred option for states to quell dissent before the opposition has formed and the risk of backlash is high.

Although there are consistent findings to suggest that more authoritarian states are generally also more repressive, authorities repress dissent across a range of political institutions, including both autocracies and democracies (Davenport, 2007; Conrad, 2014; Conrad, Hill Jr and Moore, 2018). Indeed, the relationship between dissent and repression is so consistent in the literature that it has been called a law of coercive responsiveness (Davenport, 2007).

Previous research points to economic development, regime type and demography (Carey, 2010; Nordås and Davenport, 2013; Davenport and Armstrong, 2004; Poe and Tate, 1994; Wood, 2008) as steady predictors of repression. But these explanatory factors are mostly static and slow-changing. Therefore, they are likely to miss changing conditions that the government can perceive as threatening and use as cues for repression. Most scholarship has considered the decision calculus of the state elites to be focusing on dealing with already manifest threats. More recently, scholars have challenged this idea and theorized and modeled state repression as preemptive or preventative of future threats. Predictable future threats, or sources of dissent and conflict in the future, can be used to predict when more repression is likely. Initially, youth bulges was launched as one key source of possible instability that states predictably choose repression to counter, even before there are manifest threats in the form

of dissent (Nordås and Davenport, 2013). Indeed, this preemptive source of repression is one of the strongest predictors of physical integrity rights violations in the repression literature (Hill and Jones 2014), suggesting that preemption is an important part of the repressive calculus of states.

Subsequently, a literature has grown to consider additional sources of preemptive repression by states, and found that this extends to predictable or perceived risks associated with conflict in neighboring countries (Danneman and Ritter, 2014), and oil discoveries that have yet to produce wealth (Carey et al., 2022). When there is rebellion in neighboring countries, states are likely to increase repression due to fear of spillover or contagion effects across international borders (Danneman and Ritter, 2014); and "oil can lead to repression" arguably because during such time periods "the expectation of wealth represents a closing window of opportunity for potential rebels inclined to challenge state power" Carey et al., 2022, 2. When oil is discovered, therefore, the argument is that the state tries to actively prevent rebellions by increasing repression. Common for these arguments is that they assume that state elites see a time of potential turmoil due to various exogenous circumstances that could produce challenges. Our argument builds on this idea by proposing how times of rapidly rising food prices can be associated with more social disorder and therefore also represents a situation when the states tend to increase repression preemptively.

Existing studies on food security and food prices have focused on how spikes in prices might lead to uprisings because of the grievances that higher food prices cause for the citizenry. These grievances motivate people to take to the streets in protest or challenge the state through violent uprisings. Increasing food prices is an established predictor of unrest in the literature (Abbs, 2020; Arezki and Brückner, 2014; Berazneva and Lee, 2013; Heslin, 2021; Hendrix and Haggard, 2015; Raleigh, Choi and Kniveton, 2015; Rudolfsen, 2021; Smith, 2014). When people protest and riot with food as a stated motivation, the main focus of scholars is typically on food prices (Bellemare, 2015). While some historical studies focused

on direct causal routes between food prices and protest, others in more recent work have also considered the various domestic policies that might mediate between global price shocks and protest. Arezki and Brückner (2014) find that higher global food prices are associated with demonstrations and riots directed against the government, particularly in low-income countries. Hendrix and Haggard (2015) have looked at political institutions and find that democracies are more likely to experience urban unrest than autocracies due to both greater opportunity structures and less bias towards urban consumers, and Rudolfsen (2020) finds that repression of civil society organizations produces less instances of social unrest related to food prices. We build on this, but propose a theoretical argument based on the common assumption that food prices spur unrest. The basis for our argument is therefore less on the academic literature that verifies the average effects of grievances related to increasing food prices on conflict, and more on food prices as a source of information about likely future dissent.

Theoretical argument: Food prices and repression

Increasing food prices is relevant for understanding preemptive state repression for a series of reasons. First, governments use repression to prevent challenges that they can anticipate. Spikes in food prices is one such predictable course of behavioral challenges. It is a relatively predictable source of societal discontent and disturbance directed against the authorities. Second, information about food prices is common knowledge across populations, and hiding the source of discontent from the masses is therefore not a very plausible alternative. Weinberg and Bakker (2015) also argues similarly that food price is the best available indicator to assess the public's well-being, as it is a good that is purchased regularly and tend to make up a large share of the household budget. Food prices can change rapidly but is still going to be known to both the government and large segments of society, regardless of social status. As

such, it is easy to observe changes and directly assess changes in well-being. Third, food is a universal need, which means that the threat associated with food prices spiking can involve masses of people – not just particularly politically interested segments or special interest groups. There are many examples of food prices causing uprisings and protest attracting huge crowds. Last, in addition to being a compelling driver of unrest due to its visibility, unaffordable food also signal the state being unable to meet the most basic condition of the social contract, creating pressure to address the most fundamental failure of the state (Abbs, 2020; Hossain and Scott-Villiers, 2017). Thus, it might also signal an opportunity for potential challengers.

Food prices connect to food protests by grievances that produce a motive for taking to the streets. The effects of food prices on repression should be stronger the more food import dependent a country is, and the large the share of the population lives in urban areas and therefore rely on purchasing rather than growing their foods. These factors both make the grievances likely to be both larger and more widespread in the population, and the alternatives for the regime to compensate for higher food prices more limited.

Regimes arguably fear widespread food riots and demonstrations that call for the leaders' removal. This fear is not without merit. Large demonstrations have often erupted over price hikes on key staples, and regimes have indeed fallen to food-related protests. For example, food prices were climbing sharply in the run-up to the anti-government protests that became known as the Arab Spring. As one commentator put it in early 2011: "Tunisians and Algerians are hungry. The Egyptians and Yemenis are right behind them. Mohammad Bouazizi didn't set himself on fire because he couldn't blog or vote. People set themselves on fire because they can't stand seeing their family wither away slowly, not of sorrow, but of cold stark hunger."[6] Bouazizi, a street vendor, set himself on fire in Tunisia in late 2010, which triggered the Arab Spring protests. When people took to the streets there and later in

[6]https://gulfnews.com/opinion/op-eds/why-democracy-isnt-a-one-stop-shop-1.746849

Egypt and other countries, they chanted about a range of issue, but also bread. Despite fierce government resistance, many of the protests ended up toppling the sitting regimes. Egypt and other Arab Spring countries might have taken a lesson from past events – possibly one of getting ahead of the problems as they see them. Egypt is the world's largest buyer of wheat, and the country is now already seeing enormous pressure on its huge subsidy program for bread, which means an even more repressive approach might be expected, in a country where repression is already high.

In 2019, huge demonstrations led to the overthrow of Sudan's long-term authoritarian President Omar al-Bashir. The Sudanese uprising has been described as "bread riots", although people were certainly taking to the streets also for other reasons.[7]. In 2021, seven regions of Sudan declared states of emergency following violent protests against food price rises; and curfews were imposed and schools closed in 10 cities.[8] Today, the situation is more grave than ever and maintaining subsidies for food will be difficult. This entails that the regimes that face instability over surging food prices will be cornered, and are therefore likely to try to turn to increased repression to maintain control.

Both in highly authoritarian countries but also in democratic countries are the food price spikes a concern that might incentivize repression. In Iran, protests have been triggered (in part) by sharply rising food prices [9] but also France and England are facing food security problems, which initially are being met by suggestions for increasing support for poor families, but which could also be presumed to trigger disruptive protests and entail stricter control of public spaces and civil society organizations by the government. One way that repression might vary, however, is in the form it takes. Repression can take the form of more

[7]https://www.cmi.no/publications/7201-blog-from-sudan-the-sudan-uprisings-the-revolution-of-the-youth

[8]https://www.theguardian.com/global-development/2021/feb/16/sudan-declares-states-of-emergency-after-protests-over-soaring-food-prices

[9]https://www.nytimes.com/2022/05/13/world/iran-protests-food-prices.html Story from May 13, 2022. Last accessed 06/06/2022

bureaucratic means to control civil society organizations in response to predicted popular uprisings in particular (perhaps when food prices are expected to increase gradually over time and the regime is restricted in what it can order the coercive apparatus to do), as well as more coercive forms of state repression such as physical integrity rights violations (perhaps in particular when food prices are expected to rise rapidly). This could be a response to protest (violent), or preemptive (less severe).

When future threats are perceived as both serious, involving actors assumed to be willing to engage in active challenge or use violence and/or issues that can mobilize large numbers of people in opposition to the regime, and the threat is also predictable, the elites arguably have much to gain from acting before the perceived problem has taken root. However, repression is not the only choice when faced with popular grievances and possible uprisings, of course, as attempts to counter the price hikes through subsidies and investment in social welfare are other options to diffuse dissent. However, if and when alternatives to avoid price hikes or alleviate suffering does not seem like a preferable or even viable option, more focus on control of dissent through repression is likely to be considered by the state. In our discussion, we therefore focus both on the direct effect of anticipated dissent in response to food prices, and interaction effects that are relevant conditions or context under which food price spikes are likely to lead to the choice of increasing repression. The specific repressive repertoire that is utilized might depend on the nature of the perceived threat. We therefore study a set of different repressive strategies, from limiting civil society organizations to outright physical integrity violations.

Our argument hinges in large part on the assumption that state leaders and the coercive apparatus perceives rising food prices as involving a high chance of popular dissent, and that they fear widespread protests over spikes in food prices. We cannot systematically test the leadership perceptions and fears directly. However, we will conduct empirical tests of the association between rising food prices and repression, and rising food prices under various

conditions on repression, which are based on implications drawn from such a mechanism.

Our expectations based on the above arguments are formulated into a set of hypotheses. The overarching expectation is that food price shocks will be associated with increased repression:

H1: Increasing international food prices are met by increasing state repression to preempt dissent. We also expect the effect to be stronger in a set of conditions that increase the vulnerability to food price shocks and increase the costs and limit the ability of the state to compensate with food subsidies. We therefore hypothesize that:

H2: Increasing international food prices are more likely to be met by increasing state repression in contexts where large shares of the population is urban compared to in more rural countries.

Data

To test our hypothesis, we use country-year panel data from 1992 to 2019 in Africa.

Dependent variables

We use three dependent variables to indicate levels of state repression, taken from the Varieties of Democracy Project (V-Dem) and the political terror scale (PTS) (Bernhard et al., 2015; Wood and Gibney, 2010). The first measure captures the degree to which the government controls CSO activity. *CSO control* is a five point ordinal scale (reversed from original), that measures the extent to which the government achieves control over the entry and exit of CSOs into the public sphere.

The variable ranges from 0 to 4, and is defined as follows:

0: Unconstrained. Whether or not the government licenses CSOs, the government does not impede their formation and operation unless they are engaged in activities to violently

overthrow the government.

1: Minimal control. Whether or not the government licenses CSOs, there exist constitutional provisions that allow the government to ban organizations or movements that have a history of anti-democratic action in the past. Such banning takes place under strict rule of law and conditions of judicial independence.

2: Moderate control. Whether the government ban on independent CSOs is partial or full, some prohibited organizations manage to play an active political role. Despite its ban on organizations of this sort, the government does not or cannot repress them, due to either its weakness or political expedience.

3: Substantial control. The government licenses all CSOs and uses political criteria to bar organizations that are likely to oppose the government. There are at least some citizen-based organizations that play a limited role in politics independent of the government.

4: The government exercises an explicit monopoly over CSOs. The only organizations allowed to engage in political activity (e.g. endorsing parties, organizing rallies or demonstrations, engaging in strikes, or publicly commenting on politics) are government-sponsored organizations.

The second measure captures the degree to which the state attempts to repress civil society organizations. *CSO repression* is a five-point ordinal scale (reversed from original), ranging from no repression (0) to severe repression (4), and is defined as follows:

0: No. Civil society organizations are free to organize, associate, strike, express themselves, and to criticize the government without fear of government sanctions or harassment.

1: Weakly. The government uses material sanctions (fines, firings, denial of social services) to deter oppositional CSOs from acting or expressing themselves. They may also use burdensome registration or incorporation procedures to slow the formation of new CSOs and sidetrack them from engagement. The government may also organize Government Organized Movements or NGOs to crowd out independent organizations.

2: Moderately. The government also engages in minor legal harassment (detentions, short-term incarceration) to dissuade CSOs from acting or expressing themselves. The government may also restrict the scope of their actions through measures that restrict association of civil society organizations with each other or political parties, bar civil society organizations from taking certain actions, or block international contacts.

3: Substantially. The government arrests participants in oppositional CSOs who have acted lawfully. Other sanctions include disruption of public gatherings and violent sanctions of activists (beatings, threats to families, destruction of valuable property). 4: Severely. The government violently and actively pursues all CSOs. They seek not only to deter the activity of such groups but to effectively liquidate them.

Finally, the most severe forms of repression are arguably physical integrity rights violations, and like much previous scholarship, we use the political terror scale (PTS) (Wood and Gibney, 2010) to measure this. The *PTS* variable is defined as follows:

0: If countries are under secure rule of law, then political imprisonment and torture are rare, and political murders are extremely rare.

1: If imprisonment for nonviolent political activities is limited, then torture and beating are exceptional and political murder rare.

2: If political imprisonment is extensive, then execution and political murder may be common, and detention for political views is acceptable.

3: If the practices of level 3 are expanded to a larger segment of the population, then murders and disappearances are common, but terror affects primarily those who interest themselves in political practices and ideas.

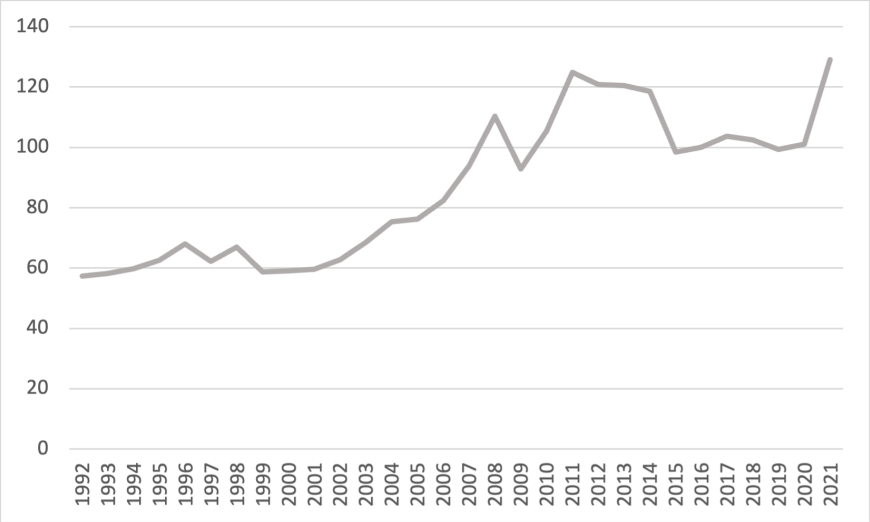
4: If terror has expanded to the whole population, and state authorities place no limits on the means or thoroughness with which they pursue personal or ideological goals.

Figure A1 in the Appendix displays the distribution of the dependent variables.

Independent variable

To model international food prices, we use the IMF Primary Commodity Price System (PCPS) (IMF, 2022).[10] The indexes includes the market price of food and beverages in terms of US dollars. Benchmark prices are determined by the largest import markets of a given commodity, where the base year is 2016=100. Figure 1 displays the IMF Food Price Index for 1992–2021.

Figure 1: International food prices, 1992-2021.



Covariates

We include a lagged dependent variable to account for the likely scenario that the effects of changes in the independent variables are distributed over multiple time periods, and also to control for omitted variables. Given that repression is an institutional feature that changes slowly over time, we do not expect that the effect of food prices on repression is instantaneous. We assume that present repression levels correlate with past values of repression, and do not assume that repression varies randomly over time. While including a lagged dependent

[10] In future versions of this paper we plan to include domestic prices, and also test various thresholds for price shocks.

variable increases the data requirements, it also provides a way to account for historical factors that cause current differences in the dependent variable that are difficult to account for in other ways. For example, some countries have had high repression rates in the past. Many of the same unobserved factors contribute to both high current and past levels of repression. By including repression t-1 we can assess the effect of increasing food prices on two countries with the same previous repression rates, so that B measures the effect of a unit increase in international food price on changes in state repression.

We also include a range of controls typically found in repression models [more details on these and expectations/justifications to be added in future versions]:

Regime type, *Polity 2* (Marshall and Jaggers 2020).

GDP per capita, point estimate from latent variable model of gross domestic product per capita based on a number of sources (Fariss et al. 2021).

ln(Population), point estimate from latent variable model of population based on a number of sources (Farris et al. 2021).

Youth bulge, share of population aged 15-24 (World Population Prospect, UN 2020).

Share urban pop, share of urban population (World Urbanization Prospects, UN 2020).

Financial crisis 2008, dummy.

Arab spring 2011, dummy.

Conflict, UCDP dummy.

Preliminary results

To assess the relationship between increasing food prices and state repression, we apply random-effects ordered probit models, as the dependent variable is categorical and ordered with more than two outcomes.[11] The results are reported in table 1 (models 1-6). We

[11] We also apply baseline models, OLS as an alternative model specification, and models with global coverage in the Appendix.

assess *H1* in model 1, 3 and 5. The coefficient for international food price is positive and significant for government control of CSOs in model 1 (0.010, $p<0.001$) and government CSO repression in model 3 (0.007, $p<0.01$). For political terror in model 5, the effect is negative and insignificant. Thus, the preliminary findings provide support for *H1*, where an increase in international food prices increases the risk of increased government control and repression of CSOs. However, we do not find an effect for the most severe forms of repression concerning physical integrity rights violations, reflected in PTS. Figure 2 shows the effect on probability of increased government control and repression respectively, given a unit increase in international food prices. While the effect is small, increasing prices reduce the predicted probability that the outcome will be no control and repression of CSOs, whereas the probability increases for the remaining outcomes.

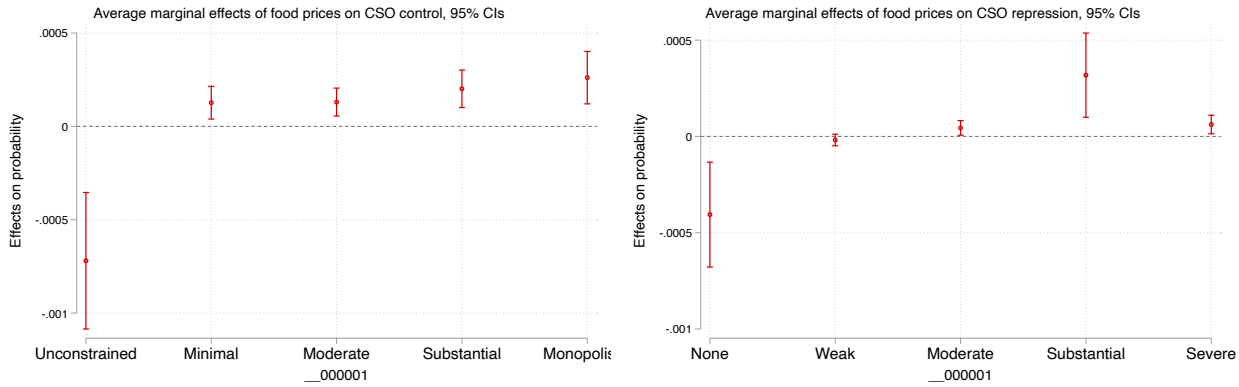
Table 1: Ordered probit models of state repression in Africa, 1992-2019.

	(1)	(2)	(3)	(4)	(5)	(6)
	CSO control		CSO repression		PTS	
International food prices	0.010***	0.023***	0.007**	0.016**	-0.001	-0.001
	(0.002)	(0.006)	(0.003)	(0.006)	(0.002)	(0.005)
CSO control lag_t-1	2.906***	2.922***				
	(0.173)	(0.170)				
CSO repression_t-1			3.116***	3.127***		
			(0.166)	(0.161)		
PTS lag_t-1					1.053***	1.053***
					(0.082)	(0.082)
Polity 2	-0.071***	-0.072***	-0.080***	-0.080***	-0.031***	-0.031***
	(0.018)	(0.018)	(0.013)	(0.013)	(0.009)	(0.009)
GDP per capita	0.018	0.020+	0.031**	0.032**	0.009	0.009
	(0.012)	(0.012)	(0.011)	(0.011)	(0.007)	(0.007)
ln(Population)	-0.008	-0.012	-0.025	-0.026	0.141***	0.141***
	(0.043)	(0.042)	(0.037)	(0.036)	(0.040)	(0.040)
Youth bulge	3.968*	2.648+	3.172	2.457	-0.086	-0.135
	(1.635)	(1.555)	(2.106)	(2.055)	(1.453)	(1.513)
Share urban pop	-0.001	0.027*	-0.007+	0.012	0.002	0.004
	(0.004)	(0.013)	(0.004)	(0.011)	(0.004)	(0.010)
Financial crisis 2008	-0.250**	-0.258**	-0.063	-0.062	-0.197	-0.196
	(0.089)	(0.090)	(0.126)	(0.126)	(0.194)	(0.194)
Arab spring 2011	-0.971**	-0.948**	-0.990*	-0.960*	0.028	0.029
	(0.370)	(0.363)	(0.474)	(0.461)	(0.218)	(0.217)
Conflict	0.339**	0.364***	0.349**	0.359**	0.752***	0.753***
	(0.117)	(0.106)	(0.128)	(0.123)	(0.111)	(0.109)
Food prices × Share urban pop		-0.000*		-0.000+		-0.000
		(0.000)		(0.000)		(0.000)
Observations	1332	1332	1332	1332	950	950
Pseudo R^2	0.770	0.772	0.788	0.789	0.318	0.318
AIC	951.460	944.501	839.455	837.960	1857.882	1859.863

Clustered robust errors in parentheses.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 2: Average marginal effect on probability for government control and repression of CSOs.



Turning to *H2*, we assess whether increasing international food prices are more likely to be met by increasing state repression in contexts where large shares of the population is urban. The results are reported in model 2, 4 and 6 in Table 1. [Interpretation and plots for interaction terms with very low but significant coefficients to be continued.]

Conclusion

As we have only presented preliminary results so far, we will add a conclusion and policy implications at a later stage.

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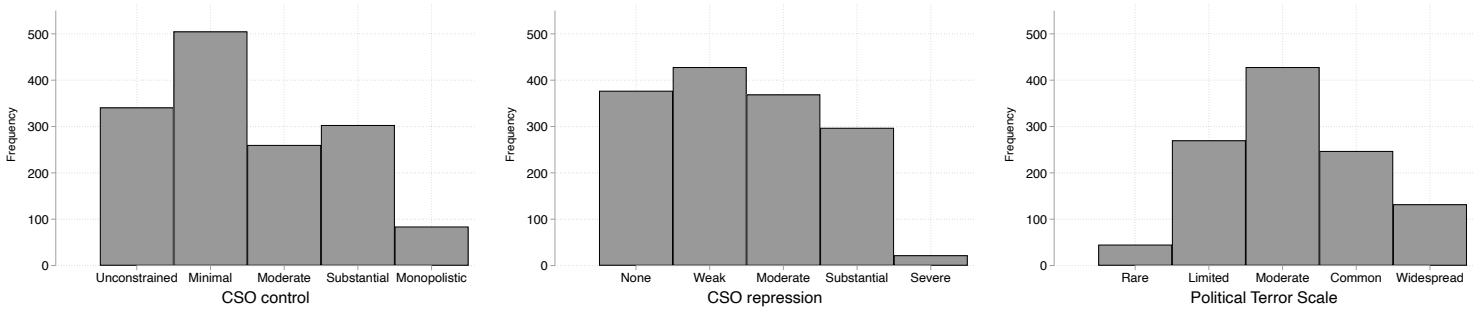
Appendix A: Summary statistics

Distributions

Figure A1: Distribution of dependent variables



Summary statistics

Appendix B: Alternative sample and estimation

Baseline models

Global sample

OLS