# Urban unrest in the MENA region in times of high food prices

## A qualitative comparative analysis of «food riots» in Middle Eastern and Northern African capitals in 2008 and 2011

### 1.0 Introduction

The phenomenon of food riots has received increasing attention since the financial crisis in 2008 and the Arab spring in 2011. During the food prices crisis in 2007–2008, the significant growth in world food prices increased the number of undernourished people in the world by 14 percent in two years (from 848 million people to 963 million) (FAO, 2008), and right now the COVID-19 pandemic risks further escalating these figures, with likely significant rises in humanitarian needs and food insecurity (FAO, 2020). Previous research has been using both qualitative and quantitative methods to investigate the link between food insecurity and unrest, establishing that there is in fact a connection between rising food prices and unrest. The conditions set for the tests have also varied, looking at for example regime type, organizational levels, and regime policies. However, to the best of my knowledge, a QCA-study to identify and narrow down the conditions of occurrence has not yet been conducted. By performing a crisp-set qualitative comparative analysis of 18 cities in the MENA region in the years 2008 and 2011, I hope to be able to contribute to the existing literature with attempting to uncover the conditions behind the unrest and the contexts required for high food prices to lead to unrest

The study will be case based, and thus allow more detailed information to be analyzed, but as a multiple case study, it will lead to a somewhat more general understanding than studies with fewer cases. The Middle East and Northern Africa region consists of countries who both have and have not seen food-related unrest in the years 2008 and 2011. Urban citizens are those most likely to be affected negatively by high food prices, and the sampling of cases will happen on the basis of data from the Urban Social Disorder v.2 dataset. I will examine periods of unrest in capitals in the region and identify where the unrest coincide with high food commodity prices for consumers, by the use of data from FAO. In those periods where cities have seen both unrest and high prices, I will analyze what other conditions were present to identify the segments that interact to make unrest manifest and investigate whether there were more countries experiencing unrest in 2011 than in 2008 due to reaching their limit on subsidizing the price rise away, as seems to be the case with Egypt (Soffiantini, 2020). My

main research question in this thesis is as follows: “In capitals in the MENA region, what conditions must be present for high food prices to lead to urban unrest?”

First, a review of the literature will give an impression of where the research field is situated at the moment, before I move on to the theoretical framework linking food prices to urban unrest. Next, I will explain the research method I am using and the cases I will analyze. I will use Factiva to gain in-depth information of the cases I study, assuming that capitals have good media coverage. Further on, the analysis of data, calibration of conditions and operationalization of key terms will take place, before I move on to the cross-case analysis with threshold setting for the dichotomizing of the conditions. Finally, I will present a summary of my findings and a conclusion, including shortcomings of my own study and recommendations for future research.

## 2.0 A review of the literature

To narrow the scope of this thesis and establish a foundation for our understanding of food-related unrest, I will examine the most influential and recent studies on the area. Furthermore, I aim to get an understanding of how my thesis can complement existing research as well as the contextual factors surrounding so-called “food riots”. Ida Rudolfsen quite recently published a review article on the topic, and her article will serve as a starting point as I zoom in on the literature ranging from a general overview to more specific case literature, as well as dividing the two main strains of literature into those who look at domestic food prices versus those who look at international food prices.

In the article “Food Insecurity and Domestic Instability: A Review of the Literature”, Rudolfsen (2020a) takes a closer look at the theoretical mechanisms of how food insecurity is linked to unrest and how to distinguish food-related unrest from other unrest events. She stresses the importance of being explicit about the definitions and assumptions of food security and unrest to facilitate comparisons of results and for teasing out under what societal conditions we can expect food insecurity to lead to unrest. Rudolfsen divides the research on food insecurity-related unrest into four different categories. The first category revolves around case studies of revolutionary settings from Europe and Russia, while the second focused on the so-called “IMF riots” that occurred in various developing countries in the 1970s and 1980s. The third category examines the unrest that corresponded with food price peaks in the 2000s, aiming to analyze patterns of social unrest and their linkages to food insecurity, which

will be the focus in this master thesis. The fourth category Rudolfsen identifies is primarily concerned with food production and the loss of income from agricultural yields.

Rudolfsen concludes that factors such as increasing food prices can function as a catalyst for political mobilization and act as an opportunity to address multiple grievances. She stresses the importance of explicitly modelling «assumed conditional effects to specify in which contexts we would expect violence to occur», and points to Hendrix and Haggard (2015) who have included the conditioning effect of regime type in their analysis of food price rise and urban unrest. However, their analysis uses international food prices, while world prices have varying passthrough effects on domestic prices depending on trade regimes, substitutability between domestic and foreign goods, and domestic market structures (Baquedano & Liefert, 2014). Therefore, Rudolfsen argues, it is more useful to look at domestic food prices that better reflect the cost for consumers. In the following sections I will examine the literature on both domestic and international food prices chronologically. Lastly, I will summarize the recommendations in the existing literature and provide a basis for my choice of price category.

### 2.1 Domestic food prices

Berazneva & Lee (2013) examines in "Explaining the African Food Riots of 2007–2008: An Empirical Analysis" how to explain the fact that fluctuations in domestic food price are more frequent and widespread than the occurrence of unrest. They therefore examined 50 African countries in the period of 2007-2008 and found that, controlling for the geographic location of food riots, higher rates of poverty, limited access to food, a coastal line, urbanization, oppressive regimes and higher level of civil liberties increases the likelihood of food riots in Africa. They state that the food riots also were used to air other grievances, such as dissatisfaction with corruption, economic policies, and government efficiency. An interesting point regarding urbanization is that Berazneva and Lee found that Niger's low level of urbanization is likely one of the factors that contributed to its avoiding riots in 2007, whereas the likelihood of riots would have increased by 53–56% if Niger had a large urban center.

Sneyd, Legwegoh and Frasers (2013) article "Food Riots: Media Perspectives on the Causes of Food Protest in Africa" operates with relative deprivation through group comparisons (Gurr, 1970) as theoretical mechanism, as they find that a population engages in

violence during food shocks because other groups in society, especially merchants, are gaining from rising food prices. They investigate the effect of domestic food prices on food riots in 14 African countries between 2007 and 2011. By comparing international and African media news sources, they find that the international media depicts the riots as acts caused by hunger, whether the protest revolve around international commodity speculators driving the costs up or whether there is an absolute food shortage, while the African media presents the food riots as being part of, amongst other things, economic and political grievances in the population.

Smith (2014) claims in "Feeding unrest: Disentangling the causal relationship between food price shocks and socio-political conflict in urban Africa" that while food prices naturally fluctuate over time without causing unrest, sharp increases or sudden shocks in food prices could overwhelm the consumers and increase the likelihood for them engaging in urban unrest. He focuses on domestic food prices in urban areas of Africa from 1990 to 2012 and takes account of varying domestic levels of food price volatility, as well as comparing changes in the price of food across countries with different food price indices. In addition, he uses instrumental variables such as international grain prices and rainfall scarcity as identification strategies, simultaneously as he controls for regime type, the share of urban population, share of youth in the population, GDP per capita, life expectancy and infant mortality. He utilizes monthly price increases outside the observed long-term volatility as the independent variable and unrest in each month as the dependent variable to further isolate the causal mechanism to consumer response to economic pressure, and further claims that it is a "flawed assumption" that changes in international commodity prices are directly reflected in domestic prices. Smith posits that elite capture of increased revenue could lead to unrest due to grievances over structural inequality and concludes that rising domestic food prices increases the risk of urban unrest and that the likelihood of unrest may be more determined by the level of repression than the extent of hardship.

Raleigh, Choi and Kniveton (2015) look at local commodity prices' effect on armed civil conflict in 113 African markets in the period from 1997 to 2010. They also consider the impact of climatic factors such as dryness and rainfall. Raleigh et al. find both a direct link between food price and conflict, where higher food prices increase conflict rates, and conflict raises food price. They also find an indirect effect through the impact of climate change. They argue in the context they are investigating that dynamics of food price-related instability are essentially local, and thus local markets and prices should be the focus.

Weinberg and Bakker (2015) states in "Let them eat cake: Food prices, domestic policy and social unrest" that the effect of food price fluctuations on individual consumers is unique due to the high proportion of household budgets being used on foodstuffs, the visibility of price increases and the non-substitutability of food. They investigate domestic food prices, by converting global prices into a domestic price proxy using a consumer tax equivalent (CTE) based on data from the World Bank, and their effect on social unrest in 71 countries between 1972 and 2007. They argue that international prices are only relevant if the product in question is imported. Moreover, not all countries consume the same types of food and several political factors may inhibit the transmission of world market prices to domestic markets.

Weinberg and Bakker posit food prices as the most satisfactory measure of individual well-being, as it provides a more accurate assessment of food scarcity than any other indicator. The domestic policy efforts of each state are evaluated by measuring whether national agricultural policies impose costs or benefits on consumers. Weinberg and Bakker further control for regime type, urban population, ethnic fractionalization, and economic growth, and argue that increased grievances over time due to relative deprivation relating to higher food prices give consumers incentives to act against their government. Governments that prevent food price increases due to external price shocks largely avoid food price-based unrest, whereas higher food price spikes increase the perception that large segments of the population share similar grievances and have a common interest in mobilizing against the government who is solely to blame for widespread economic hardship, a finding in accordance with Smith (2014). They conclude that the important effect of food price on domestic unrest is found in the change in price, rather than the level of price, as these changes or shocks are more likely to be picked up as signals and acted upon by consumers.

Abbs (2019) focuses in his article "The Hunger Games: Food Prices, Ethnic Cleavages and Nonviolent Unrest in Africa" on the outcomes and initial emergence of nonviolent action. He argues that nonviolent mobilization is made possible in ethnically polarized contexts when broader cross-cutting grievances such as food price spikes are present as they facilitate nonviolent action across ethnic lines. Abbs uses spatially disaggregated data on government targeted nonviolent action and analyses grid-cell years across 41 African countries (1990-2008, excluding country-years with civil war) and domestic food prices as they more closely reflect the price that people pay. Referring to Barrett (2013), 90% of all food consumed in sub-Saharan Africa is being produced domestically. Abbs finds strong evidence that food

price spikes increase the likelihood of nonviolent action in politically excluded and ethnically diverse locations, and that more price variation occurs across rural markets, while price trends in urban markets tend to move in the same direction.

Sánchez and Namhata perform an empirical analysis looking into what feeds protest participation in Sub-Saharan Africa in their 2019 article and find that high domestic food price variability increases the likelihood of protests. They include state and individual level controls in their study, such as the regimes tolerance to protest participation, degree of economic growth, the occurrence of armed conflict and population size. Specifically, they find that within countries with higher food price variability, young educated and employed males are the most likely to protest. Sánchez and Namhata also note that it is active participation in voluntary and community groups that increase the likelihood of protests, rather than feelings of relative deprivation due to group comparisons.

In “Food price increase and urban unrest: The role of societal organizations”, Rudolfsen (2020b) states that existing literature suggests a positive correlation between food prices and social unrest, while the theoretical focus on grievances appears to be insufficient for explaining the variations in outcome. The article argues that manifestation of unrest when food prices increase is moderated by the degree to which the state represses its civil and political society. Societal organizations provide existing mobilization structures that people can draw on to engage in collective action, in addition to translating individual-level grievances into a group phenomenon by politicizing the cost of food. Rudolfsen points to Hendrix and Haggard (2015) to explain how social unrest during periods of increasing food prices most often originate from mobilized urban dwellers as they are more likely to overcome collective action problems, simultaneously as they are more dependent on the market for food.

Rudolfsen finds that regimes which moderately repress societal organizations have the highest change in predicted probability of urban unrest given an increase in food prices, while the level of unrest is lower or negative in societies with no institutional constraints on societal organizations. Finally, she stresses that unrest within the context of increasing food prices can be a sign of the citizens being able to react, and thus unrest is not necessarily inherently problematic.

### 2.2 International food prices

In "Food Riots: Poverty, Power and Protest", Bush (2010) examines food riots in Africa and the Middle East during the 2007/2008 food price spike. He states that the protests were triggered by rising food prices, but they were also based on factors such as inequality and repression, resistance of globalization, the spread of capitalism, and political elites benefitting from the status quo. The rioters during the 2008 price spike had demands well beyond the price of food, as they knew why the food prices were increasing, and who benefited from the food price rise. While it was mostly among the urban poor that violent protests erupted, some of the food riots combined urban and rural, poor and middle class in demonstrations against high food prices, local corruption, repressive governments and poverty.

In their IMF Working Paper "Food Prices and Political Instability", Arezki and Brückner (2011) find that rising international food prices lead to a significant increase in political instability and social unrest in low-income countries, as well as lower democracy scores, while there is no significant effect of food price increases in high-income countries. They analyze the effect variations in international food prices have on democracy and intra-state conflict using panel data for over 120 countries in the 1970–2007 period.

Hendrix and Brinkman (2013) states in "Food Insecurity and Conflict Dynamics: Causal Linkages and Complex Feedbacks" that those hardest hit by increasing food prices tend to be the marginalized urban poor, who often simultaneously are not represented by or engaged in societal organizations or political participation. If a state is highly repressive it may create incentives to engage in unrest due to underlying political and economic issues but it also has the possibility to repress it and thereby hinder social upheaval when food prices rise. Through a review of the literature, focusing on the Sahel area, Hendrix and Brinkman conclude that urban unrest coincide with higher consumer prices for food and fuel and that it is usually not the most food-insecure that riot, but rather those with comparatively better access, partly because of political regime, few mechanisms for conflict management due to weak institutions, incentives for the government to shield consumers from higher international prices and lower costs to collective action. In many cases, governments are limited in how they can act, as was the case in Egypt in 2011 where subsidies accounting for 8% of the country's GDP in 2011 and became unaffordable.

In their 2014 study, "Effects of International Food Price Shocks on Political Institutions in Low-Income Countries: Evidence from an International Food Net-Export Price

Index", Arezki and Brückner find that increased revenue during food price spikes in poor, autocratic, net-exporting countries, captured by the elite by reducing the political rights of the people, lead to an increase in incidences of social unrest, such as riots, demonstrations, and civil conflict. Lack of redistribution leads high food prices to coincide with a reduction in per capita consumption and increased income inequality. Arezki and Brückner thereby link their theoretical approach to horizontal inequalities, e.g., relative deprivation through group comparisons.

Bellemare's 2015 article "Rising Food Prices, Food Price Volatility, and Social Unrest" uses monthly data on the international level to examine the impact of food prices on social unrest in the period between 1999 and 2011. He pairs it with the occurrence of natural disasters as an instrumental variable to identify the causal relationship flowing from food price levels to social unrest and finds that increasing food prices over time leads to increased social upheaval, while food price volatility is not associated with unrest. He even finds that volatility is associated with either a decrease in social unrest or might be unrelated. Food price volatility is at best negatively associated with and at worst unrelated to social unrest, contrasting the media narrative of the food riots of 2008 and of 2010–2011 where volatility was often blamed for unrest.

In "Global food prices, regime type, and urban unrest in the developing world", Hendrix and Haggard (2015) utilize the PRIO Urban Social Disturbance database to find that the effect of global food prices on urban unrest is conditional on the regime type. They control for urban bias in agricultural policies, polity scores, the degree of international trade openness and growth in national income (GDP). According to their examination of 55 cities in Africa and Asia during the time period of 1961 to 2010, where they argue that 92% of the world's food insecurity lies, democracies are more likely to experience urban unrest than autocracies, while anocracies are more likely to experience protests when food price variability is high, as compared to democracies and autocracies.

Hendrix and Haggard explain democracies being more prone to urban unrest as there are greater opportunity structures when regimes are more accepting of protests, and that they are less likely to favor urban consumers compared to autocracies. They also contend that mobilized urban citizens, as they are more likely to overcome collective action problems and are more dependent on the market for food, are those who most often partake in social unrest during periods of increasing food prices. Moreover, they claim that "the greater the extent of government intervention in favor of urban consumers, the less likely grievances associated

with high prices will translate into urban unrest." They find that more pro-rural agricultural policies robustly covariates with urban unrest.

Natalini, Bravo and Jones (2019) initiates their article "Global food security and food riots – an agent-based modelling approach" by stating that the most recent literature on food riots have found that food insecurity and high international food prices are neither necessary nor sufficient conditions for food-related unrest to happen. Through the gathering of newspaper articles, Natalini et al. discovered that the causes of the violent protests they examined often were cited as either the effective or threatened removal of food subsidies. Their methodological approach were simple keyword searches in open access newspapers to find articles in English that met their definition of food riots, in addition to data from the database on food riots developed by the Food Price Crisis Observatory if the World Bank (WB, 2015).

They further claim that it is credible to believe that once the price of food crosses a certain threshold, poor and politically fragile countries decide to cut subsidies, causing grievances from the populations which again can turn into food riots. They set a threshold at 140 for the deflated, annual version of the FAO Food Price Index for increased probability of food riots. Their article attempts to model the complexity of the global food system, focusing on global food availability, international trade of cereals, the interaction with international price of food and the rise of social conflict by developing an Agent-Based Model (ABM) called the Dawe Global Security Model (DGSM). The agents in their model are the 213 countries of the world, and the model simulates how national food production shocks can result in a spike in the international price of food, which in turn can cause food riots far from where the crisis originated.

In "Food insecurity and political instability during the Arab Spring" Soffiantini (2020) illustrates the causal relationship between food insecurity and political instability through a comparative analysis of three Arab Spring cases: Egypt, Syria and Morocco. The research assumes that the rise in food prices in 2011 increased the pre-existing social unrest, triggering protests in the three countries with differing outcomes. Soffiantini considers the food price rise in 2008 as a basis of comparison and coins food subsidies as a "social bargain" to mitigate the effects of food price spikes both used by all three regimes in both 2008 and 2011. The differing outcomes could be traced back to the food security policies adopted by the corresponding governments.

According to the model constructed by Soffiantini, extreme weather events between 2010 and 2011 (independent variable) increased food insecurity in 2011 (causal mechanism), leading to political instability (dependent variable). She concludes that the governments in Egypt and Syria failed to respond to the challenges posed by extreme weather events to the food security, while the Moroccan government managed to safeguard food security and avert a revolution. Soffiantini stresses that food subsidies as managed by the Moroccan government are important in the short term to safeguard food security, while progressively reducing food subsidies and investing in sustainable agriculture constitutes a more long-term food security strategy.

Al-Shammari and Willoughby (2019) examine 19 countries in the MENA region in the period between 1991 to 2014 in their article "Determinants of political instability across Arab Spring countries" through econometric observations. They find that political instability in the MENA region is very sensitive to exogenous food price shocks, simultaneously as youth unemployment and regime durability are strong predictors of unrest. Concretely, they find that a 1 per cent increase in food prices across the MENA region is associated with a 4.6 per cent increase in political instability, whereas a 1 per cent increase in school enrolment leads to a 5.6 per cent decrease in political instability, and a one unit increase in the regime durability index leads to a 74 per cent increase in political instability.

In "Riots and resources: How food access affects collective violence" Heslin (2020) investigates how food access affect the mobilization of collective violence, as food price increases have not resulted in equally distributed riots between and within countries, implying that including additional factors can strengthen our understanding of the spatial and temporal variation in conflict occurrence. Through a comparative study of two sets of rioting events, Heslin attempts to identify potential pathways to food-related unrest. She uses detailed, first-hand accounts of both violent and non-violent rioting in rural West Bengal, India in 2007 and urban Dhaka, Bangladesh in 2008. By drawing on social movement literature on resource mobilization, she argues that the process of mobilizing can be understood as 'an increase of the resources available to a political actor for collective making of claims' (Tilly & Tarrow, 2015: 120, quoted in Heslin, 2020: 4).

Heslin (2020) finds that riots were largely motivated by existing, non-food-related grievances held by the communities, respectively wage-withholding in urban Bangladesh and corruption in rural India. In West Bengal, she found that food prices were able to mobilize action by changing the meaning and seriousness of an existing offense (corruption), while the

riots in Dhaka occurred due to the high food prices increasing the capacity for laborers to mobilize against factory owners, whereas in times of normal food prices the risk of demanding higher wages may be deemed too high to participate. She concludes that the heightened organizational capacities in urban areas are more important to explain the differences in urban and rural rioting, rather than the level of market dependence.

In "Hungry, or Hungry for Change? Food Riots and Political Conflict" Edward Newman (2020) examines incidents of social unrest between 2005 and 2015, aiming to identify whether these incidents should be interpreted as due to hunger or whether the grievances should be considered as part of broader political contestation. He points to among other data from the FAO Initiative on Soaring Food Prices (GIEWS) to support his choice of international food prices instead of domestic, claiming that there is strong support for local and international prices being integrated to a considerable degree, and that even when food markets reflect local production and consumption to a significant degree, an inflationary "knock-on" effect from rising international food prices has been detected. Newman considers the "relevance of state capacity, human development, food security and nutrition, socioeconomic inequality, public social protection, household spending behavior, demographic factors, urbanization, and government type in the incidence of food riots and protests" (2020, p. 301). He finds that food-related unrest events tend to occur in partial democracies with social inequalities and state fragility, and that they are more likely in urban settings than in the poorest societies. Newman therefore suggests that food riots need to be understood in a context of broader grievances, rather than anger toward absolute poverty and hunger.

### 2.3 Summary

High food prices can be seen as a trigger but is not sufficient on its own. I will therefore try to identify in the MENA cases which other conditions were present between the starting point of high food prices and the result of urban unrest or lack of it. All Arab countries are net food importers, and the vast majority of people are net consumers of food, which made the countries and people in MENA highly vulnerable to the global food price spikes in 2008 and 2011. Food insecurity has increased in Egypt, Libya, and Yemen since 2008 (Ianchovichina et al., 2012), and if my assumptions, as Soffiantini's (2020), are correct, the countries who avoided significant unrest in 2008 experienced it in 2011 due to pressure over time. Because of the high transmittance of international food prices to the Arab

countries, I will focus on global food prices in my comparative case analysis, in accordance with the arguments of Newman (2020) and Al-Shammari and Willoughby (2019).

## 3.0 Theoretical framework

As the literature review already has pointed towards, there are two important strands of theoretical arguments within the food price-related unrest literature, namely relative deprivation and opportunity. In this chapter I present the theoretical framework linking high food prices to urban unrest. I will explore how grievances and opportunity structures lay the foundation for food price-related unrest, starting with a definition of urban unrest.

### 3.1 Definition of urban unrest

According to Bahgat et al. (2018) the rate of urban social disorder events has increased steadily over recent decades, contrary to most other forms of violent conflict. Furthermore, urban disorder is primarily associated with ongoing civil conflict, economic shocks and a lack of consistent political institutions (Buhaug & Urdal, 2013). Demarest (2015) remarks that the differentiation process between violent and non-violent protesting can be difficult, and that peaceful demonstrations quickly can escalate into rioting, due to for example repression. Therefore, I choose to not solely focus on either violent or non-violent unrest but will include any type of urban unrest as coded in the Urban Social Disorder dataset (Bahgat et al. 2017). Hendrix and Haggard (2015) who analyzed an earlier version of the same dataset (not including the MENA countries), used the terms ‘protest and rioting’ and ‘urban unrest’ interchangeably, as will I. They also stated that food prices have particular influence on the welfare of poor households that are net purchasers of food, simultaneously as the capacity of urban residents to engage in collective action is clearly much more substantial than rural dwellers (Hendrix & Haggard, 2015).

In the USD dataset Bahgat et al. utilize the term ‘urban social disorder’, meant to encompass social actions directed against a political target and/or challenging political authority. Actors may vary considerably in terms of number of participants, use of violence or not, type of political target and organizational level. The distinction between violent and non-violent event goes between ‘organized violent riot’ and ‘spontaneous violent riot’. The latter evolves from an originally non-violent protest, whereas the former plans the use of violence (2017).

### 3.2 Grievances and opportunities

Food prices is a useful measurement for grievances due to the unique nature of food as a non-substitutable good, and as the most basic of all necessities (Berazneva & Lee, 2013; Hendrix & Haggard, 2015). Abbs (2019) argue that this unique and symbolic nature provides both common intergroup grievances which eases horizontal mobilization and vertical mobilization through short-term incentives to protest against the government. Hendrix & Haggard (2015) argue that there is a growing recognition of some similarities in the underlying causal mechanisms that might generate contentious politics (McAdam, Tarrow & Tilly, 2001).

Rudolfsen (2020b) divides the different approaches to the theoretical mechanisms between food insecurity and unrest in individual, group and state level explanations. I will take a closer look at those mechanisms relating increasing food prices to unrest. On the individual level, there is a suggestion that absolute deprivation may lead to unrest when people cannot access food and become so desperate that they protest to acquire it. I will however not focus on this aspect in my thesis, as several scholars have pointed out that if this mechanism were to be correct, we would see a very much higher number of protests as there are more incidents of hungry people in this world than there are number of protests (Berazneva & Lee, 2013; Rudolfsen, 2020a; Sanchez & Namhata, 2019; Demarest, 2015; Newman, 2020). On the other side of the individual level, increasing food prices can lead to a temporal deprivation due to a larger share of household budget being spent on food, eventually leading to unrest. On the group level, the increasing food prices can lead to unrest through three different pathways. Either through elite capture of increased revenue, or through increasing income inequality, or, lastly, through merchant hoarding. On the state level, it is government inaction that can lead to unrest when food prices increase, either through a lack of state intervention or through a lack of state repression (Rudolfsen, 2020b). According to Sanchez and Namhata (2019), the literature on protest participation identifies three main drivers: grievances, resources, and opportunity. These theories mostly derive from the works of Gurr (1970) and Tilly (1978), which I will explore further in the following paragraphs.

In his book *Why Men Rebel* (1970) Gurr explored why people engage in protest and political violence and how regimes respond. He presented his hypothesis of relative deprivation, a state occurring when reality diverge from what you perceive you are entitled to or from what you expect. The feeling of being deprived can stem from individual intertemporal comparisons, when your prospects for life now are worse than they were before,

or from comparisons between individuals or groups (Hendrix & Haggard, 2015). Similarly, food price increases can be symptomatic of the declining social welfare and status of certain sections of society (Newman, 2020). The theoretical foundation for arguing that higher food prices relate to unrest points, as Rudolfsen (2020b) remarks, to grievances linked to these relative deprivations.

Tilly's resource mobilization theory (1978) provides a political opportunity structure to determine whether grievances result in popular mobilization (Hendrix & Haggard, 2015). Sustaining a rebellion depends critically on the support by the local population in terms of e.g., sheltering and funding, and increasing food prices is a type of symbolic issue that can facilitate horizontal mobilization across intra-ethnic and interethnic divides (Hendrix & Haggard, 2015; Tilly, 1978). Hendrix & Salehyan (2012) states that for most aggrieved actors, rebellion is not a viable option most of the time due to the aforementioned costs.

As an example of both increased grievances and opportunities, democracies may witness more protest not only as a result of the viability of protests, but also because of policies they pursue with respect to accommodating the rural sector, where most of the voters reside. For autocratic leaders, the urban dwellers are more important to appease, as they have the possibility to inflict more damage "closer to home" than the rural population (Hendrix & Haggard, 2015).

### 3.3 Other perspectives

But is it really about the food prices, or are 'food riots' an expression of broader political contention? Newman (2020) argues that sharp rises in food prices, both domestic and international, can have a mobilizing and exacerbating effect in societies where preexisting broader social and political grievances are present. Heslins' 2020 study argues that many 'food riots' were not directly motivated by food access, but rather aiding the mobilization process around a range of grievances, some unrelated to food access.

Furthermore, Abbs (2019) argue that there is a distinct difference between violent and non-violent mobilization and that civil war mechanisms are poorly suited to explain mass nonviolent mobilization (Chenoweth & Lewis, 2013). He refers to Nepstad (2015), who points to three broad determinants of nonviolent action: vertical and horizontal mobilization on widely held grievances against the government, intergroup coalitions, and space to organize. Armed opposition typically only needs to recruit a few hundred fighters, while nonviolent resistance needs several thousand, where a cross-cutting issue as food price spikes come in useful to facilitate the mobilization (Abbs, 2019). The strategic logic of mass

nonviolent action is to generate enough leverage, through mobilizing greater numbers with the purpose of disrupting the state's ability to rule or impose particular policies (Sharp, 2005; Chenoweth & Stephan, 2011).

### 3.4 Summary and presentation of hypotheses

Rudolfsen (2020b) points out that despite the many different theories for why instability occurs, we lack more precise measurement and analysis that capture these different suggested mechanisms to tease out under what conditions we would expect that food insecurity leads to unrest. She also argues that to better test the argument of how food insecurity is related to unrest, it would be a step forward to explicitly model assumed conditional effects, such as regime type (Hendrix & Haggard, 2015), to specify in which contexts we would expect unrest to occur. Activity in civil and political networks and organizational level is also important (Sanchez & Namhata, 2019; Rudolfsen, 2020b), and repression of societal organizations decreases the likelihood of unrest when food prices rise (Rudolfsen, 2020b). The occurrence of unrest is thus related to both opportunities for collective action and the perception of grievances.

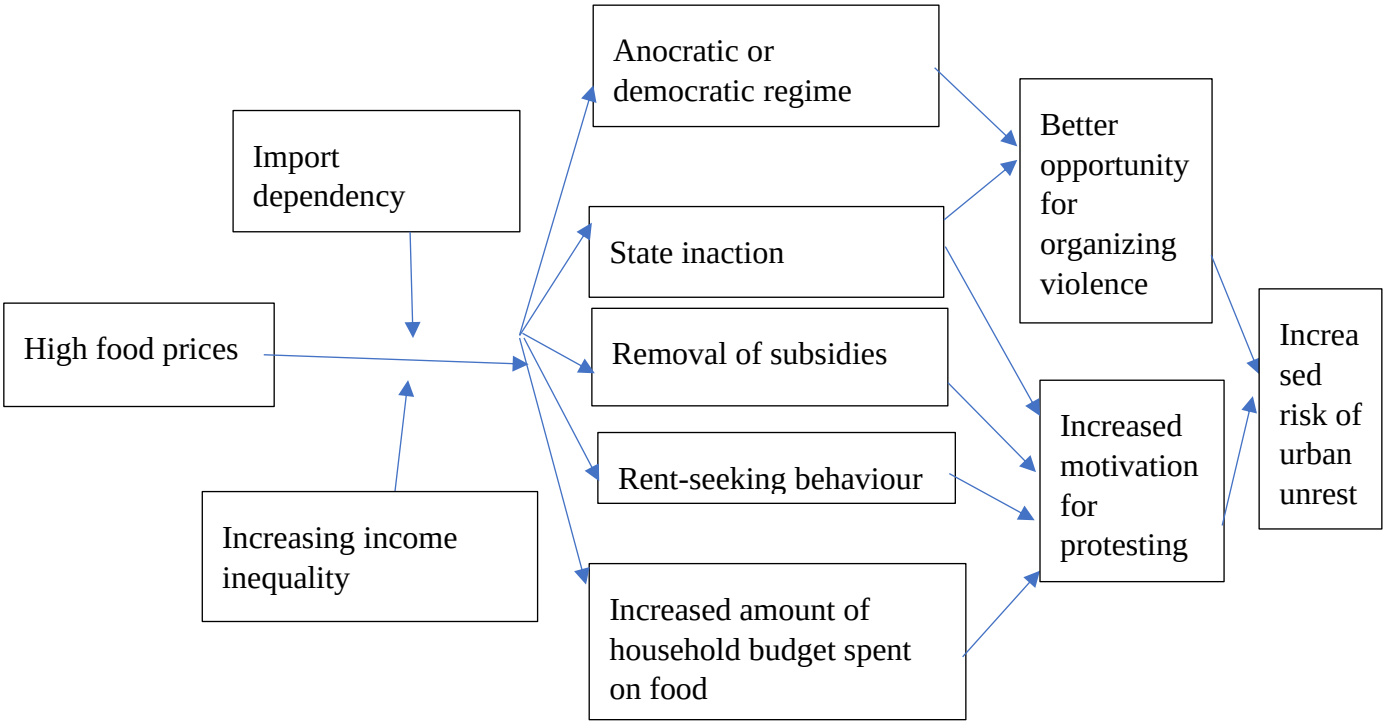
In summary, relative deprivation and opportunity must be seen in combination with several conditions to adequately give a theoretical explanation for why increasing food prices are linked to unrest. These theoretical assumptions will inform my selection of cases and the context of specific conditional effects where we would expect unrest to occur. The preceding discussion informs the hypotheses I want to test in this thesis:

H1: Given high food prices, import dependency and increasing income inequality, the presence of an anocratic or democratic regime will lead to urban unrest

H2:

H3:

Different potential pathways to high food price-related urban unrest




**4.0 Methodology and research design**

Rihoux & Ragin (2009): The logical foundations for the QCA method were laid by Hume (1758) and, in particular, J. S. Mill's (1967 [1843]) "canons." Among these, the "method of agreement" and the "method of difference" are the most important. The first refers to eliminating all similarities but one: "If two or more instances of the phenomenon under investigation have only one circumstance in common, the circumstance in which alone all the instances agree is the cause (or effect) of the given phenomenon" (p. 390). By contrast, the Method of Difference establishes the absence of a common cause or effect, even if all other circumstances are identical.

p.3: Similarly, they may not *prove* any causal relationship, because it is most often impossible (in social science at least) to test a clear and complete (preconceived) model of such links and to sufficiently "control" for other factors.[2] They constitute, however, a valuable step toward eliminating irrelevant factors and approximating causal conditions in the "real" world. In this sense they correspond to Popper's (1959) famous principle of "falsification." The various techniques of QCA precisely identify and narrow down such "conditions of occurrence." As

will be demonstrated and exemplified in the chapters that follow, these techniques are important tools for reducing the enormous complexity that we routinely confront in the social sciences.

One key question we shall address is the following: Which conditions (or combinations thereof) are "necessary" or "sufficient" (or possibly both necessary *and* sufficient) to produce the outcome? In a non-formal way (for more on this, see p. 10, Box 1.3; see also Caramani, 2008), let us say at this stage that:

- A condition is *necessary* for an outcome if it is always present when the outcome occurs. In other words, the outcome cannot occur in the absence of the condition.
- A condition is *sufficient* for an outcome if the outcome always occurs when the condition is present. However, the outcome could also result from other conditions.

The first step in a Boolean analysis is to identify the relevant causal conditions.

1. An ability to examine a large number of cases
2. An ability to address complex causal conjunctures
3. An ability to produce parsimonous explanations (if desired)
4. An ability to investigate cases both as wholes and as parts
5. An ability to evaluate competing explanations

Crisp set QCA is a binary method, and therefore fits well with this research question where the outcome is also binary: unrest or the absence of unrest. csQCA perhaps captures less details than the fuzzy-set approach, but it is in this case "differences in nature or kind rather than differences in degree" (Ragin 2002 in De Meur & Rihoux & Yamasaki 2009:149) that is interesting.

Cases: Cities in the MENA region covered by USD v2: Abu Dhabi, Algiers, Amman, Ankara, Baghdad, Beirut, Cairo, Casablanca, Damascus, Istanbul, Kuwait City, Rabat, Riyadh, Sanaa, Tripoli and Tunis. Years: 2008 and 2011. Degree of unrest in the cities: citymonths with unrest in 2008=35, citymonths with unrest in 2011=86. FAO FPI: shows spikes in 2008 and 2011 compared to the respective years before and after.

| | |
|---|---|
| 2007 | **94.2** |
| 2008 | **117.5** |
| 2009 | **91.7** |
| 2010 | **106.7** |
| 2011 | **131.9** |
| 2012 | **122.8** |
| 2013 | **120.1** |
| 2014 | **115.0** |
| 2015 | **93.1** |

Conditions based on literature review: Regime type, GDP, Elite capture/ Corruption (Rent-seeking), State repression of civil and political society, Removal/threat of removal of subsidies, Import dependency. I will use case knowledge for the reduction process, fewer conditions are necessary to be able to say something useful when the number of cases is intermediate.

Illustration of what a truth table might look like:

| Country | Import dependent | Partial democracy /anocracy | Low or middle income | Rent-seeking | State repression | Subsidies removal | Share of househ. income spent on food | Unrest |
|---|---|---|---|---|---|---|---|---|
| Egypt | 1 | 1 | 1 | 1 | ? | 1 | ? | 1 |
| Morocco | 1 | 0 | 1 | 1 | 1 | ? | ? | 0 |
| Syria | 1 | 0 | 1 | 1 | 1 | ? | ? | 1 |

I will use the software Tosmana or fsQCA in Stata to produce the truth table.

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