

The Effects of the Arab Spring: The Robustness of Perceived Inequality in Survey Research



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Importance of Studying Inequality



- Inequality linked to GDP per capita (World Bank 2013)
- Inequality linked to quality of governance (Kaufmann et al. 1999)
- Inequality linked to regime stability and democratization (Boix 2003)
- Inequality linked to social indicators (Wilkinson and Pickett 2009)
 - Crime
 - Drug use
 - Health / Life expectancy

Defining Inequality



- **Stanford Encyclopedia of Philosophy:**
 - ‘Equality’ is a contested concept: “People who praise it or disparage it disagree about what they are praising or disparaging.” (Dworkin 2000, 2).
 - ‘Equality’ (or ‘equal’) signifies correspondence between a group of different objects, persons, processes or circumstances that have the same qualities in at least one respect...”

Measuring Inequality



- Many surveys focus on “objective” measures
 - Economic
 - ✦ Income level
 - ✦ Features of House/Living situation
 - Social
 - ✦ Level of Education
 - ✦ Job type
 - Demographics
 - ✦ Age
 - ✦ Urban/rural
 - ✦ Ethnicity
 - ✦ Language
 - ✦ Gender

Objective Inequality Measures in Survey Research



- **UNICEF**
 - Mortality, nutrition, children's health, environment, education, demographics
- **European Commission**
 - Demographics, civic participation, health culture, use of technology
- **Afrobarometer**
 - Economic characteristics, demographics, ethnicity, personal security (crime, instability, etc.)

Subjective Measures of Inequality



- Subjective measures focus on perceptions and attitudes
 - Seek to answer whether inequality is a major concern to respondents rather than capture exact levels
 - ✦ Why does this matter?

Can Subjective Measures Capture Objective Inequality?



- Subjective measures are commonly used as proxies for objective measures when there is no alternative
 - Transparency International (TI) relies heavily on *perceived* levels of corruption
 - ✦ How corrupt are certain parts of government?
 - ✦ Societal attitudes toward corruption
- World Values Survey is often used due to its global coverage
 - Example: Macunovich 2011

Problems with Subjective Measures



- **Cross-nationally there are concerns**
 - Societies may have different conceptions of inequality
 - ✦ Anchoring vignettes can be used to control for different scales between societies (King et al. 2003)
 - A useful but difficult, costly and time-consuming solution
- **Within the same country, are measures stable over time?**
 - If there is a major political or economic change, how are inequality measures affected?
 - ✦ For example: TI rankings change annually
 - If a major corruption scandal is uncovered, perceived levels of corruption may change

Research Question



- Research Questions:
 - Are subjective inequality measures reliable proxies for objective measures?
 - ✦ Does their reliability vary by country context?
 - ✦ Does their reliability vary by topic?

The Arab Spring as a Natural Experiment



- Using the Arab Spring as a Quasi-Experiment
 - Arab Spring led to dramatic changes in the region
 - ✦ Fall of long-standing dictator in four countries (Tunisia, Egypt, Libya and Yemen)
 - ✦ Rise of Islamist parties in Tunisia and Egypt
 - Events reverberated across the region...
 - ✦ Dramatic changes in public opinion shifts in Saudi Arabia (Robbins and Tessler 2012)
 - ...but individual country experience varied
 - ✦ Some countries underwent major political upheavals but most did not
- ➔ What were the effects of the Arab Spring on measures of inequality?

Theory



- **Basic assumption: In the short-term the events of the Arab Spring resulted in little objective change on social, political or economic inequality**
 - Government policies did not change dramatically
 - Change of regimes was limited, even if the head of the regime changed
- **Insofar as perceptions about inequality changed, the changes were relatively similar across all segments of society**
 - Economic decline was felt across society
 - Insecurity affected most of society
 - Political reforms should have similar effects

Theory



- Yet, perceptions are likely to differ between winners and losers from the events of the Arab Spring
 - Winners are more likely to see outcome positively while losers are more likely to say it was negative
 - ✦ Ex: Moehler 2007
- Do we observe differences between winners and losers about perceived levels of inequality as a result of the events of the Arab Spring?

Research Design



- Comparison of changes in beliefs about inequality between supporters of political Islam (“winners”) and opponents of political Islam (“losers”)
- Comparison across four countries
 - *Egypt*: Islamist party wins power and tries to consolidate power
 - *Tunisia*: Islamist party wins election but shares power
 - *Yemen*: Dictator falls but Islamists do not come to power
 - *Algeria*: No change in regime and Islamists remain out of power, but regime undertakes limited political liberalization

Hypothesis



- If there subjective measures of inequality are valid proxies for objective measures, then changes in beliefs about inequality following the Arab spring should be similar for supporters and opponents of political Islam

Data



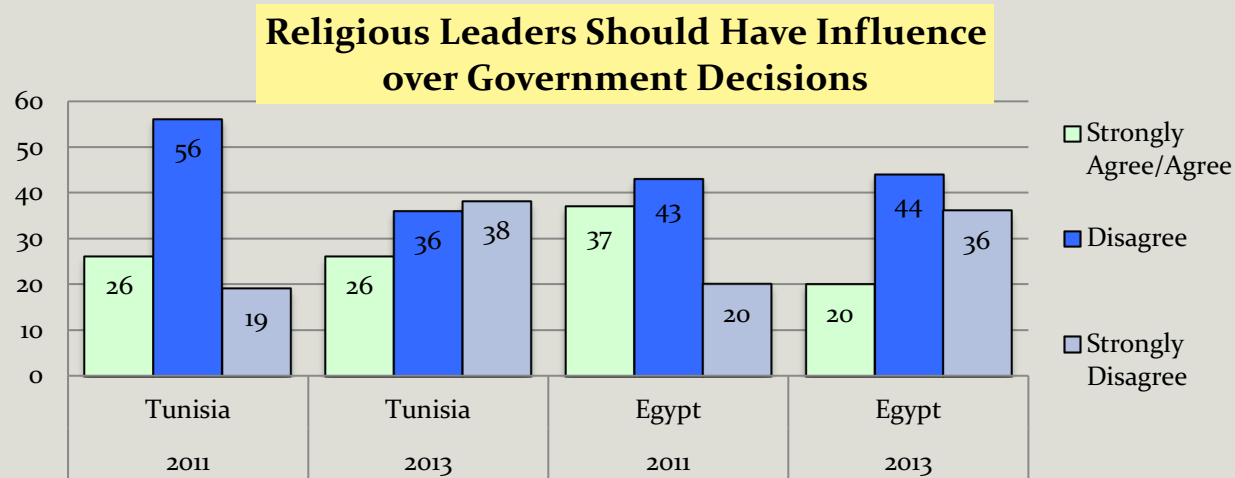
- Arab Barometer Wave 2 and Wave 3 data
 - All surveys have n~1200
 - All surveys done face-to-face in partnership with local researchers
 - All surveys used a similar instrument

Country	Wave 2	Wave 3
Algeria	April-May 2011	March-April 2013
Egypt	June-July 2011	March-April 2013
Tunisia	Sept-Oct 2011	Feb 2013
Yemen	Feb 2011	Nov-Dec 2013

Support for Political Islam over Time



- Supporters (and opponents) of political Islam vary in significant ways between wave 2 (t_0) and wave 3 (t_1)



Source: Tessler 2014

Matching Strategy



- Comparing all supporters (and opponents) of political Islam at t_0 to those at t_1 will result in biased estimates
- Propensity Score Matching (PSM) can correct for the bias by controlling for confounding variables
 - Compares similar individuals at t_0 to those at t_1 to yield an unbiased result

Confounding Variables



- Age
- Gender
- Education
- Urban/rural
- Personal religiosity
- Frequency of prayer
- Support for Islamic law (*sharia*)

Capturing Inequality



- Kaufmann et al. (1999) focus on quality of governance and inequality demonstrating the that two are closely linked
 - Following their lead, I look at five such areas focusing on measures that are directly or indirectly linked with inequality

Inequality Measures



- **Economic well-being and security**
 - How would you describe the country's economic situation?
 - Do you feel your personal security is guaranteed?
 - Is the government doing a good job creating jobs?
- **Government responsiveness**
 - Trust in government
 - Is the government improving health services?
 - Ability to get assistance from police
 - Ease of filing a complaint if your rights are violated
- **Societal equality**
 - Are you treated equally relative to others?
 - Is the government doing a good job narrowing the income gap?

Inequality Measures

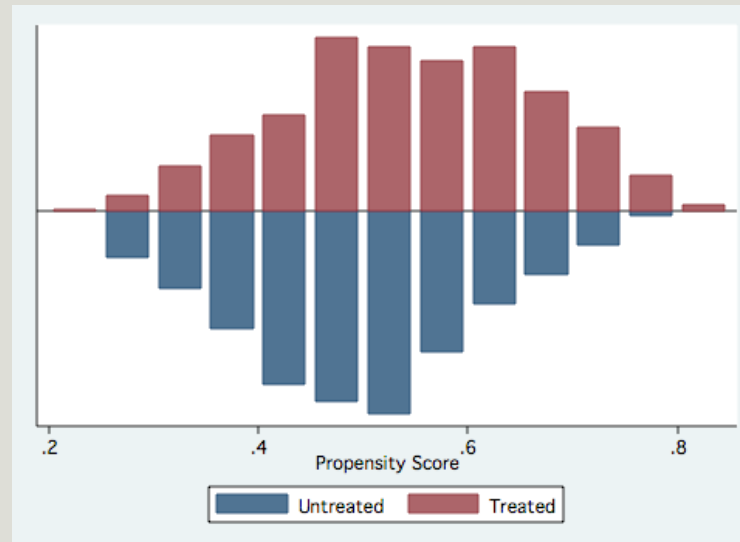


- **Corruption**
 - Is there corruption in the government?
 - Is the government working to eliminate corruption?
- **Political rights**
 - State of democracy and human rights
 - Freedom of speech guaranteed
 - Freedom of the press guaranteed
 - Free to join a political party
 - Have the right to protest freely
 - Free to join a civil society organization (CSO)

Matching Technique



- Propensity scores generated through a probit model
- Kernel matching was employed
 - Results are similar with nearest neighbor matching
- Approximate balance between treatment and control



Matching Summary



- Data: Arab Barometer wave 2 & 3
- Treatment group: Wave 3
- Control group: Wave 2
- Outcome: Perceptions of inequality
- Covariates: SES, religiosity measures, sharia with exact matching for supporters and opponents of political Islam
- Propensity scores: probit
- Matching: kernel matching

Support for Political Islam



- Support for political Islam measured by an additive index of two highly correlated items
 - ✦ Should men of religion have influence on decisions of government
 - ✦ Would the country be better off if more religious people held public office

	Supporters of Political Islam		Opponents of Political Islam	
	Wave 2	Wave 3	Wave 2	Wave 3
Algeria	156	291	812	617
Egypt	368	151	813	970
Tunisia	168	250	784	824
Yemen	492	420	586	724

Results



- Results are the percentage point difference between the treatment effect of the Arab Spring on supporters and opponents of political Islam
 - Differences close to zero mean that the Arab spring had a similar overall effect on supporters and opponents of the political Islam

Economic Well-Being and Security



Difference in percent change between supporters and opponents of political Islam

	Economic Situation	Personal Security	Government Creating Jobs
Egypt	-5.1	+0.0	+13.0
Tunisia	-5.7	+5.2	-0.0
Yemen	-5.9	+5.1	+1.6
Algeria	+19.1	+12.8	+27.6

Government Responsiveness



Difference in percent change between supporters and opponents of political Islam

	Government Trust	Government Improving Health Services	Ability to Get Police Assistance	Ease of Filing a Complaint when Rights are Violated
Egypt	+8.4	+27.7	+8.6	-2.9
Tunisia	+18.7	-5.4	-1.4	+1.2
Yemen	+5.7	+3.5	-3.8	-5.3
Algeria	+15.8	+19.4	-8.2	-13.1

Equality



Difference in percent change between supporters and opponents of political Islam

	Treated Equally to Other Citizens	Government Narrowing Income Gap
Egypt	-1.9	+19.6
Tunisia	+10.3	+7.4
Yemen	+1.5	+4.6
Algeria	+4.8	+2.3

Corruption



Difference in percent change between supporters and opponents of political Islam

	Corruption in Government	Government Fighting Corruption
Egypt	-6.6	+20.9
Tunisia	-2.3	+10.3
Yemen	-5.3	+13.4
Algeria	+0.1	-4.6

Political Rights



Difference in percent change between supporters and opponents of political Islam

	State of Human Rights	Freedom of Speech	Freedom of Press	Right to Join Party	Right to Protest	Right to Join CSO
Egypt	+31.4	+19.7	+20.3	+16.3	+20.3	+10.1
Tunisia	+8.4	-5.4	-7.6	-17.5	-11.8	-11.8
Yemen	+9.9	+5.0	+7.7	+3.4	+1.2	+9.3
Algeria	+4.9	+20.7	+12.6	+19.8	-3.9	+11.5

Conclusions



- There is some evidence that subjective measures may be unaffected by major societal changes, but the measures are not entirely consistent
 - *Economy and security*: Except Algeria, generally no major differences
 - *Government responsiveness*: Except Algeria, generally no major differences
 - *Equality*: One exception for each measure, but otherwise no difference
 - *Corruption*: No difference in perceived corruption, but vast differences on government fighting corruption
 - *Political rights*: Consistent differences except for Yemen

Conclusions



- **Yemen: Differences are least common**
 - Change of president but little political reform
- **Tunisia: Some differences, but relatively few**
 - Most consistent on perception of political rights
- **Egypt: Differences very common on questions related to government**
 - Muslim Brotherhood sought to consolidate power by excluding opponents
- **Algeria: Differences are most common**
 - No regime change, but regime pursued some political liberalization

Political Rights



Difference in percent change between supporters and opponents of political Islam

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Conclusions



- When are subjective measures of inequality more likely to be consistent?
 - Yemen may have undergone the fewest changes of any country and subjective measures remain consistent
 - In countries that experienced more political reform, there are key differences between supporters and opponents of political Islam on subjective measures of inequality
 - ✦ Frequently differences are linked with questions that include questions about the government
 - Additional research is necessary to understand how context affects subjective measures of inequality