

ONLINE APPENDICES (NOT FOR PUBLICATION)

Appendix A: Data

In this appendix, we define the variables used in the empirical analysis and their sources. Table A1 describes/defines the variables and their sources. Table A2 lists the countries in our sample. We restrict our analysis to a sample of developing (as defined by the World Bank), non-oil producing countries (as defined by British Petroleum). So as to not conflate the direct effect of oil prices on political stability, we exclude oil-producers. Table A3 provides the summary statistics for the variables used in main regression/econometric analysis in the paper. Table A4 compares Muslim and non-Muslim non-oil producing countries on a number of observable characteristics prior to the treatment period. Finally, Table A5 describes the difference-in-difference statistics in which high oil price periods were associated with a foreign aid windfall for Muslim non-oil producers.

Table A1 below describes the data used in the empirical analysis. Our measure of foreign aid is total official development assistance (ODA) as reported by the World Bank in its World Development Indicators. According to the WDI's official documentation, ODA consists of:

“disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is provided under terms and conditions similar to those for ODA. Part II of the DAC List was abolished in 2005. The collection of data on official aid and other resource flows to Part II countries ended with 2004 data. Data are in current U.S. dollars”

While DAC members include members of the OECD, non-DAC members include other bilateral donors, such as those from the Middle East (e.g., Kuwait, UAE) and multilateral agencies (e.g., World Bank, United Nations).

Table A1: Data description

Variable	Description	Source
<i>Categories of countries</i>		
Oil producer	Binary variable equal to 1 if the country produces oil, 0 otherwise	British Petroleum
Muslim	Binary variable equal to 1 if at least 70 percent of the population identify with the Islamic faith; 0 otherwise	Central Intelligence Agency
<i>Aid and instrumental variable</i>		
Foreign aid	Foreign aid (% GDP)	World Development Indicators
Oil price	Oil price (2009 US\$)	British Petroleum
Muslim x p(oil)	Muslim x Price of oil	
<i>Dependent variables</i>		
Civil war	Binary variable equal to 1 if a country experiences at least 1,000 battle deaths (from a non-internationalized internal war) in a year; 0 otherwise	Armed Conflict Data
Political rights	Political rights index, 1=Most free, 7 = Least free	Freedom House
POLITY	POLITY2 index from -10 (Most autocratic) to 10 (Most democratic)	Marshall and Jagers
Executive Constraints	Executive constraints index, 1=Least constrained, 7=Most constrained	Marshall and Jagers
<i>Control variables</i>		
Low aid per capita	Indicator variable equal to 1 if aid per capita < \$25 (2008 US\$), 0 otherwise	World Development Indicators
Log GDP per capita (2000 US\$)	Log GDP per capita (2000 US\$)	World Development Indicators
GDP per capita growth (% annual)	Growth in GDP per capita from the previous year (%)	World Development Indicators
Log population	Log population	World Development Indicators
Rural x p(oil)	Rural population (% of total population) in 1972 x p(oil)	World Development Indicators
Autocratic in 1972 x p(oil)	Autocratic in 1972 x p(oil)	Marshall and Jagers
Remittances (% GDP)	Workers' remittances (% GDP)	World Development Indicators
Assassinations	Number of assassinations	Arthur Banks
Terrorist fatalities	Total number of terrorist related fatalities	Global Terrorism Database (START 2014)

Table A2: Sample of countries

Country	Muslim	Country	Muslim
Albania	X	Latvia	
Armenia		Lebanon	X
Bangladesh	X	Lesotho	
Belarus		Liberia	
Benin		Lithuania	
Bhutan		Macedonia, FYR	
Bolivia		Madagascar	
Botswana		Malawi	
Bulgaria		Mali	X
Burkina Faso		Mauritania	X
Burundi		Mauritius	
Cambodia		Moldova	
Cent. African Rep.		Mongolia	
Chad		Morocco	X
Chile		Mozambique	
Comoros	X	Namibia	
Congo, Dem. Rep.		Nepal	
Costa Rica		Nicaragua	
Cote d'Ivoire		Niger	X
Croatia		Pakistan	X
Czech Republic		Panama	
Djibouti	X	Paraguay	
Dominican Republic		Philippines	
El Salvador		Poland	
Eritrea	X	Rwanda	
Estonia		Senegal	X
Ethiopia		Sierra Leone	
Fiji		Slovak Republic	
Gambia, The		South Africa	
Georgia		Sri Lanka	
Ghana		Sudan	X
Guatemala		Swaziland	
Guinea	X	Tajikistan	X
Guinea-Bissau		Tanzania	
Guyana		Togo	
Haiti		Turkey	X
Honduras		Uganda	
Hungary		Ukraine	
Jamaica		Uruguay	
Jordan	X	Zambia	
Kenya		Zimbabwe	
Kyrgyz Republic	X		
Lao PDR			

Notes: Sample of developing, non-oil producing countries, 1960-2008.

Table A3: Summary statistics

Variable	Mean	Std. Dev.	Min	Max
Incidence of civil war (at least 1,000 battle deaths per year)	0.05	0.21	0.00	1.00
Foreign aid (% GDP)	8.21	9.93	-0.55	108.81
Oil price (US\$ 2009)	34.10	21.87	9.94	95.89
Muslim	0.21	0.40	0.00	1.00
Log GDP per capita (2000 US\$)	6.39	1.03	4.13	8.89
GDP per capita growth (% annual)	0.85	6.54	-50.00	90.10
Log population	15.48	1.22	12.75	18.76
Rural population in 1972 (% total population)	69.92	18.33	17.20	97.00
POLITY in 1972	-3.49	6.17	-10	10

Notes: Estimating sample from main 2SLS specification. Number of observations: 2277

Table A4: Political and economic conditions in developing, non-oil producing Muslim and non-Muslim countries in 1972

Variable	Non-Muslim	Muslim	Difference	P-Value
Log GDP per capita (2000 US\$)	6.48	6.02	0.46	0.21
Aid (% GDP)	4.70	4.83	-0.13	0.93
POLITY	-3.77	-5.67	1.89	0.27
Executive constraints	2.75	2.57	0.17	0.78
Rural population (% total population)	70.58	72.49	-1.91	0.72
Incidence of civil war (at least 25 battle deaths per year)	0.15	0.07	0.08	0.40

Table A5: Difference-in-difference estimates of foreign aid (% GDP)

	Non-Muslim	Muslim	Difference	Std Error	Difference-in-difference	Std Error
Before: 1960-1972	4.12	4.57	0.45	(1.024)		
During: 1973-1985	6.57	12.82	6.24	(3.215)*	5.79	(2.643)**
After: 1986-1999	10.81	11.76	0.96	(2.344)	-5.29	(2.288)**
Post: 2000-2008	8.81	9.59	0.78	(2.283)	-0.17	(1.998)

Notes: Standard errors are clustered by country reported in parentheses. * = significant at 10%; ** = significant at 5%; *** = significant at 1%.

Table A6: Difference-in-difference estimates for civil war, accounting for differential trends

Dependent variable: Incidence of civil war (at least 1,000 battle deaths)		
	(1)	(2)
During: 1973-1985	-0.117 (0.101)	-0.063 (0.047)
After: 1986-1999	0.068 (0.043)^	0.115 (0.056)**
Post: 2000-2008	-0.104 (0.091)	-0.086 (0.050)*
Included trends	Muslim x Year	Region FE x Year

Notes: Standard errors are clustered by country reported in parentheses. ^ = significant at 11%; * = significant at 10%; ** = significant at 5%; *** = significant at 1%.

Appendix B: Exporting Islamic Extremism – Extended discussion

Perhaps the most troublesome concern is that oil prices allowed Gulf oil producers to affect the internal politics of non-oil producing Muslim countries, independent of the foreign aid channel. After all, when the price of oil was high, OPEC countries were not only giving money away, they were exporting politics. In particular, there were three major players whose influence benefited from the high oil prices: Ayatollah Khomeini in Iran, Muammar Gaddafi in Libya, and the religious hardliners in Saudi Arabia. Khomeini tried to export the Iranian revolution, Gaddafi funded insurgencies of all sorts, and the Saudis pushed Wahhabi beliefs on Muslims around the world. These policies had the potential to lead to instability down the road in the developing Muslim countries that received the foreign aid windfalls. As we discuss in detail in this appendix, the balance of evidence, however, suggests that none of these three stories biases the findings of the paper.

Any of these stories can pose two specific dangers to the analysis. One, the political interventions on the part of Iran, Libya, or Saudi Arabia could lead to the data being coded in a way that would falsely indicate a rise in civil war (i.e., non-internationalized internal conflict) after the fall of oil prices. Specifically, we are worried that these countries may have been intervening in domestic conflicts at the same time that the developing Muslim countries were receiving aid windfalls.¹ Two, the political interventions of these states during the high oil price years could have planted the seeds for future internal conflict in a channel unrelated to foreign aid. Most saliently,

¹ If Libya, for example, were intervening in an internal war in Niger while the price of oil was high, the war in Niger could have been coded as internationalized at the same time that Niger received a foreign aid bonus from the Gulf states. Then, when the price of oil fell, Libya might have run out of money and stopped intervening—resulting in the conflict being coded as “non-internationalized” just as the foreign aid fell. This would generate the same results that the paper has put forward: a rise in foreign aid coinciding with the fall in non-internationalized internal conflict, then the fall in foreign aid coinciding with a rise in non-internationalized internal conflict.

the export of radical Islam gained steam during the 1970s and early 1980s. Perhaps the ideas promulgated during the high oil price years needed time to germinate before they would realize themselves in domestic instability after the oil price had fallen.

The first danger is the easiest to address. As it turns out, there were only two non-oil-producing Muslim countries that, according to ACD, experienced internal conflict over the period 1973-85 which entailed interventions by other Muslim countries for some duration of the conflict.² They were Lebanon (1982-1986) and Morocco (1975-1989). In 1983 and 1984 Lebanon's conflict is not coded as internal because of intervention on the part of Israel and Syria. It seems reasonable to code this as an internationalized internal conflict: the typical analysis of this conflict is that Lebanon served as the fighting grounds for the war between Israel and the Palestinian Liberation Organization as well as Syria.³

In the ACD, Morocco experienced civil war from 1975-1989. For the first 5 years, this conflict was coded as internationalized (only in 1976 by ACD though) because of Mauritanian involvement in putting down the rebel group Polisario's secession aims for Western Sahara. After a coup in Mauritania, the new government signed a cease-fire with Polisario and granted them control over disputed territory. From 1980-89 the conflict between the Moroccan government and the rebels, ACD codes the conflict as internal.

To make sure the results are not driven by these two conflicts, we repeat our difference-in-difference analysis dropping Lebanon, Morocco, or both. We report the difference-in-difference estimates in Table 5, columns 2-4. As it turns out, the double differences remain statistically significant, indicating that Muslim countries' involvement in the internal conflicts of other Muslim

² Certainly, this understates Libyan involvement. Geoff Simons (1996, 281) cites an Israeli intelligence report that in 1986 Gaddafi was supporting some "fifty terror organizations and subversion groups, in addition to more than forty radical governments in Africa, Asia, Europe and America." If all these interventions had been coded as internationalized, however, the results could be biased towards seeing all domestic conflict as internationalized.

³ Murphy 2002, 49-57

countries during the period of high oil prices cannot explain the subsequent rise in internal conflict. Moreover, the 2SLS results remain unchanged in specifications that exclude observations from Lebanon, Morocco or both countries.

The second danger, that Islamic political influences during the period 1973-1985 planted the seeds for future internal conflict, is much harder to discount. Evidence, however, suggests that the surge in Islamism and the increasing power and political activism of traditionalist religious groups is an outcome rather than a cause of the political economy of the state that is fed by foreign aid.

For example, during 1979 in Iran, Ayatollah Khomeini led a successful revolution that seized power from the American-backed shah whose regime had ignored crucial segments of the populace. The Iranian revolution spawned what Gilles Kepel calls a “ripple effect”:

Regimes in Muslim countries viewed the shah’s fate as an object lesson, and many of them became ostentatiously religious, in the hope of avoiding what had befallen the Persian monarch, who had never bothered to hide his contempt for the “men in black.” Governments sought to head off social movements that, by annexing the vocabulary of Islam, threatened to unite everyone with an axe to grind and bring down the established power. The ulemas, having been steadily harassed during the nationalist period, now found themselves fawned upon by princes eager for the Islamic legitimacy their blessing could confer. In return, the clerics demanded greater control over culture and morals. (2002, 118)

In other words, the Islamic Revolution in Iran had an indirect, positive effect on Islamism in other Muslim countries (and potentially non-Muslim countries where the successes in Iran could be adapted). Governments, feeling distant from and threatened by their constituencies that they were otherwise repressing or buying off with the foreign aid rents, made concessions to the segment of the populace that was most threatening. In this case, that segment was religious, but there are other examples during the same time period where the segment was not religiously defined, as in Somalia. The foreign aid windfall could certainly have been used to help make these concessions.

With respect to the spread of Wahhabism from Saudi Arabia, Kepel acknowledges the shift in power in the Muslim world to the Gulf states upon the beginning of the oil embargo. Yet he is skeptical that this wealth was able to influence any fundamental change in developing Muslim countries:

[Saudi Arabia's] immense financial generosity had won it a following that was more venal than sincere, and the Wahhabization it wished to implement had tended to fluctuate with the price of a barrel of oil. (73)

An example of the failure of Saudi's export of Islam can be seen in the far west of Africa. In Senegal, stable with the exception of the separatist Casamance region in the south (which is not an Islamist movement), the influence of fundamentalist Islam was easily controlled:

When Islamism began to appear in Senegal in the late 1970s among students who were inspired by the Iranian revolution or educated in Arab universities in the Middle East, it immediately collided with the power of the marabouts. Radical Islamism was allowed a hearing only so long as it did no harm to the marabouts' interests; as soon as the movement showed signs of doing so, the religious leaders squashed it. (Kepel, 2002, 50)

Likewise, in Morocco—where King Hassan II had claimed to be a direct descendent of the prophet Mohammed—the reach of Wahhabism was limited. The Islamist movement encountered “difficulty in contriving a political rupture with the state without calling into question the monarch's sacredness, a taboo to which the mass of the populace was resolutely opposed.”⁴

Even if the Islam exported by Saudi Arabia was not inherently successful in infiltrating the dominant practice of Islam in recipient countries, it may have encouraged radical groups at the fringe of society. This is equivalent to saying that the level of extremism increased as a result of Saudi influence. If such a story is correct, this implies that the analysis in the paper thus far ignores an important factor: religious extremism. In order to measure the effect of aid on instability independent of extremism, one must control for the latter.

To check whether this indeed might be the case, we use assassinations as a(n admittedly imperfect) proxy for extremism to test whether extremism produced alongside the foreign aid windfalls can explain the patterns of conflict. We repeat our empirical analysis controlling for each country's annual number of assassinations (available from Banks 2010) and terrorist related fatalities (from START 2014). Controlling separately for assassinations and terrorist fatalities (Table 2, columns 6 and 7) does not appreciably change the pattern between the foreign aid

⁴ Kepel 2002, 55

windfall and high intensity, two-sided civil war. The difference-in-difference estimates remain largely unchanged (Table 5, columns 5 and 6). On balance, accounting for the potential effects associated with the “exporting” of Islamic extremism does not affect our substantive findings.

In sum, the evidence supports the notion that movements in Islamism among developing Muslim nations—though coinciding with oil price movements and Saudi foreign policy—were a fundamental part of those nations’ internal politics and the consequences of elites otherwise repressing the population. The robustness checks also suggest that the specificities of coding the data cannot alone explain the pattern in conflict, nor can the omission of religious extremism that might have been independently generated by the foreign policies of Iran and Saudi Arabia in particular.