ASSESSING THE FACTORS AFFECTING THE COUNTRY ALLOCATION OF OFFICIAL DEVELOPMENT ASSISTANCE FLOWS TO THE HEALTH SECTOR FROM THE G7 COUNTRIES TO DEVELOPING EUROPEAN COUNTRIES

Seminar paper

International Development Finance:
Applied Research Using Stata

Submitted by: Alisa Lyubina

Seminar leaders: Prof. Dr. Andreas Fuchs, Felix Turbanisch, M. A.

MOTIVATION

- Health sector improvement -> **long-term economic growth**
- G7 countries: population aging -> additional burdens on healthcare system -> investments in medicine
- Developing countries: cutting poverty, higher-quality workforce -> increase in productivity and economic growth
- External factors

RESEARCH QUESTION

What factors have a significant impact on the distribution of Official Development Assistance flows to the health sector from G7 countries to developing European countries?”

HYPOTHESES

- **H1:** The recipient countries with **lower socio-economic indicators attract more Official Development Assistance flows** to the health sector
- **H2:** An increase in the **donor countries health indicators** has a **greater absolute effect** on the Official Development Assistance flows to the health sector **than** similar changes in the **recipient countries health indicators**

SAMPLE AND METHODOLOGY

- **Donors**: Canada, France, Germany, Italy, Japan, the United Kingdom, the United States
- **Recipients**: Albania, Belarus, Bosnia y Herzegovina, Croatia, Cyprus, Malta, Moldova, Montenegro, North Macedonia, Serbia, Slovenia, Turkey, Ukraine
- **Observation period**: 1995-2023
- **Unit of observation**: pair of countries
- **Evaluation method**: panel regression model with country fixed effects

REGRESSION EQUATION

$$oda\_flows_{ijt} = \beta_0 + \beta_1 donor\_gdp_{it} + \beta_2 recipient\_gdp_{jt} + \beta_3 donor\_pop_{it} + \beta_4 recipient\_pop_{jt} + \beta_5 donor\_poverty_{it} + \beta_6 recipient\_poverty_{jt} + \beta_7 donor\_inflation_{it} + \beta_8 recipient\_inflation_{jt} + \beta_9 donor\_int\_rate_{it} + \beta_{10} recipient\_int\_rate_{jt} + \beta_{11} donor\_life\_exp_{it} + \beta_{12} recipient\_life\_exp_{jt} + \beta_{13} donor\_mortality_{it} + \beta_{14} recipient\_mortality_{jt} + \beta_{15} donor\_old\_depend_{it} + \beta_{16} recipient\_old\_depend_{jt} + \beta_{17} donor\_young\_depend_{it} + \beta_{18} recipient\_young\_depend_{jt} + \beta_{19} donor\_tuberc_{it} + \beta_{20} recipient\_tuberc_{jt} + \varepsilon_{ijt}$$

VARIABLES

- **Dependent variable**: ODA flows from donor country to recipient country
- **Socio-economic regressors**: real GDP der capita, population, poverty rate, inflation, interest rate
- **Healthcare regressors**: life expectancy at birth, infant mortality rate, old age dependency ratio, young age dependency ratio, incidence of tuberculosis

FIXED EFFECTS MODEL

Variable	Coef.	Std. Err.	P>|t|	
donor_gdp	25.146	12.713	0.048	**
recipient_gdp	-9.777	21.098	0.643	
donor_pop	0.000	0.000	0.893	
recipient_pop	0.000	0.000	0.000	***
donor_poverty	0.027	0.013	0.039	**
recipient_poverty	0.001	0.006	0.905	
donor_inflation	0.133	0.042	0.002	***
recipient_inflation	-0.002	0.002	0.244	
donor_int_rate	0.076	0.045	0.092	*
recipient_int_rate	-0.018	0.009	0.050	**
donor_life_exp	-0.672	0.122	0.000	***
recipient_life_exp	0.317	0.065	0.000	***
donor_mortality	-0.195	0.222	0.381	
recipient_mortality	-0.143	0.029	0.000	***
donor_old_depend	0.023	0.021	0.272	
recipient_old_depend	-0.048	0.029	0.099	*
donor_young_depend	0.068	0.084	0.418	
recipient_young_depend	0.036	0.022	0.100	*
donor_tuberc	-0.005	0.013	0.724	
recipient_tuberc	-0.001	0.003	0.753	
const	31.808	10.316	0.002	***

FIXED EFFECTS MODEL WITH ONE-YEAR LAG

Variable	Coef.	Std. Err.	P>|t|	
donor_gdp	30.992	14.074	0.028	**
recipient_gdp	-14.861	22.562	0.510	
donor_pop	0.000	0.000	0.833	
recipient_pop	-0.000	0.000	0.000	***
donor_poverty	0.014	0.014	0.330	
recipient_poverty	0.001	0.007	0.909	
donor_inflation	0.156	0.047	0.001	***
recipient_inflation	-0.006	0.002	0.001	***
donor_int_rate	0.109	0.047	0.020	**
recipient_int_rate	-0.041	0.009	0.000	***
donor_life_exp	-0.589	0.127	0.000	***
recipient_life_exp	0.272	0.067	0.000	***
donor_mortality	-0.423	0.236	0.073	*
recipient_mortality	-0.130	0.031	0.000	***
donor_old_depend	0.023	0.022	0.302	
recipient_old_depend	-0.062	0.031	0.043	**
donor_young_depend	0.055	0.089	0.539	
recipient_young_depend	0.065	0.023	0.004	***
donor_tuberc	0.001	0.013	0.992	
recipient_tuberc	-0.005	0.003	0.140	
const	28.394	10.706	0.008	**

FIXED EFFECTS MODEL WITH FIVE-YEAR LAG

Variable	Coef.	Std. Err.	P>|t|	
donor_gdp	12.728	16.668	0.445	
recipient_gdp	-51.890	28.718	0.071	*
donor_pop	0.000	0.000	0.434	
recipient_pop	-0.000	0.000	0.013	**
donor_poverty	-0.040	0.020	0.044	**
recipient_poverty	-0.001	0.008	0.862	
donor_inflation	0.192	0.061	0.002	***
recipient_inflation	-0.004	0.002	0.016	**
donor_int_rate	0.169	0.054	0.002	***
recipient_int_rate	-0.027	0.010	0.007	***
donor_life_exp	-0.523	0.187	0.005	***
recipient_life_exp	0.595	0.088	0.000	***
donor_mortality	-0.755	0.316	0.017	**
recipient_mortality	-0.101	0.041	0.013	**
donor_old_depend	-0.004	0.028	0.883	
recipient_old_depend	-0.093	0.044	0.034	**
donor_young_depend	-0.027	0.101	0.787	
recipient_young_depend	0.121	0.029	0.000	***
donor_tuberc	-0.008	0.015	0.571	
recipient_tuberc	-0.002	0.004	0.654	
const	1.731	15.753	0.912	

CONCLUSION

- **H1**: is not confirmed
- **H2**: has partial empirical support
- **Key points**:
  - Donors tend **not to direct** aid to countries with **unfavourable macroeconomic conditions**
  - Donors are more **likely to allocate** assistance to countries with **long-term sustainable progress in health sector**
  - **Effect of donor countries**' indicators on aid allocation **is stronger**
  - **Demographic context** is important

CONCLUSION

The allocation of aid does not fully correspond to the theoretical objectives of Official Development Assistance

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Q&A SESSION