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**POPULAR GRIEVANCES AND PERCEPTIONS  
OF SOCIOECONOMIC CONDITIONS  
IN THE ARAB REGION PRIOR TO THE UPRISINGS**

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**Working Paper No. 1006**

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**Send correspondence to:**  
Nisreen Salti  
American University of Beirut  
ns17@aub.edu.lb

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## Abstract

In the wake of the Arab uprisings, analysts have advanced a range of hypotheses about the grievances that formed the backdrop to mass mobilization. To date, little empirical research examines the validity of the large array of proposed sources of disaffection, particularly at the micro-level. We use public opinion data from 2009-2010 from Arab countries that experienced mass mobilization to assess attitudes towards general satisfaction, sectors such as health, education, and labor markets, and perceptions of fairness in the economy and social life, and disaggregate the results by socioeconomic class and age cohort in order to probe accounts of middle-class grievances, lower-class deprivation, and intergenerational disjunctures. We find mixed support for the hypotheses derived from the scholarship on the lead-up to the uprisings. We find a consistent income gradient in satisfaction, particularly general satisfaction and satisfaction with the labor market. We find similar gradients in perceptions of health services and of dignity in virtually all countries. Perceptions of corruption show a gradient in some countries and a reverse gradient in others. Intergenerational differences in class satisfaction show no consistent patterns across countries and sectors, but youth disaffection within a given class is more common than its converse. The cross-national variation in patterns of discontent across classes and generations suggests that diffusion processes rather than a common set of grievances may have been at the root of the Arab uprisings.

**JEL Classifications:** P1, P2, I1

**Keywords:** Arab Uprisings, Middle-Class, Discontent

## ملخص

في أعقاب الانتفاضات العربية، قدم المحللون مجموعة من الفرضيات حول المظالم التي شكلت خلفية التعبئة الجماهيرية. وحتى الآن، تتناول القليل من البحوث التجريبية صحة المصادر المقترحة للسخط الجماهيري، ولا سيما على المستوى الجزئي. نقوم باستخدام بيانات الرأي العام من 2009-2010 من البلدان العربية والتي شهدت التعبئة الجماهيرية لتقييم المواقف تجاه الارتياح العام والقطاعات مثل الصحة والتعليم وأسواق العمل، وتصورات العدالة في الاقتصاد والحياة الاجتماعية، وتبويب النتائج وفقا للطبقة الاجتماعية والاقتصادية والفئة العمرية للبحث في حسابات المظالم في الطبقة المتوسطة، والحرمان في الطبقات الدنيا. نجد تدرج ثابت في الدخل ورضا العامة بشكل خاص، ورضا مع سوق العمل. نجد تدرجات مماثلة في الخدمات الصحية والكرامة في جميع البلدان تقريبا. تظهر تصورات الفساد التدرج في بعض البلدان والتدرج العكسي في بلدان أخرى. الاختلافات بين الأجيال في رضا الطبقة تظهر أنماط ثابتة عبر البلدان والقطاعات، ولكن سخط الشباب ضمن فئة معينة هي أكثر شيوعا. الاختلاف في أنماط الاستياء عبر الطبقات والأجيال تشير إلى أن عمليات الانتشار ربما كان في جذور الانتفاضات العربية بدلا من وجود مجموعة مشتركة من المظالم.

## 1. Introduction

In the wake of the Arab uprisings, analysts have advanced a range of hypotheses about the grievances that formed the backdrop to mass mobilization in the region. Scholarly research and media reports have proposed a laundry list of factors behind public discontent, including economic grievances, a sense of alienation, corruption, the youth bulge, and affronts to dignity, among other factors. Although grievances cannot explain why people take to the streets (McAdam 1982), particularly at great risk to themselves and their families, they are a necessary cause for mass mobilization and other public expressions of dissatisfaction. Furthermore, policy-making and strategies for reform should be based on empirically grounded interpretations of the sources of popular disaffection. Thus, it is vital to develop a fine-grained understanding of the nature of discontent – that is, what aggrieves people and which people or groups of people are most aggrieved.

To date, little empirical research examines the validity of the large array of proposed sources of disaffection in the Middle East, particularly at the micro-level. In this paper, we use public opinion data from multiple Arab countries in an effort to assess distinct claims about the substance of discontent among distinct segments of populations.

Empirically, our analyses focus on countries that experienced mass mobilization, albeit to varying degrees, during the Arab Uprisings. These countries also span the diverse types of political economies in the Middle East (Cammett et al. 2015). These include Resource Poor Labor Abundant (RPLA) countries where the uprisings were first initiated and where incumbent rulers were toppled, notably Tunisia and Egypt; the RPLA monarchies, Jordan and Morocco, where mass protests occurred but did not reach the same scale and generally stopped short of calling for the overthrow of reigning monarchs; a Resource Rich Labor Abundant economy, Syria, where an opposition movement emerged and ultimately became dominated by armed groups; and two Resource Rich Labor Poor countries, Bahrain, where the most large-scale protests among the wealthy Gulf countries erupted and were largely repressed by the regime with external support, and Libya, where popular mobilization and a NATO-led bombing campaign toppled the ruler but has not resulted in a stable, unified polity.<sup>1</sup> We assess attitudes towards general satisfaction, specific sectors such as health, education, and labor markets, and perceptions of fairness in the economy and social life, and disaggregate the results by socioeconomic class and age cohort in order to assess some of the most common accounts of popular grievances leading up to the Arab uprisings.

In general, we find that there is no standard pattern of grievances across the region: the nature of citizen dissatisfaction varies across countries, whether in terms of class or generational patterns. Thus, we find little support for the oft-articulated claims that the youth were particularly discontent across the Arab world prior to the outbreak of the uprisings. Paradoxically, in many of the countries we look at, young people actually expressed more general satisfaction than their elders. Second, with respect to socioeconomic status, patterns of disaffection across several outcomes measured in the paper follow a clear class gradient, with the lower class least satisfied and the upper class most satisfied. This finding does not lend credence to the common claim that the middle class was the backbone of the protests although, given that our data cover a short time span, the results do not necessarily contradict the argument that the middle class had become increasingly aggrieved in the decade prior to the outbreak of the uprisings (Diwan 2013). When we compare class attitudes

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<sup>1</sup> In their typology, Cammett, et al. (2015) classify Libya as a Resource Rich Labor Poor country on the basis of per capita oil endowments alone, however, they emphasize that its patterns of distributional politics resemble that of higher population oil exporters for various historical reasons.

across cohorts, we find that the youth in the middle class do show more disaffection than the older middle class across a number of sectors and countries.

The paper is structured as follows. First, we review the nascent literature on the roots of grievances that may have contributed to the Arab Uprisings. Next, we build on this review, and on the variables available to us from data from the public opinion polls we have at hand, to identify a range of hypotheses regarding the nature of grievances across distinct social groups that can be tested using the data we have. Third, we describe our data and key variables and present some statistical analyses to evaluate these hypotheses. Finally, we summarize and critically assess our findings and identify key areas for further research on public opinion in the Middle East.

## **2. The Micro-Foundations of Discontent in the Middle East**

Public opinion polls indicate that socioeconomic grievances were the main sources of discontent for Arab publics in Tunisia, Egypt, and elsewhere in the decade prior to the uprisings. As Cammett and Diwan (2013, 407-408) note, a survey conducted by Zogby International in 2005 found that expanding employment opportunities, improving health care and educational systems and ending corruption were the most important priorities of citizens across the region. Democracy and civic and political rights were also cited, but ranked lower than socioeconomic concerns (Zogby International 2005). Similarly, the 2010 Arab Youth Survey finds that the greatest perceived challenge and concern of Arab youth was the cost of living, followed by unemployment and then human rights (ASDA'A/Burson-Marsteller 2010). To date, however, little scholarship provides systematic empirical support for the hypothesized linkages between socioeconomic grievances and the Arab uprisings.

Popular discontent does not automatically translate into mass mobilization but it is a *sine qua non* for mass uprisings.<sup>2</sup> Furthermore, citizen evaluations of government performance in economic and social policy, among other spheres of public action, are a key determinant of trust in government (Kumlin 2004, Levi and Stoker 2000, Mishler and Rose 2001). Thus, it is imperative to understand which social groups harbor grievances as well as the sources of their discontent. In this vein, a number of analysts have explicitly linked the uprisings to grievances (Cammett and Diwan 2013, Campante and Chor 2012, Diwan 2013, Kaboub 2013, Galal and Selim 2013, Gelvin 2012, Khashan 2012, Malik and Awadallah 2013, *inter alia*). But what is the precise nature of popular discontent and which elements of society are most aggrieved in Middle Eastern countries? Scholarly and media accounts of the Arab uprisings propose a variety of answers to these questions. Prominent explanations, which we review briefly in this section, include the breakdown of social contracts with government failure to provide economic security and stagnant prospects for social mobility, rampant corruption, a revolt by the poor masses, youth frustration with blocked social mobility, middle-class disaffection, and affronts to dignity. These approaches point to different sources of discontent, but are not necessarily mutually exclusive.

### **2.1 Government failure and the breakdown of social contracts**

A widely accepted narrative emphasizes the unraveling of state commitments to populations beginning in the 1980s with the adoption of structural reform programs, declining public investment in social sectors, and cuts in government employment. Since the 1990s, a spate of scholarship has traced the rise and decline of the “social contract” in the Middle East, particularly in the RPLA countries of the region (Richards and Waterbury 1996, 1990, 2008, Youssef 2004). After independence, post-colonial governments across the region invested relatively heavily in

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<sup>2</sup> Our paper purposively does not aim to explain the decision to join protests, which undoubtedly entails more proximate factors than long-term grievances and is linked to emotional responses (Pearlman 2013, Wood 2006).

health, education, and other social sectors, a pattern that some date back to the Ottoman period (Malik and Awadallah 2013). Government investment fueled major gains in social indicators in the 1960s and 1970s, offering relatively comprehensive benefits for formal sector workers and especially for civil servants and members of the armed forces. Statist social and economic policies were implemented across the region, both in oil-rich and oil-poor countries and in the ostensibly “populist, redistributive” republics as well as the “residualist” monarchies (Richards and Waterbury 2008, Youssef 2004). Across the region, government employment was a key component of welfare regimes and, in some countries, was constitutionally guaranteed.

From diverse analytical perspectives, recent accounts link the failure of economic development in the Arab world, the corresponding decline of social investment and dwindling resources for patronage to the popular discontent fueling the Arab uprisings (see Cammett and Diwan 2013, Dahi 2011, Gelvin 2012, Hanieh 2013, Malik and Awadallah 2013, inter alia). A corollary to this macro-level argument is the claim that negative evaluations of specific social sectors are a driver of dissatisfaction in the Middle East. Numerous accounts point to inadequate educational systems, unemployment, underemployment, and the poor quality of jobs as the primary grievances in Middle Eastern populations (Amin et al. 2012, Campante and Chor 2012, Galal and Selim 2013, ILO 2012).

This genre of argument undoubtedly yields a valid picture of persistent macroeconomic problems facing much of the Middle East, but it provides an overly generalized account of discontent in the region. As a result, it tends not to identify specific actors or groups whose fortunes have changed over time and that are most likely to be discontent about their economic and social positions or the directions that their governments have adopted in pursuing national development. Most importantly, broad analyses of popular grievances are rarely linked to public opinion data tapping into attitudes towards economic and social regimes, offering little empirical support for the general depiction of dissatisfaction. Such portrayals of the breakdown of the social contract therefore provide a backdrop to mass discontent, but offer little insight into how people actually perceive their prospects and living conditions in the distinct political economies of the region. In what follows, we review arguments from the literature that identify more specifically the nature of grievances and the segments of society that are likelier to experience them. These accounts may fall under the overarching theme of the breakdown of social contract, but they lend themselves more easily to hypotheses that can be tested with the data that we have at hand.

## ***2.2 Corruption***

By now, it is well known that the turn towards more market-based systems of economic governance beginning in the late 1970s and 1980s was marked by rampant cronyism in which connections to ruling families, whether in republics or monarchies, were vital for access to credit, markets, and investment opportunities (Cammett 2007, Chekir and Diwan 2012, Gobe 1999, Haddad 2012, Heydemann 2004, Hibou 2006, Kienle 2001, Schiffbauer et al. 2014, Schlumberger 2008, World Bank 2009). In the context of unraveling social contracts, a new set of well-connected elites emerged in virtually all of the countries in the Middle East, benefiting disproportionately from access to economic opportunities while failing to spur national prosperity through private-sector-led development (Chekir and Diwan 2012, Henry and Springborg 2010). The rise of crony capitalism was especially egregious because it marked a shift in the underlying “political settlement” (Khan 2010) of many Middle Eastern countries (Cammett et al. 2015), creating focal points for popular grievances against state officials and well-connected private sector elites.

Resentment about growing corruption has been cited as a motivation for mass discontent expressed during the Arab uprisings. For example, Gelvin (2012, 40) notes, “[D]uring the uprisings,

protestors vented their rage on corruption at the top.” Similarly, Lynch (2012, 2) observes, “As the gap between rich and poor grew, so did corruption and escalating resentment of an out-of-touch and arrogant ruling class.” The combination of perceived corruption and the mounting reality of inequality of opportunity, which has been well documented (Salehi-Isfahani, Belhaj, and Assaad 2011), were at the core of the uprisings (Cammatt and Diwan 2013). These claims suggest that perceptions of corruption are the key drivers of citizen evaluations of their social and economic environments.

As we discuss below, not all segments of society are likely to be equally aggrieved by mounting corruption. Rather, the increasingly marginalized and alienated members of the middle class, whose hopes for advancement became increasingly out of reach while political elites prospered, should be especially offended by perceived corruption because they had benefited most extensively prior to the explosion of crony capitalism across the region. For educated professionals and civil servants in particular, the rise of cronyism marked a sharp break from the initial decades after independence in Nasser’s Egypt, Bourguiba’s Tunisia, and elsewhere in the region.

### ***2.3 Food prices and the revolt of the poor***

Returning to more explicitly material concerns, some analyses focus on the impact of increasingly difficult living conditions for the masses as a source of discontent that spiked right before the uprisings erupted. In particular, some analysts point to rising food prices, increasing food insecurity, and protracted drought conditions in some countries, such as Syria, as grievances underlying the Arab uprisings (Breisinger, Ecker, and Al-Riffai 2011, Ciezadlo 2011, Werrell and Femia 2013, Goldstone 2011, Harrigan 2012, Johnstone and Mazo 2011, Nasser, Mehchy, and Abu Ismail 2013). This account implies that the grievances underlying the uprisings were widely shared among the poor, who are hurt most directly by rising food prices and more broadly by the form of capitalist development that was unfolding in the region (Hanieh 2013).

Analyses that highlight the role of labor unrest as a prelude to the uprisings also point to non-elite bearers of grievances. Breaking with the peak-level leadership of official unions, workers and splinter or non-officially recognized unions played a key role in the Arab uprisings, especially but not exclusively in Tunisia and Egypt (Bishara 2014, Langohr 2014, 181). Indeed, labor had a track record of opposing poor working conditions and discriminatory access to job opportunities long before the outbreak of mass protests in late 2010 and early 2011 (Beinin and Vairel 2013). Such accounts imply that blue-collar workers are likely to express especially strong grievances vis-à-vis social sectors in their countries.

### ***2.4 Youth discontent***

The apparent predominance of young people in the Arab uprisings compelled some to refer to the wave of protests as youth uprisings or as a “youth quake” (Al-Momani 2011, Ahmari and Weddady 2012). The high proportion of youth participating in demonstrations may be expected as young people tend to be the most common protagonists in street politics everywhere, given their stage in the life cycle, and are the most likely to mobilize, engage in protests and even violent behavior (Urdal 2006). At the same time, according to some analysts, socioeconomic trends in many Arab countries gave plenty of reason for young people to rebel. Across the region, young people face similar constraints on their life prospects, aspirations, and living conditions. Middle Eastern countries boast large shares of young people who are more educated and plugged into social media than ever but lack the economic opportunities and possibilities for social mobility that older generations enjoyed (Dhillon and Yousef 2009). Although the youth bulge peaked in Middle Eastern countries by the 1990s, the mismatch between the available jobs and the skills of educated



youth is a persistent source of frustration for this demographic group (ILO 2012, Tzannatos 2013). They may therefore express more intense grievances than members of other age cohorts.

As some youth activists themselves argue, however, the characterization of the uprisings as a youth phenomenon masks the broad array of participants, which cut across class and age lines (Shehata 2012, 106). In this vein, Hoffman and Jamal (2012) find mixed evidence for the claim that the Arab uprisings were actually youth rebellions while Campante and Chor (2012, 25-39) show that the not-so-young were most disaffected in Arab societies.

### ***2.5 The middle class***

Finally, a prominent family of explanations holds that the middle class was the critical component of the anti-authoritarian coalition that emerged by the end of the 2000s in some Arab countries. This class, which includes a heterogeneous mix of civil servants and professionals, was the chief beneficiary and even the product of post-independence welfare regimes. In this storyline, economic crisis and the decline of state spending beginning in the 1980s reduced middle class opportunities for social advancement, fueling pronounced grievances in this class stratum. The breakdown of the social contract alongside the mounting resentment of crony capitalism and perceived inequality fueled middle class discontent (Ayeb 2011, Cammett and Diwan 2013, Diwan 2013, Galal and Selim 2013, Gelvin 2012, Kaboub 2013). Kaboub's (2013, 14-15) account of the Tunisian revolution nicely summarizes the centrality of the middle classes in the breakdown of support for or tolerance of authoritarian rule:

[T]he government broke its economic support ties to the middle class, which grew increasingly dissatisfied with its material status but had no political recourse to express its grievances; instead the Ben Ali regime increased its oppression, and the middle class began to see its interests drift away from that of the elite, and align more with the poor, the disenfranchised, the oppressed, and the underground opposition. As the social contract was being eroded by free market policies, the Ben Ali regime became gradually incapable of supporting the middle class, which grew increasingly dissatisfied with the rising cost of living, rising corruption, and lack of opportunities for upward mobility. Instead of compensating the middle class for the deterioration of their economic status either by increasing subsidies or increasing political concessions on freedom of speech and democratization the Ben Ali regime increased repression despite its constant rhetoric about freedom and democracy.

Two empirical studies lend credence to the emphasis on middle class grievances as a backdrop to the Arab uprisings. Based on survey data from Egypt, Diwan (2013) shows that middle class individuals exhibited the largest increase in support for democracy over the course of the 2000s. Campante and Chor (2012) also highlight the increasingly precarious socioeconomic foundations of the middle class across the Arab world. In their framework, expanding levels of education combined with poor labor market conditions set the backdrop for mass mobilization during the Arab uprisings because middle class citizens were increasingly dissatisfied with their regimes and the opportunity costs of protest dropped significantly in the context of limited employment prospects (Campante and Chor 2012, 175).<sup>3</sup>

An alternative narrative centered on the middle class, with quite distinct implications for patterns of grievances and even mass mobilization, holds that consumerist aspirations have undercut the potential for middle class discontent in the Arab region. In Jordan, for example, Tobin (2012) contends that the desire to lead a cosmopolitan lifestyle associated with malls, international chain

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<sup>3</sup> Campante and Chor (2012) explicitly contend, however, that grievances alone did not compel mass collective action. Rather, individuals, as rational agents, were encouraged by the reduced transaction costs of protesting to take to the streets.

stores, and Western ways of life has bred complacency among the middle classes.<sup>4</sup> This account implies that members of the middle class as defined by income, occupation and related characteristics would express greater satisfaction with their socioeconomic conditions than other social groups.

## **2.6 Dignity**

Finally, a number of analysts highlight the key role of demands for dignity in fueling the uprisings. Along with appeals for “bread,” “freedom,” and “social justice,” protestors explicitly called for “dignity” (*karamah*), a theme that resonated across the region (Ardic 2012, Levine 2013, Pace and Cavatorta 2012, Teti and Gervasio 2011). Appeals for dignity are distinct from, albeit potentially complementary with, appeals that focus on the need for jobs or bread. Rather than centering on material well-being and security, demands for dignity emphasize the quality of the relationship between citizens and authorities, calling for treatment with respect and the protection of physical integrity.

Importantly, appeals based on dignity are more likely to garner cross-class support since all but the most privileged, well-connected citizens would value treatment with respect and security while higher income individuals are less concerned about employment and material well-being. As Lim (2013, 928) notes, the framing of Bouazizi’s self-immolation as a call for “justice, freedom, and dignity” engaged higher income Tunisians, facilitating the spread of the uprisings across the country: ‘The distinction between “food” and “dignity” was very important in mobilizing Tunisians, especially the urban middle-class youth in more affluent regions. . . . [I]n coastal regions where tourists and beaches abound, people were generally disengaged from poverty and the struggles of people in the impoverished areas.’ We therefore expect that concerns for dignity would elicit support from respondents from a broad spectrum of socioeconomic classes, with the possible exception of elites with connections to ruling circles, who enjoy relative impunity in their societies.

## **3. Hypotheses**

In this paper, we aim to connect changes in macro-level socioeconomic conditions emphasized in the generalized narrative of broken social contracts in the Arab world to micro-levels patterns in public opinion. As a starting point, we focus on the ways in which distinct segments of populations perceive their domestic socioeconomic conditions and welfare regimes. Our goal is to uncover the main correlates of individual-level attitudes and perceptions of key social sectors in countries that witnessed varied levels of publicly expressed discontent during the uprisings. How people *perceive* socioeconomic trends or government performance, rather than objective measures such as economic growth or unemployment rates, are at the foundation of dissatisfaction. Furthermore, grievances increase the probability of participating in protests or engaging in other forms of conveying discontent.

We measure grievances by looking at pre-2011 levels of satisfaction with personal life circumstances and general economic conditions in countries with varied levels of mass unrest in our dataset. We examine measures of satisfaction in a variety of Arab countries that witnessed mass mobilization with varied outcomes, including Egypt, Tunisia, Syria, Libya, Bahrain, Jordan and Morocco.

We expect that evaluations of distinct social sectors should vary by class because members of different socioeconomic classes experienced shifts in post-independence welfare regimes

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<sup>4</sup> See also Schwedler (2010) on the “aspiring cosmopolitans” of Amman.

differently. Building on many of the arguments in the literature discussed in the previous section, the middle class, which was on aggregate the main beneficiary and even the product of post-independence social contracts, should be especially aggrieved about broken social contracts and would therefore express more negative views of government performance and socioeconomic conditions, particularly in countries where resources are more constrained.

*Hypothesis 1: Members of the middle class express more dissatisfaction with their general living conditions because they were the primary beneficiaries of and therefore the most disappointed by the decline of the state-led economic model.*

Our second hypothesis disaggregates welfare regimes by sector. A substantial literature on welfare states in advanced industrialized countries posits that different policy areas generate distinct constituencies and therefore exhibit different political dynamics (Gingrich and Ansell 2012, Iversen and Soskice 2001, Linos and West 2003, Rehm, Hacker, and Schlesinger 2012, on developing countries, see Haggard, Kaufman, and Long 2013). In this vein, we expect that patterns of public satisfaction vary across distinct policy areas of welfare regimes (in this case, health, education and labor markets). For example, middle class professionals may be more aggrieved by the poor state of schools and the lack of job opportunities in their countries because education and formal sector employment have historically constituted the main channels for social mobility. The linkages between health and healthcare, on the one hand, and social advancement, on the other, are more indirect and, in any case, all but the poor and most economically insecure tend to opt out of public health facilities in favor of private providers. These claims lead to our second hypothesis:

*Hypothesis 2: Members of the middle class express more dissatisfaction with schools and labor markets than with health services because education and public sector employment were the main sources of social mobility for this class in post-independence social contracts and they are likely to opt for private or non-state health services, which are perceived to be of superior quality than public services.*

We then examine the hypothesis that the youth report the most intense grievances, particularly middle-class youth. Young people should be especially discouraged if they see no future for themselves in their societies and economies, and this is all the more likely for the young and educated, who have high hopes that are dashed when their educational systems and labor markets do not provide adequate prospects for social mobility. By contrast, young people should be less concerned about healthcare than schools and jobs, and may express more muted concerns about health systems than older citizens, who tend to use health services more frequently. We therefore refine Hypothesis 2 to look for youth-specific effects in general and, more specifically, to identify more middle-class youth dissatisfaction with specific social sectors.

*Hypothesis 3: Young people and, especially, middle-class youth report more dissatisfaction than older generations, particularly with schools and labor markets.*

Finally, we focus on appeals to dignity as a source of popular grievances. Because appeals based on dignity are likely to garner more cross-class support than material concerns, we expect that perceived treatment with a lack dignity would be associated with grievances across class lines.

*Hypothesis 4: Perceptions of treatment without dignity should elicit dissatisfaction among respondents from all socioeconomic groups.*

In the next section, we discuss the data, variables and analyses used to evaluate these distinct hypotheses.

## **4. Data and Methods**

Our statistical analyses rely on data from 4 rounds of GALLUP surveys in the two years before the wave of mass protests, starting with the spring of 2009 and ending with the fall of 2010. The data cover seven Arab countries that witnessed mobilization to varying degrees during the uprisings: Bahrain, Egypt, Jordan, Libya, Morocco, Syria and Tunisia. The typical round in a given country includes information on socio-demographic, economic and labor market characteristics of over 1,000 respondents, as well as their satisfaction with social sectors and their views on corruption, among other relevant factors.

### ***4.1 Conceptualization and measurement of the variables***

#### *4.1.1 Outcome variables*

The core hypotheses regarding popular grievances in the Arab region center on general satisfaction among citizens as well as popular attitudes regarding social services and economic opportunities. First, we construct an index of general satisfaction using questions about respondents' assessments of their own standards of living and their views on economic conditions in their respective countries and in the cities in which they live. Using public opinion data, we then take as indicators of grievances the respondents' reported levels of satisfaction with specific sectors, including healthcare services, education services and job market opportunities.

To tap into attitudes towards basic grievances articulated by protestors and prioritized in the growing literature on the Arab uprisings, we construct an index of corruption using questions on perceptions of corruption in government and businesses in the respondent's country. We also construct measures of the extent to which merit factors into socioeconomic advancement and of whether or not the respondent is treated with dignity in her society. Finally, we assess perceived treatment with dignity based on questions regarding whether the respondent felt they were treated with respect and whether they felt the country they lived in treated children with respect and dignity. The data appendix details the construction of each of these satisfaction indexes and lists the questions included in each variable.

#### *4.1.2 Explanatory variables*

In our main analyses, we divide the scale of self-reported income into three classes in the selected countries: the lowest (bottom quintile), the middle class (the 3 middle quintiles) and the upper class (top quintile). In particular, the analyses aim to investigate the class gradient in the various satisfaction variables and also focus on youth, defined as respondents 15 to 25 years of age.

#### *4.1.3 Control variables*

Our control variables include standard socio-demographic measures of age (in ten year bands), gender, education, marital status and household size. In addition, we construct an indicator variable to measure whether the area of residence is urban or rural and include the presence of any self-reported health problems, which potentially affect attitudes towards social sectors such as health and possibly labor market conditions. The variables measuring the respondent's labor market profile are limited to an indicator of employment status (full-time, part-time, unemployed and outside the labor force) and an indicator for self-employment. Finally, we use indicator variables for the wave of the survey.

## **4.2 Methods**

In order to test our hypotheses of interest, we run ordinary least squares (OLS) regressions of each of the outcome variables on a number of correlates and controls.<sup>5</sup> The models focus on the

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<sup>5</sup> Models with logit specifications yielded qualitatively similar results.

correlates of general satisfaction followed by attitudes towards conditions in specific social sectors, including health, education and job opportunities, and towards social grievances articulated frequently during the uprisings, notably perceptions of corruption, the role of merit in social advancement and dignity in social relations. Our primary variables of interest are indicators of class, youth and the interaction of these two terms. The regressions also include the controls listed above.

## **5. Empirical Analyses: Satisfaction and Perceptions of Social Sectors and Fairness**

In this section, we report the findings of a series of regressions at the country level in the period preceding the uprisings. We explore the results by outcome variable and compare attitudes across different Arab countries, concentrating on class and generational variation in Table 1. Table 2 reports the results from running similar regressions but investigates the possibility of class differences changing across generations. Table 3 summarizes the main directions of the results in the preceding tables by outcome for each country in the dataset.

### ***5.1 General satisfaction***

The results of the regressions of general satisfaction exhibit the most consistent pattern across the Arab countries in the dataset as seen in the first column of Tables 1 and 2. In all countries, the class gradient is ubiquitous and is significant for the overall population and for adults when the models distinguish between adult- and youth-specific class effects. These findings suggest that middle-class levels of discontent are not unique, nor are they on par with those of the lower class, but they conform to the intuitive pattern that the less privileged are less satisfied with their living conditions.

The findings with respect to general satisfaction also do not support the claim that Arab youth are especially aggrieved. Quite the opposite: in Egypt, Tunisia, Jordan and Bahrain, young people are generally more satisfied.

When the class effect is differentiated for youth, again the youth are either statistically similar to adults of the same class in their reported satisfaction or are statistically more satisfied. The gradient observed for adults is tempered for the youth in Syria and Tunisia, with smaller class differences in satisfaction for the younger generation.

### ***5.2 Satisfaction with health services***

With respect to health services, the findings tend to exhibit a weak class gradient with the lower class expressing less satisfaction and the upper two classes showing similar satisfaction profiles in virtually all countries (column 2 in Table 1). In the baseline models, the middle and upper class have similar satisfaction profiles in Bahrain, Egypt, Jordan, Libya and Tunisia. This general pattern suggests class disparities in access to good quality healthcare and may reflect the fact that lower-income households rely more heavily on public health services, which tend to be rated poorly in the region. Two countries in the dataset, however, do not follow this pattern: in Syria, no class distinctions are reported while in Morocco, it is the lower two classes that are indistinguishable in their satisfaction profiles, rather than the top two classes.

Evaluations of health care can vary by age group given that some demographic groups, such as the elderly or women of reproductive age, tend to use health services more intensively. However the only countries that show significant generational differences are Jordan, where the young are less satisfied, and Bahrain where the reverse is true. At least for the case of Bahrain, these findings may reflect the fact that the young do not make use of health care as much as their elders and therefore are less critical of the health system.

In Table 2 when the youth effect is distinguished by class, the results for Tunisia show that the lower-class dissatisfaction among adults is not observed for the youth. In other countries, such as Libya and Morocco, the same class gradient seen in the total sample (Table 1) continues to hold for adults when classes are disaggregated by age (Table 2), while in Bahrain and Jordan the class effect is no longer significant when separated by generation.

### ***5.3 Satisfaction with education***

It is important to examine the breakdown of public opinion vis-à-vis education (column 3 in Tables 1 and 2) given that it can be a means to social mobility and has been the focus of some recent research on the Arab uprisings (Campante and Chor 2012) and is a key dimension of increasing inequality of opportunity in the region (Assaad, Salehi-Isfahani, and Hendy 2014). It is noteworthy that in Egypt, where blocked social advancement was a central concern of some protestors, no class or generational distinctions are reported in satisfaction with education. The results for Libya are qualitatively similar. Perhaps more strangely, in Bahrain the middle class reports more favorable views of the educational system than the lower and upper classes. In other countries, however, the findings conform to a standard class gradient, with clear class-based tiers in Syria, the lower class less satisfied in Jordan and Tunisia, and the upper class more satisfied in Morocco. Only Syria shows a generational effect, with the youth less satisfied than older generations.

When, however, we look at the youth effect separately by class, Table 2 shows that the class breakdown of public opinion towards education does vary by age group. In Morocco, the higher satisfaction of the upper classes is still significant, for adults and for the youth alike. However, middle-class youth are less satisfied not only than upper-class youth, but also than middle-class adults. The relationship seems to support the claim that middle-class youth were especially aggrieved in the lead-up to the Arab uprisings – at least with some aspects of their living conditions. In Jordan, the lower satisfaction of the lower classes is significant for both adults and for the youth, the young middle-class, while more satisfied than their lower-class peers are more aggrieved than the older middle class. The gradient in Syria is tempered by the generational distinction: the lower class is still significantly less satisfied among adults, but that class difference is less significant for the young. In this case, the upper and middle classes are indistinguishable in their satisfaction for both young and old. Instead, for both the middle and upper classes, the youth show significantly lower satisfaction than older generations of these classes.

### ***5.4 Satisfaction with the job market***

An analysis of public opinion towards the labor market is especially valuable given the demands for good jobs articulated in the demands of protestors and in polls conducted prior to and during uprisings and in light of the emphasis on this social sector in recent research (Campante and Chor 2012, ILO 2012, Tzannatos 2013). Across all countries in the dataset, attitudes towards the labor market exhibit a class gradient, as seen in the results of analyses of general satisfaction (column 4 in Table 1).

The results change slightly when accounting for variation in levels of satisfaction by age group. In some countries, notably Bahrain and Jordan, young people are more satisfied with labor markets, contradicting the youth disaffection hypothesis. Furthermore, where youth-specific class effects are significant (column 4 of Table 2), the gradient is not the same for young and old: Tunisian adults still show a clear gradient, but the satisfaction of the upper class is significantly lower for the young than for adults; in Syria the gradient is different for adults, with the lower and middle classes indistinguishable and significantly less satisfied than the wealthy of their cohorts, while lower-class youth are less satisfied than adults of their class and than their middle-class peers.

## **5.5 Corruption**

Corruption in economic, political and social life was a widespread source of discontent articulated during the Arab uprisings throughout the region, yet public opinion towards this issue does not exhibit a clear, cross-national pattern (column 5 of Table 1). In Egypt, the middle class, which by some accounts was increasingly aggrieved (Diwan 2013), has the lowest perception of corruption while the more privileged upper class reports the highest perceptions of corruption – a finding that seems at odds with the narrative of real and perceived exclusion in the context of narrowed ruling coalitions dominated by regimes cronies. The lower class in Tunisia has lower perceptions of corruption than the other two classes, while the middle and upper classes are indistinguishable. Upper-class Jordanians, express high levels of perceived corruption. In Morocco, however, the upper class reports the lowest levels of perceived corruption. Meanwhile, more Bahraini and Syrian lower-class respondents report high levels of corruption than their middle- and upper-class counterparts. There is no evidence of a generational difference in overall perceptions of corruption.

When generational effects are class-specific, the findings reported above are largely unchanged and the class-specific effects reported are not different for the youth than they are for adults (column 5 of Table 2).

## **5.6 Merit**

Perceptions about the role of merit in socioeconomic life offer another way to tap into grievances about blocked opportunities for social advancement and rising perceived corruption (column 6 of Table 1). In Egypt and Tunisia, the results follow a weak class gradient, with the middle class generally reporting similar views to the upper class. When no age-based class effects are modeled, Bahrain, Jordan and Libya exhibit the same pattern. In Morocco, the middle class appears more similar to the lower class, with the upper class showing significantly higher perceptions of merit.

Incorporating generational effects into the class analysis in column 6 of Table 2 modifies the results in some countries. In Jordan, the class gradient in perceptions of merit sharpens when accounting for age groups by class. In Morocco, the introduction of age-based class effects shows a U-shaped relationship between class and the perception of merit for adults, with the middle class showing significantly lower perceptions of merit, but only the upper-class showing a significantly higher sense of merit among the young. The relationship between class and merit is also changed in Libya, when class-effects are distinguished by generation: the upper class shows a higher perception of merit than the lower and middle classes among older Libyans. The young show a significantly lower sense of merit in the lower and upper classes. The middle class, however, does not show such a generational gap. In Bahrain, when youth-specific class effects are added to the model, the relationship between class and merit shows an inverted-U shape with the middle class showing the highest perception of merit, for both young and old.

## **5.7 Dignity**

Finally, the analysis focuses on the degree to which respondents feel they are treated with dignity or *karāma*, a frequent phrase used by demonstrators and heard in popular discourse during the uprisings. As seen for other outcomes, such as satisfaction with the health and education systems and perceptions of merit in social advancement, results for this outcome follow a weak class gradient in many countries (column 7 of Table 1). Lower-class respondents articulate distinct and more negative views than middle- and upper-class respondents in Bahrain, Egypt, Jordan, Syria and Tunisia, and the middle and upper classes are indistinguishable in their reports of dignity.

When accounting for generational variation in class effects (column 7 of Table 2), a weak class gradient continues to hold. Furthermore, Egyptian and Jordanian middle-class youth generally

report lower perceptions of dignity than their elders in the same class; Libyan lower-class youth express more negative views when compared with the older generation of the same class.

## 6. Discussion

These findings provide mixed support for the main hypotheses derived from the growing scholarly literature on citizen grievances in the lead-up to the Arab uprisings. In this paper, we aimed to assess the validity of several claims posited in or implied by this body of research. First, we examine the class breakdown of grievances given the importance of social class in explanations for the uprisings and for patterns of discontent in the region in the scholarly literature and journalistic accounts. While some explanations point to the role of middle-class disaffection, others emphasize lower-class marginalization in descriptions of shifting socioeconomic conditions and social contracts in the region as the state-led economic model, adopted almost universally among post-independence Arab rulers, unraveled.

The most preponderant result is one of an income gradient in satisfaction. This ordering is ubiquitous for general satisfaction and satisfaction with the labor market. With corruption, in all countries but Libya and Egypt, we still observe an income gradient. The gradient holds in one direction in Tunisia and Jordan (with lower classes perceiving lower levels of corruption), and in the opposite direction in Morocco, Syria and Bahrain (with lower classes reporting the highest levels of perceived corruption). The ranking of satisfaction levels according to class is observed in all countries but Syria with respect to health care services, and in all countries but Libya with perceptions of dignity.

While an income gradient is not particularly surprising about the nature of grievances or the identities of the most aggrieved, additional insights can be gleaned from examining the results more closely and identifying three patterns of note, which we detail below:

- i. The first pattern among cases where the gradient obtained is what we term “a loose gradient,” in which the middle class is similar in its expressions of discontent to one of the other two classes. Where the middle and lower classes are indistinguishable in their satisfaction profile, a story of middle class grievances tipping the balance can be told. Where the middle class resembles the upper classes, the story of impoverishment, food security and lower class deprivation is favored. Further analyses of public opinion toward the sectors in which middle class grievances align with those on either end of the income spectrum can suggest which argument in the literature best describes the dynamics of grievances in the years leading up to the uprisings in a given country. This approach would also point to the sources of middle class discontent that deviate from what an emphasis on material conditions alone would indicate.
- ii. A second general pattern arises when the relationship between satisfaction and class is non-monotonic, so that the middle class lies at one end of the satisfaction spectrum and the other two classes are at the other end. This finding would be consistent with the story of middle class discontent as the force behind mobilization.
- iii. A third aspect to consider is when the class differences observed for the general population, whatever form they take, are different for the youth, indicating that an intergenerational shift may be a driver of mobilization and call for change.

*When does the middle class resemble the lower class?*

These mixed findings call into question the salience of middle-class discontent in at least some Arab countries. If anything, the class gradient, exhibited to varying degrees across distinct



outcomes in the Arab region, lends some support to the claim that the lower classes were most discontent. Nonetheless, in a few cases, the results support the claim that grievances of the middle class were indistinguishable from those of the lower classes. This is most pronounced in Morocco, where the lower and middle classes show similarities in their attitudes towards health care and education and in their perceptions of corruption and dignity. In Libya, the lower and middle classes show similar perceptions of merit among the older generations. However, in general, the middle class, as measured crudely by an income scale, reports levels of satisfaction commensurate with its position in the income scale relative to other classes – in other words, consistent with a simple gradient-based understanding.

*When does the middle class resemble the upper class?*

More frequently, cases of the middle class resemble the upper class, with the lower class singled out at the other end of the satisfaction spectrum. This is observed with satisfaction regarding health care services in all countries except Morocco and Syria, satisfaction with education in Tunisia, Jordan and Syria, satisfaction with the labor market in Egypt, perceptions of corruption in Tunisia, Syria and Bahrain, perceptions of merit in Jordan, Libya, Bahrain, and perceptions of dignity in Egypt (among adults), Tunisia, Jordan (among adults), Syria and Bahrain. To the extent that the most aggrieved are the drivers of mobilization, these cases seem to favor explanations from deprivation, poverty and marginalization as the likelier engines of change.

*Where does the middle class stand out?*

Little evidence suggests that the middle class reverses the gradient in its satisfaction with or perceptions of government and economic life. In only a handful of cases, the opinions of the middle class lie at one end of the satisfaction spectrum while perceptions of the other two classes are at the other. Of these cases, many indicate the middle class has fewer, not more grievances: The Egyptian middle class reports lower perceptions of corruption than either the wealthy or the poor; in Bahrain, the middle class shows the highest satisfaction with education and the older middle class has the highest perception of merit as a means of social advancement. The only case of middle class disaffection is found in Morocco, where older generations of the middle class express less faith in merit. Thus, a distinct middle class effect that sets that class apart from the other two ends of the income spectrum in terms of its grievances finds little support in the data, suggesting that grievances related to issues beyond material conditions were important as a backdrop to the uprisings. In short, there is little evidence for the middle class being the most dissatisfied class. And the most common finding is that middle class satisfaction is somewhere between lower and upper class satisfaction levels.

*Do we see youth disaffection across all classes?*

The generational shifts we observe show, for a number of countries, a higher level of general satisfaction for the youth (in Egypt, Tunisia, Jordan and Bahrain). In Bahrain, we also see higher satisfaction with health care services and job market conditions for the youth. The youth show higher levels of discontent across all classes only when it comes to health care in Jordan and perceptions of dignity in Syria. Overall, however, there is little evidence of a generational divergence in perceptions and grievances that is uniform across all classes. Instead, differences across generations are class specific, and show up in our findings only when we allow for generational effects to differ by class.

*Are class grievances distinct over generations?*

In several countries and sectors, the youth of certain social strata show lower levels of discontent than older respondents from the same class. Thus, while general satisfaction shows a clear income

gradient for all countries, the class differences may be less stark in certain cases when adjusting for age: The younger generation of the lower class is significantly more satisfied than the older lower class in Tunisia, whereas upper class youth express less satisfaction than adults in Syria. In Bahrain, the middle class may be “catching up” with the upper class since the youth in the middle class is significantly more satisfied than the older middle class.

A story about middle class disaffection can be told where the younger middle class expresses greater discontent than the older middle class. This is seen in lower levels of reported middle class youth dissatisfaction with educational services in Morocco, Jordan and Syria, as well as in perceptions of dignity among this group in Egypt and in Jordan.

However, the middle class is not the only class with shifting dynamics of grievances: Upper classes youth show more discontent in their attitudes towards the labor market in Tunisia and in Syria, and in their perceptions of merit in Libya. The younger members of the lower class are also more disaffected with the labor market in Syria, and show lower perceptions of merit in Morocco and of merit and dignity in Libya.

## **7. Conclusion**

What can we conclude based on this complex cocktail of public opinion across classes, generations and countries in the Arab region? First and foremost, cross-national variation in patterns of discontent may suggest that the dynamics of diffusion rather than a common set of grievances was at the foundation of the region-wide phenomenon now referred to as the Arab uprisings or Arab Spring. In other words, to the extent that the uprisings were a common phenomenon across the region, diffusion effects rather than parallel sources of popular disaffection were at play (Bamert, Gilardi, and Wasserfallen 2015, Owen 2012, Patel, Bunce, and Wolchik 2014). While each country has its own specific profile of discontent, the narrative of disaffection with incumbent rulers and the prevailing political economies resonated across the borders of Arab countries that share a common language and similar but not identical historical experiences of economic and political development. To the extent that a shared set of grievances holds in the region, the clearest pattern is a simple and perhaps unsurprising class gradient, particularly with respect to measures of general satisfaction and satisfaction with the job market.

Academic and policy research should continue to probe the foundations of popular grievances in the region in order to identify priority areas for economic and social policy reform and to propose strategies for introducing reforms that might find greater acceptance among social groups and that would promote economic and political inclusion. It is particularly important to understand perceptions, or how individuals and groups of individuals interpret their socioeconomic conditions, because these form the basis for political attitudes and behavior. As social scientists across the disciplines recognize, politics rather than objective economic realities pose the greatest obstacle to change and, therefore, public opinion cannot be ignored in formulating and implementing policy initiatives.

Further research should investigate what is driving these cross-national and subnational patterns of variation in public satisfaction across the Arab region. Undoubtedly, the explanation is more complex than a simple response to objective material conditions. For example, citizen expectations of their states, derived from the real and rhetorical commitments of rulers to national wellbeing in the years following independence, may shape evaluations of government performance and of specific social sectors more than actual outcomes and trends. Unpacking the ways in which citizen expectations are formed and how, in turn, they affect evaluations or perceptions of government

performance is an important next step in exploring the determinants of public opinion within the Arab region.

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**Table 1: Grievances by Class and Age Group**

		GS	HC	E	LM	C	M	D
<b>Egypt</b>	L	-0.08**	-0.08**	-0.03	-0.02**	0.03**	-0.03**	-0.06**
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
	U	0.08**	0.03	0.002	0.02	0.05**	-0.01	-0.03
	Y	-0.01	-0.03	-0.03	-0.01	-0.01	-0.02	-0.03
		0.06*	0.01	-0.03	0.05	0.03	-0.03	-0.08
		-0.03	-0.08	-0.05	-0.03	-0.03	-0.03	-0.05
<b>Tunisia</b>	L	-0.19**	-0.10**	-0.07**	-0.08**	-0.04**	-0.02**	-0.03**
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
	U	0.11**	0.02	0.01	0.07**	0.002	0.01	0.01
	Y	-0.01	-0.03	-0.02	-0.01	-0.01	-0.01	-0.01
		0.06*	0.06	-0.07	0.01	0.01	-0.03	-0.05
		-0.03	-0.07	-0.05	-0.03	-0.03	-0.02	-0.03
<b>Morocco</b>	L	-0.10**	0.02	-0.003	-0.10**	0.005	0.02	-0.01
		-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.02
	U	0.17**	0.11**	0.14**	0.10**	-0.03+	0.03**	0.08**
	Y	-0.01	-0.03	-0.02	-0.02	-0.01	-0.01	-0.02
		-0.03	-0.03	-0.05	-0.001	-0.03	-0.02	-3.00E-05
		-0.03	-0.06	-0.05	-0.04	-0.03	-0.02	-0.05
<b>Jordan</b>	L	-0.16**	-0.04+	-0.06**	-0.08**	-0.004	-0.07**	-0.08**
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.02
	U	0.04**	0.01	0.02	0.03*	0.03*	0.02	0.03
	Y	-0.01	-0.03	-0.02	-0.01	-0.01	-0.01	-0.02
		0.13**	-0.10+	-0.08	0.08+	0.004	0.05	-0.09*
		-0.03	-0.05	-0.06	-0.04	-0.03	-0.05	-0.04
<b>Syria</b>	L	-0.08**	-0.01	-0.03+	-0.03*	0.03*	-0.01	-0.02+
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
	U	0.06**	-0.01	0.04+	0.03+	-0.01	-0.004	-0.005
	Y	-0.01	-0.03	-0.02	-0.02	-0.02	-0.01	-0.02
		0.02	0.01	-0.08+	-0.05	-0.003	-0.02	-0.08+
		-0.03	-0.08	-0.05	-0.04	-0.03	-0.03	-0.05
<b>Libya</b>	L	-0.15**	-0.14**	0.01	-0.16**	-0.02	-0.05**	-0.03
		-0.02	-0.04	-0.03	-0.02	-0.01	-0.02	-0.02
	U	0.05**	-0.05	-0.01	0.05*	0.01	0.02	0.005
	Y	-0.01	-0.05	-0.03	-0.02	-0.02	-0.02	-0.02
		-3.00E-04	0.18	-0.04	0.15	-0.08	0.04	-0.04
		-0.06	-0.17	-0.13	-0.09	-0.08	-0.08	-0.07
<b>Bahrain</b>	L	-0.15**	-0.03+	-0.05**	-0.10**	0.05**	-0.05**	-0.02**
		-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.005
	U	0.09**	0.03	-0.02+	0.06**	0.002	-0.02	-0.01
	Y	-0.01	-0.02	-0.01	-0.02	-0.01	-0.01	-0.01
		0.20**	0.19+	0.06	0.29**	-0.02	0.09	-0.02
		-0.05	-0.11	-0.06	-0.06	-0.05	-0.07	-0.03

Notes: Standard errors between parentheses. \*\* significant at the 1% level, \* significant at the 5% level, + significant at the 10% level. GS: General satisfaction, HC: satisfaction with health care services, E: satisfaction with education, LM: satisfaction with the labor market, C: perceptions of corruption, M: perceptions of merit, D: perceptions of dignity. L: lower class, U: upper class, Y: youth. All regressions include controls for age group, household size, urban/rural, gender, health, labor market status, self-employment, occupation, marital status, education level, wave.

**Table 2: Grievances by Class and Age Group, with Age-Specific Class Effects**

		GS	HC	E	LM	C	M	D
<b>Egypt</b>	L	-0.09**	-0.08**	-0.02	-0.03*	0.03*	-0.03*	-0.08**
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.02
	U	0.07**	0.04	0.02	0.02	0.06**	-0.02	-0.02
		-0.02	-0.04	-0.03	-0.02	-0.02	-0.02	-0.03
	Y	0.05 <sup>+</sup>	0.01	-0.01	0.05	0.02	-0.04	-0.11 <sup>+</sup>
		-0.03	-0.08	-0.05	-0.03	-0.03	-0.03	-0.06
	LxY	0.01	7.00E-04	-0.03	0.004	0.02	8.00E-04	0.05
	-0.02	-0.05	-0.04	-0.02	-0.02	-0.02	-0.03	
	UxY	0.03	-0.03	-0.06	-0.002	-0.05	0.04	-0.01
		-0.03	-0.07	-0.06	-0.03	-0.03	-0.03	-0.05
<b>Tunisia</b>	L	-0.21**	-0.14**	-0.07**	-0.09**	-0.04**	-0.02*	-0.03**
		-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
	U	0.11**	-0.005	0.02	0.09**	-0.01	0.01	0.02
		-0.01	-0.04	-0.02	-0.02	-0.02	-0.01	-0.01
	Y	0.04	0.01	-0.07	0.01	0.01	-0.03	-0.05
		-0.03	-0.07	-0.05	-0.04	-0.03	-0.02	-0.03
	LxY	0.04*	0.11*	0.02	0.01	0.003	-0.004	0.006
	-0.03	-0.05	-0.03	-0.02	-0.02	-0.02	-0.02	
	UxY	-0.02	0.07	-0.02	-0.05 <sup>+</sup>	0.06	-0.001	-0.03
		-0.02	-0.06	-0.04	-0.03	-0.03	-0.02	-0.02
<b>Morocco</b>	L	-0.10**	-0.004	-0.03	-0.10**	-0.001	0.03*	0.01
		-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.02
	U	0.16**	0.09*	0.09**	0.11**	-0.02	0.04**	0.07**
		-0.02	-0.03	-0.03	-0.02	-0.02	-0.01	-0.02
	Y	-0.03	-0.07	-0.10 <sup>+</sup>	0.001	-0.03	-0.001	0.02
		-0.03	-0.06	-0.05	-0.04	-0.03	-0.02	-0.05
	LxY	-0.005	-0.08	0.09*	0.006	0.02	-0.04 <sup>+</sup>	-0.06
	-0.02	-0.05	-0.04	-0.03	-0.02	-0.02	-0.04	
	UxY	0.02	0.07	0.14**	-0.02	-0.01	-0.01	0.03
		-0.02	-0.06	-0.04	-0.03	-0.02	-0.02	-0.04
<b>Jordan</b>	L	-0.17**	-0.03	-0.07**	-0.08**	0.005	-0.06**	-0.08**
		-0.01	-0.03	-0.02	-0.02	-0.01	-0.02	-0.02
	U	0.06**	0.03	0.02	0.03 <sup>+</sup>	0.02	0.04 <sup>+</sup>	0.03
		-0.02	-0.04	-0.03	-0.02	-0.01	-0.02	-0.02
	Y	0.13**	-0.08	-0.10 <sup>+</sup>	0.09 <sup>+</sup>	0.01	0.05	-0.10*
		-0.03	-0.05	-0.06	-0.04	-0.03	-0.05	-0.05
	LxY	0.02	-0.04	0.04	-0.02	-0.03	-0.01	0.01
	-0.02	-0.05	-0.04	-0.02	-0.02	-0.03	-0.03	
	UxY	-0.04	-0.05	0.01	-0.001	0.01	-0.04	0.002
		-0.02	-0.06	-0.04	-0.03	-0.02	-0.03	-0.03
<b>Syria</b>	L	-0.08**	-0.003	-0.06**	-0.01	0.03*	-0.01	-0.02
		-0.01	-0.03	-0.02	-0.01	-0.01	-0.01	-0.02
	U	0.08**	-0.02	0.03	0.05**	-0.03	0.001	-0.005
		-0.02	-0.04	(0.03	-0.02	-0.02	-0.02	-0.02
	Y	0.04	0.02	-0.12 <sup>+</sup>	-0.02	-0.01	-0.02	-0.07
		-0.03	-0.08	-0.05	-0.04	-0.03	-0.03	-0.05
	LxY	-0.02	-0.04	0.08*	-0.05*	-0.01	0.01	-0.02
	-0.02	-0.05	-0.04	-0.02	-0.02	-0.02	-0.03	
	UxY	-0.07*	0.02	0.03	-0.06 <sup>+</sup>	0.04	-0.01	5.00E-04
		-0.03	-0.07	-0.05	-0.03	-0.03	-0.03	-0.04
<b>Libya</b>	L	-0.16**	-0.12*	-0.001	-0.15**	-0.02	-0.01	-0.004
		-0.02	-0.05	-0.03	-0.02	-0.02	-0.02	-0.02
	U	0.04*	-0.06	-0.001	0.06*	0.02	0.04*	0.02
		-0.02	-0.06	-0.04	-0.03	-0.03	-0.02	-0.02
	Y	-0.01	0.19	-0.04	0.16 <sup>+</sup>	-0.07	0.08	-0.01
		-0.06	-0.17	-0.13	-0.1	-0.08	-0.08	-0.07
	LxY	0.02	-0.05	0.03	-0.03	-0.02	-0.14**	-0.09*
	-0.04	-0.08	-0.07	-0.04	-0.03	-0.05	-0.04	
	UxY	0.02	-0.002	-0.02	-0.04	-0.04	-0.07*	-0.06
		-0.03	-0.11	-0.07	-0.05	-0.04	-0.03	-0.04

**Table 2: Continued**

		<b>GS</b>	<b>HC</b>	<b>E</b>	<b>LM</b>	<b>C</b>	<b>M</b>	<b>D</b>
<b>Bahrain</b>	L	-0.15**	-0.03	-0.06**	-0.10**	0.04*	-0.06**	-0.02**
		-0.02	-0.02	-0.01	-0.02	-0.01	-0.01	-0.005
	U	0.08**	0.02	-0.04*	0.05**	-0.004	-0.03+	0.002
		-0.02	-0.03	-0.02	-0.02	-0.02	-0.02	-0.01
	Y	0.21**	0.19	0.05	0.29	-0.04	0.07	-0.02
		-0.06	-0.12	-0.06	-0.06	-0.05	-0.07	-0.03
	LxY	-0.01	0.004	0.01	-0.001	0.03	0.03	-0.001
		-0.02	-0.04	-0.02	-0.03	-0.02	-0.02	-0.01
	UxY	0.02	0.02	0.04	0.01	0.02	0.03	-0.02
		-0.03	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02

Notes: Standard errors between parentheses. \*\* significant at the 1% level, \* significant at the 5% level, + significant at the 10% level. GS: General satisfaction, HC: satisfaction with health care services, E: satisfaction with education, LM: satisfaction with the labor market, C: perceptions of corruption, M: perceptions of merit, D: perceptions of dignity. L: lower class, U: upper class, Y: youth. All regressions include controls for age group, household size, urban/rural, gender, health, labor market status, self-employment, occupation, marital status, education level, wave.

**Table 3: Trends**

	General satisfaction	Satisfaction with health care	Satisfaction with education	Satisfaction with labor market	Corruption	Merit	Dignity
<b>Egypt</b>	L<M<H O<Y	L<M&H		L<M&H	M<L<H M<L<H	L<M	L<M&H L<M&H YM<OM
<b>Tunisia</b>	L<M<H O<Y L<M<H OL<YL	L<M&H L<M&H OL<YL	L<M&H	L<M<H L<M<H YH<OH	L<M&H	L<M&H	L<M&H
<b>Morocco</b>	L<M<H	L&M<H	L&M<H L&M<H OL<YL YM<OM OH<YH	L<M<H	H<L&M	M<H M<L&H YL<OL	L&M<H
<b>Jordan</b>	L<M<H O<Y	L<M&H Y<O	L<M&H L<M&H YM<OM	L<M<H O<Y L<M<H OM<YM	L&M<H	L<M&H L<M<H	L<M&H Y<O L<M&H YM<OM
<b>Syria</b>	L<M<H L<M<H YH<OH		L<M<H Y<O L<M&H OL<YL YM<OM	L<M<H L&M<H YL<OL YH<OH	M&H<L		L<M&H Y<O
<b>Libya</b>	L<M<H	L<M&H		L<M<H L<M<H OM<YM		L<M&H L&M<H YL<OL YH<OH	YL<OL
<b>Bahrain</b>	L<M<H O<Y L<M<H OM<YM	L<M&H O<Y	L&H<M	L<M<H O<Y L<M<H	M&H<L	L<M&H L&H<M	L<M&H

Note: The table reports using the symbol “<” only statistically significant differences across classes and generations. When a cell is split vertically into two, it is because the results showed different statistical significance when we distinguished class effects by generation.

## **Data Appendix**

### **1. Satisfaction with healthcare services:**

The satisfaction with healthcare services variable includes the following question from the GALLUP questionnaire:

Wp97: In the city or area where you live, are you satisfied or dissatisfied with the availability of quality healthcare?

### **2. Satisfaction with education**

The satisfaction with education variable includes the following question

Wp93: In the city or area where you live, are you satisfied or dissatisfied with the educational system or the schools?

### **3. Satisfaction with job market**

The satisfaction with the job market variable includes the following questions:

Wp10249: In the city or area where you live, are you satisfied or dissatisfied with the availability of good job opportunities?

Wp89: Thinking about the job situation in the city or area where you live today, would you say that it is now a good time or a bad time to find a job?

Wp133: are you satisfied or dissatisfied with efforts to increase the number of quality jobs?

Wp10205 (WP9045 in the first two waves): are you satisfied or dissatisfied with your job or the work you do?

Wp9913: do the majority of people working receive fair pay for the work or job they do?

Wp9914: are a majority of the people worried about losing their jobs/employment in the next 6 months?

The responses to each of the questions above are transformed into a binary indicator of satisfaction. The satisfaction variable is then constructed as the arithmetic mean of these individual responses to these questions.

### **4. General satisfaction variable**

To measure general satisfaction, we use the following questions:

Wp16: Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?

M30: How would you rate economic conditions in this country today (excellent, good, only fair, poor)?

Wp30: Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?

Wp31: Right now, do you feel your standard of living is getting better or getting worse?

Wp83: Are you satisfied or dissatisfied with the city or area where you live?

Wp87: Do you believe the current economic conditions in your city or areas where you live are good or not?

Wp148: Right now, do you think the economic conditions as a whole are getting better or getting worse?

The responses to each of these questions are transformed into binary satisfaction indicators. For question wp16 anyone placing themselves above 5 on the ladder is coded as “satisfied” in their response to this question. For question m30, a response of “good” or “excellent” is coded as “satisfied”.

General satisfaction is constructed as the arithmetic mean of these indicators.

## **5. Merit**

WP128: Can people in this country get ahead by working hard, or not?

## **6. Dignity**

WP61: Were you treated with respect all day yesterday?

WP129: Do you believe that children in this country are treated with respect and dignity, or not?

The dignity variable is set as 1 if the answer to either of the questions below is yes:

## **7. Corruption**

Wp145: Is corruption widespread within businesses located in (country), or not?

Wp146: Is corruption widespread throughout the government in (country), or not?

Wp6762: Do you think the level of corruption in this country is lower, about the same, or higher than it was 5 years ago?

Wp6764: Sometimes people have to give a bribe or a present in order to solve their problems. In the last 12 months, were you, personally, faced with this kind of situation, or not (regardless of whether you gave a bribe/present or not)?

Wp6765: Was there at least one instance in the last 12 months when you had to give a bribe or present, or not?

WP9080: What is the primary obstacle in this country for a youth to get a job or a better job that enables them to start a family? (if the answer is that “corruption is rampant in the economy”).

The corruption variable is based on a set of questions about perceptions of corruption and is calculated as the average of these binary variables.