Empirical Analysis of Foreign Aid from the Gulf States

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Outline

Why are the Gulf States interesting?

1. Historical very generous donors
   - Provide aid since 1973 (Villanger 2007)
   - 1.5% of GNI between 1974 and 1994 (Neumayer 2003)
2. ODA from the Gulf States seems to work differently in comparison to DAC countries
   - Promote Muslim and Arab solidarity (Villanger 2007)
3. Statistical analysis regarding their motives relatively rare
   - Lack of data
   - More comprehensive data was published only recently (Colombo & Ragab 2017)
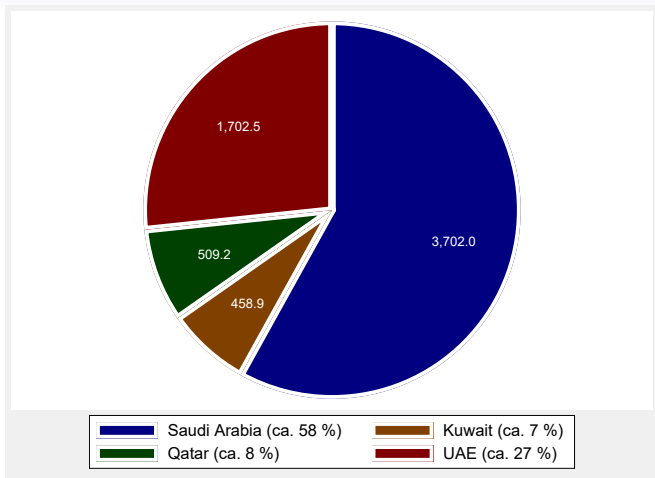
Top 14 Donors – Volume (2019 - 2021)

Place	Donor	Share
1	United States	24.06
2	Germany	16.59
3	United Kingdom	9.21
4	France	7.17
5	Japan	6.98
6	Türkiye	6.79
(7)	Gulf States	4.68
7	Canada	3.06
8	Sweden	2.87
9	Netherlands	2.75
10	Norway	2.73
11	Saudi Arabia	2.55
12	Switzerland	2.05
13	Australia	2
14	Korea	1.5

Data from OECD (2023*a*)

Number of Recipients (2019 - 2021)

- Most ODA is provided bilaterally (ca. 90%) (OECD 2023*b*)
- Number of countries each donor provided aid to:
  - Saudi Arabia: 116
  - Kuwait: 43
  - Qatar: 97
  - UAE: 125
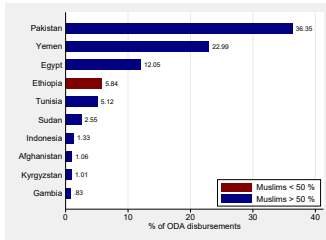
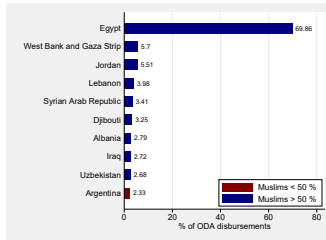# Mean Volume in Mio. US$ and Share (2019 - 2021)

Saudi Arabia (ca. 58 %) Kuwait (ca. 7 %)
Qatar (ca. 8 %) UAE (ca. 27 %)

Data from OECD (2023*a*)

Total Mean: 6,372.6 mio US$

Top 10 Recipients (2019 - 2021)

Saudi Arabia

Country	% of ODA disbursements
Pakistan	36.35
Yemen	22.99
Egypt	12.05
Ethiopia	5.84
Tunisia	5.12
Sudan	2.55
Indonesia	1.33
Afghanistan	1.06
Kyrgyzstan	1.01
Gambia	.83

Muslims < 50 %
Muslims > 50 %

Kuwait

Country	% of ODA disbursements
Egypt	69.86
West Bank and Gaza Strip	5.7
Jordan	5.51
Lebanon	3.98
Syrian Arab Republic	3.41
Djibouti	3.25
Albania	2.79
Iraq	2.72
Uzbekistan	2.68
Argentina	2.33

Muslims < 50 %
Muslims > 50 %

Qatar

Country	% of ODA disbursements
West Bank and Gaza Strip	59.19
Somalia	9.25
Syrian Arab Republic	4.55
Yemen	3.8
Afghanistan	2.11
Türkiye	1.75
Morocco	1.63
Tunisia	1.59
Sudan	1.57
Pakistan	1.47

Muslims < 50 %
Muslims > 50 %

UAE

Country	% of ODA disbursements
Sudan	28.45
Yemen	15.49
Jordan	7.96
Egypt	5.71
Mali	5.68
Eritrea	4.22
Pakistan	3.72
West Bank and Gaza Strip	3.22
Serbia	3
Afghanistan	2.83

Muslims < 50 %
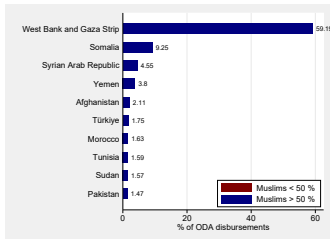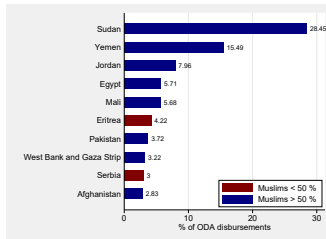Muslims > 50 %

Tested Motives

1. Cultural motives
   - Arab and Muslim solidarity
2. Political considerations
   - Political alignment
3. Economical interests
   - Trade relations
4. Altruistic motives
   - Recipient needs

Variables

- Dependent variable:
  - Mean of ODA net disbursements between 2019 and 2021
- Independent variables − Recipient need:
  - GDP per capita
  - Dummy variable for war
  - Risk measurement (exposure and vulnerability to extreme natural events and climate change)
  - Population size
- Independent variables − Donor interest:
  - Muslim percentage of a country
  - Dummy variable for Arab countries
  - United Nation General Assembly voting differences
  - Sum of bilateral imports and exports per year
  - Control of Corruption Index

Methodology

- 135 countries out of 142 ODA eligible countries in analysis
- Problem: Many zeros in dependent variable
- Solution: Two estimation steps
  - Gate keeping stage − logistic regression
  - Level stage − OLS regression (including only countries, that got a positive amount of aid)
- Both regressions for each donor individually and for all together as a collective entity

Methodology

- Binary dependent variable for logistic regression (1 if country got aid)
- High distribution skewness in dependent variable (OLS)
  -> log-transformation
- Log-transformation of some independent variables
  -> more linear relation
- Quadratic term when relation with independent variable was not linear
- Heteroskedastisity robust variance estimation for Saudi Arabia and collective model (OLS)
- Error terms were approximately normal distributed after transformations (OLS) -> more reliable inference

Logistic Regression Results

	Total	Saudi Arabia	Kuwait	Qatar	UAE
log_GDPpc	-0.608* [0.100]	-0.589 [0.333]	-0.616** [0.024]	0.0000377 [1.000]	-0.186 [0.629]
war	***	***	-1.491** [0.036]	0.669 [0.604]	***
risk	0.145** [0.040]	0.0625 [0.388]	-0.0465 [0.133]	-0.0571 [0.132]	0.0371 [0.432]
arab	-1.814 [0.262]	***	1.318 [0.123]	-0.761 [0.678]	-0.838 [0.468]
islam_pct	1.973 [0.185]	160.7** [0.043]	1.377** [0.046]	4.698** [0.014]	-0.501 [0.670]
UNGAVD	0.499 [0.453]	-0.292 [0.770]	0.331 [0.518]	0.609 [0.338]	-0.389 [0.549]
log_trade	0.445** [0.024]	0.470*** [0.008]	-0.0246 [0.808]	-0.0703 [0.314]	0.243 [0.285]
corruption	-0.221 [0.646]	1.174 [0.128]	0.493 [0.212]	0.872 [0.104]	-0.163 [0.766]
log_pop	-0.534* [0.056]	0.378 [0.185]	0.338 [0.107]	1.282*** [0.000]	-0.280 [0.369]
pseudo R^2	0.197	0.652	0.169	0.453	0.040
p	0.00750	8.39e-14	0.000862	2.07e-12	0.919
N	135	135	135	135	135

p-values in brackets
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

OLS Regression Results

	Total	Saudi Arabia	Kuwait	Qatar	UAE
log_GDPpc	-0.326*	-0.913***	0.685**	-0.146	-0.129
	[0.062]	[0.002]	[0.045]	[0.486]	[0.560]
war	0.357	0.432	-0.514	0.517	0.849
	[0.385]	[0.478]	[0.596]	[0.304]	[0.113]
log_risk	-0.134	-0.291	0.0949	-0.273	-0.107
	[0.530]	[0.310]	[0.775]	[0.228]	[0.629]
arab	1.207*	1.078	1.502	2.557***	1.041
	[0.055]	[0.230]	[0.109]	[0.000]	[0.167]
islam_pct	5.587***	10.71***	1.591**	4.902**	2.379***
	[0.003]	[0.000]	[0.029]	[0.023]	[0.000]
islam_pct^2	-2.782	-7.084***		-3.896*	
	[0.150]	[0.009]		[0.075]	
UNGAVD	-0.0752	-0.480	-0.0922	1.106**	-0.293
	[0.853]	[0.450]	[0.870]	[0.011]	[0.520]
log_trade	0.144	0.208*	-0.0685	-0.0624	0.0861
	[0.106]	[0.069]	[0.533]	[0.316]	[0.517]
corruption	0.463	0.353	0.485	1.782***	0.0731
	[0.122]	[0.467]	[0.278]	[0.005]	[0.823]
corruption^2				0.989**	
				[0.028]	
log_pop	0.362***	0.528**	0.431**	0.835***	0.234
	[0.006]	[0.011]	[0.047]	[0.000]	[0.190]
R^2	0.669	0.595	0.533	0.496	0.452
p	2.63e-21	3.18e-18	0.00153	1.02e-08	1.49e-11
N	117	114	42	95	123

p-values in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Evaluation of Tested Motives

1. Cultural motives:
   - Only Qatar seems to have a bias toward Arab countries in their level stage
   - All donors have a bias towards Muslim countries

2. Political considerations:
   - Only Qatar seems to favor countries with more similar voting patterns in the level stage

3. Economical interests:
   - Trade relations only plays a role for Saudi Arabia and for the Gulf States as a collective entity in the gate keeping stage and for Saudi Arabia in the level stage

4. Altruistic motives:
   - Income of the recipients plays only a role for Kuwait in the gate keeping stage and for Saudi Arabia and Kuwait (other direction as expected) in the level stage
   - War and the risk does not change the amount of aid a country got, but each country that had an ongoing war, got aid from Saudi Arabia and UAE

Conclusion

- Gulf States differ in their aid allocation patterns
    - Number of countries they provided aid to differs a lot
    - Different variables were significant -> different motives
- Recipient needs seem to play a role for some of the donors, but are not the most impotent factor
- One striking similarity and by far the most impotent factor: **Muslim solidarity**

Variables with Sources

- Dependent variable:
  - Mean of ODA net disbursements between 2019 and 2021 (OECD 2023*a*)
- Independent variables − recipient need:
  - GDP per capita (The World Bank 2019*b*) & (Johnson & Grim 2023*a*)
  - Dummy variable for war (Berghof Foundation 2022)
  - Risk measurement (Bündnis Entwicklung Hilft 2019)
  - Population size (The World Bank 2019*a*)
- Independent variables − donor interest:
  - Muslim percentage of a country (Maoz & Henderson 2013) & (Johnson & Grim 2023*b*)
  - Dummy variable for Arab countries (European Union n.d.)
  - United Nation General Assembly voting differences (Voeten et al. 2022)
  - Sum of bilateral imports and exports per year (UN Comtrade n.d.)
  - Control of Corruption Index (Kraay et al. 2010)

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Thank you for your attention!
Do you have any questions?