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Does financial aid exacerbate corruption and hinder economic growth in developing countries?



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# Introduction

Excessive reliance on external financial support might discourage local governance reforms and economic development by making governments reliant on external funds instead of internal revenue generation



# Research Question

Does financial aid exacerbate corruption and hinder economic growth in developing countries?

#### Literature Review

#### Foreign Aid Effectiveness

#### CRITIQUES -

- Aid creates dependency (Gulrajani, 2011)
- Aid fosters corruption (Knack, 2001)
- No link to growth (Vasquez, 1998; Boone, 1996)
- Aid should be driven by local actors, not external planners (Easterly, 2006)
- Aid worsens economic conditions (Moyo, 2009)

#### CONDITIONS

- Good governance & policy (Burnside & Dollar, 2000)
- Political stability (Islam, 2005)
- Post-conflict recovery:
  - Aid supports rebuilding efforts (Collier, 2011)
  - Persistent gains in local public goods and modest improvements in institutions (communitydriven development program in Sierra Leone) (Casey et al., 2012, Casey et al., 2023)

#### **New Perspectives**

#### MEASUREMENT.

- Traditional measures of aid are inaccurate; new methods are proposed (Chang et al., 1998)
- Shift in development
   Thinking: Evolution from broad plans to targeted, self-sufficiency projects (Edwards, 2015)

## The debate between William Easterly and Dambisa Moyo

#### Easterly: Aid and Accountability

#### Moyo: Dead Aid and Economic Independence

## ACCOUNTABILITY PROBLEM

- Lack of accountability: wasted resources and limited impact on poverty reduction
- Top-down approaches: external solutions without understanding local needs
- Encouraging dependence
- Institutional weakness

#### SOLUTION

• Easterly emphasizes bottom-up, locally-driven approaches that prioritize institutional accountability and individual empowerment of local actors as more effective alternatives to traditional aid.

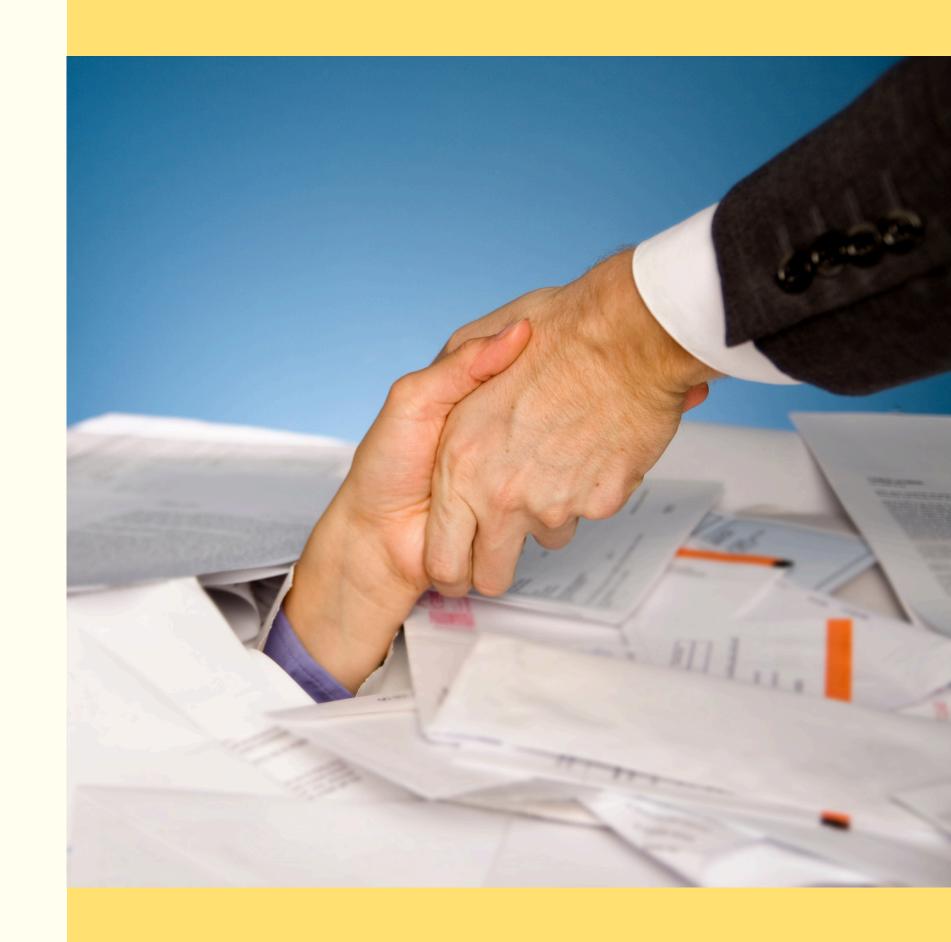
## DEPENDENCE PROBLEM

- Aid's role in sustaining corruption: aid funds often end up in the hands of corrupt elites
- Stifling private investment: an artificial reliance on external funding
- Aid creates a cycle of dependency

#### -SOLUTION-

- Moyo focuses on weaning countries off aid dependency, arguing for a shift toward market-based financing and global economic integration.
- Moyo advocates for trade, microfinance, and accessing international capital markets.

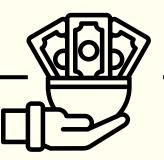
# Context



**Official Development Assistance (ODA)** represents resource flows aimed at promoting economic development and welfare in developing countries, as defined by the OECD's Development Assistance Committee (DAC)

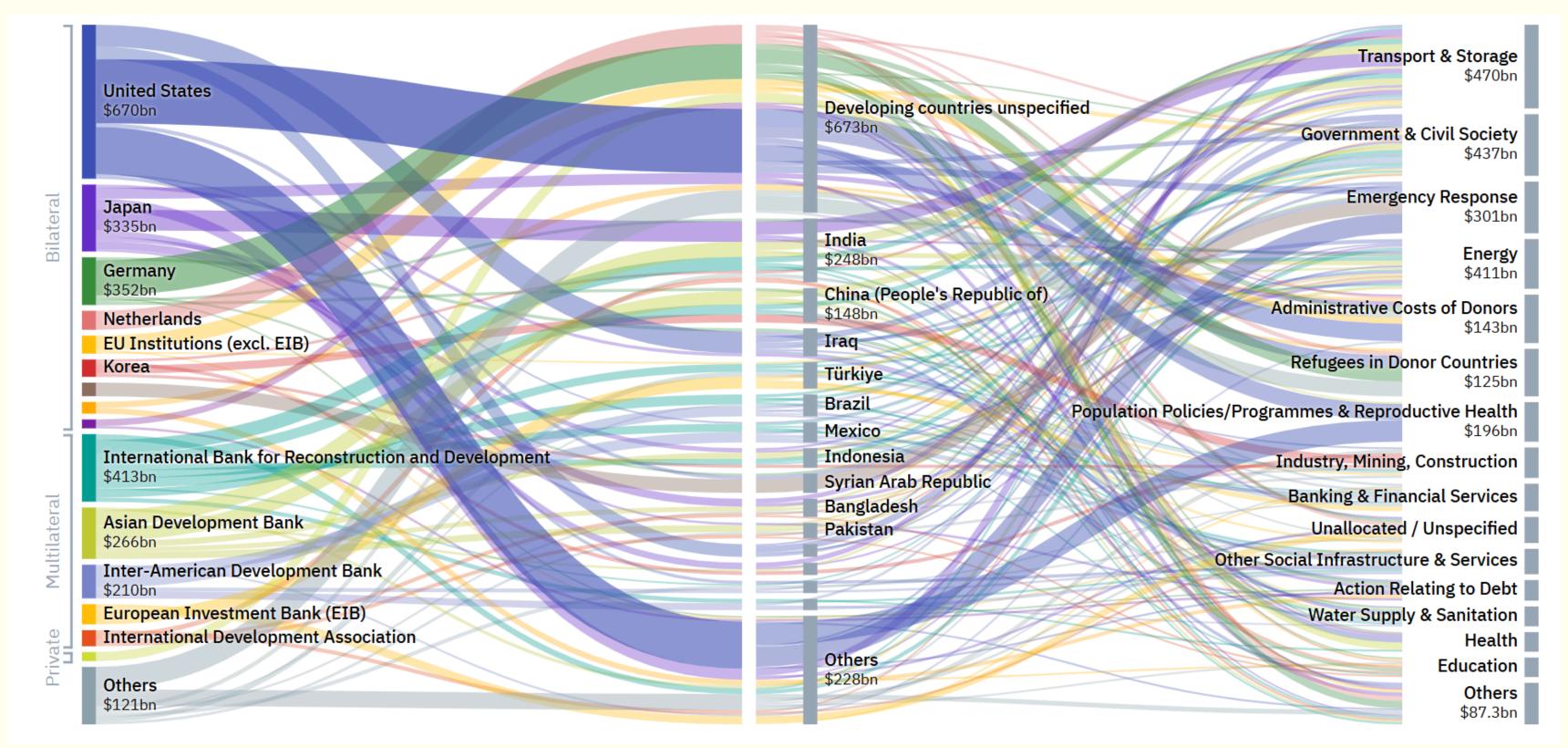


- ODA is provided by official agencies under concessional terms, meeting specific grant element thresholds
- Since 2018, ODA reporting has transitioned to a grant-equivalent measure, enhancing transparency in donor efforts.



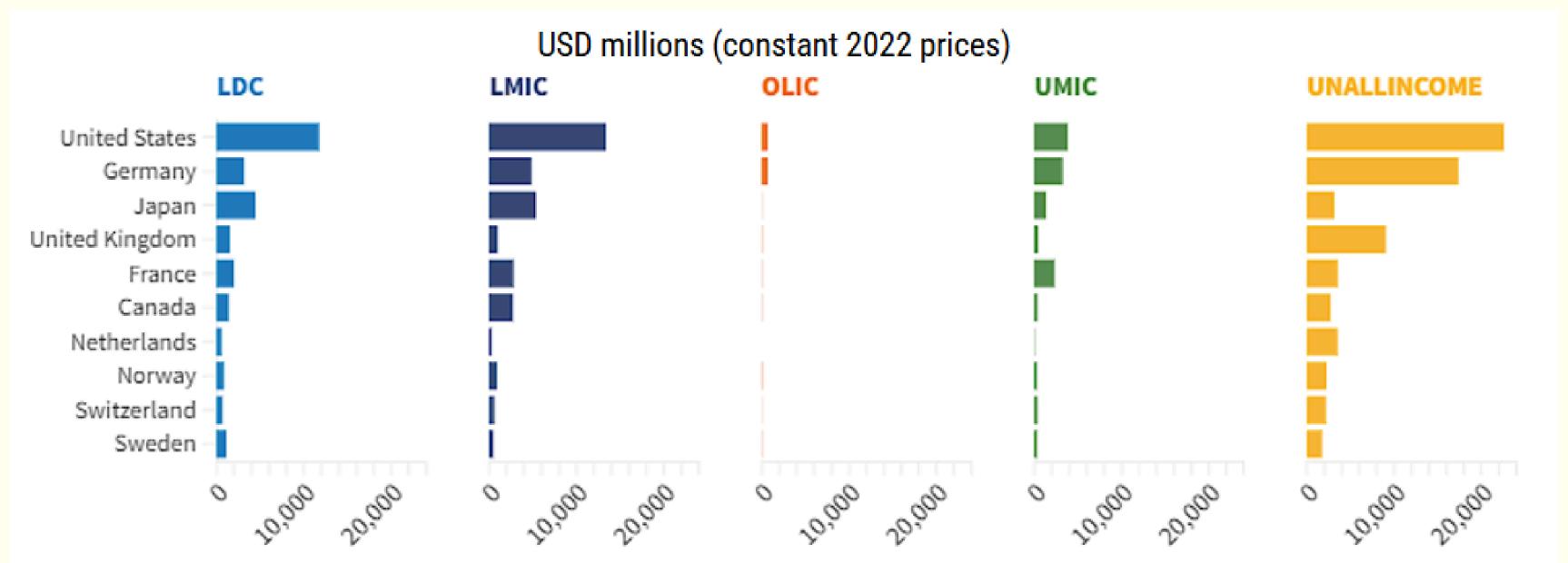
- Exclusions include:
  - military aid,
  - o anti-terrorism activities, and
  - most peacekeeping costs
- ensuring ODA remains focused on developmental goals

# All Donors to All Recipients for All sectors & objectives during 2002-2021



Source: Aid Atlas

## Net bilateral ODA by income group and by top 10 DAC countries in terms of volume, 2022

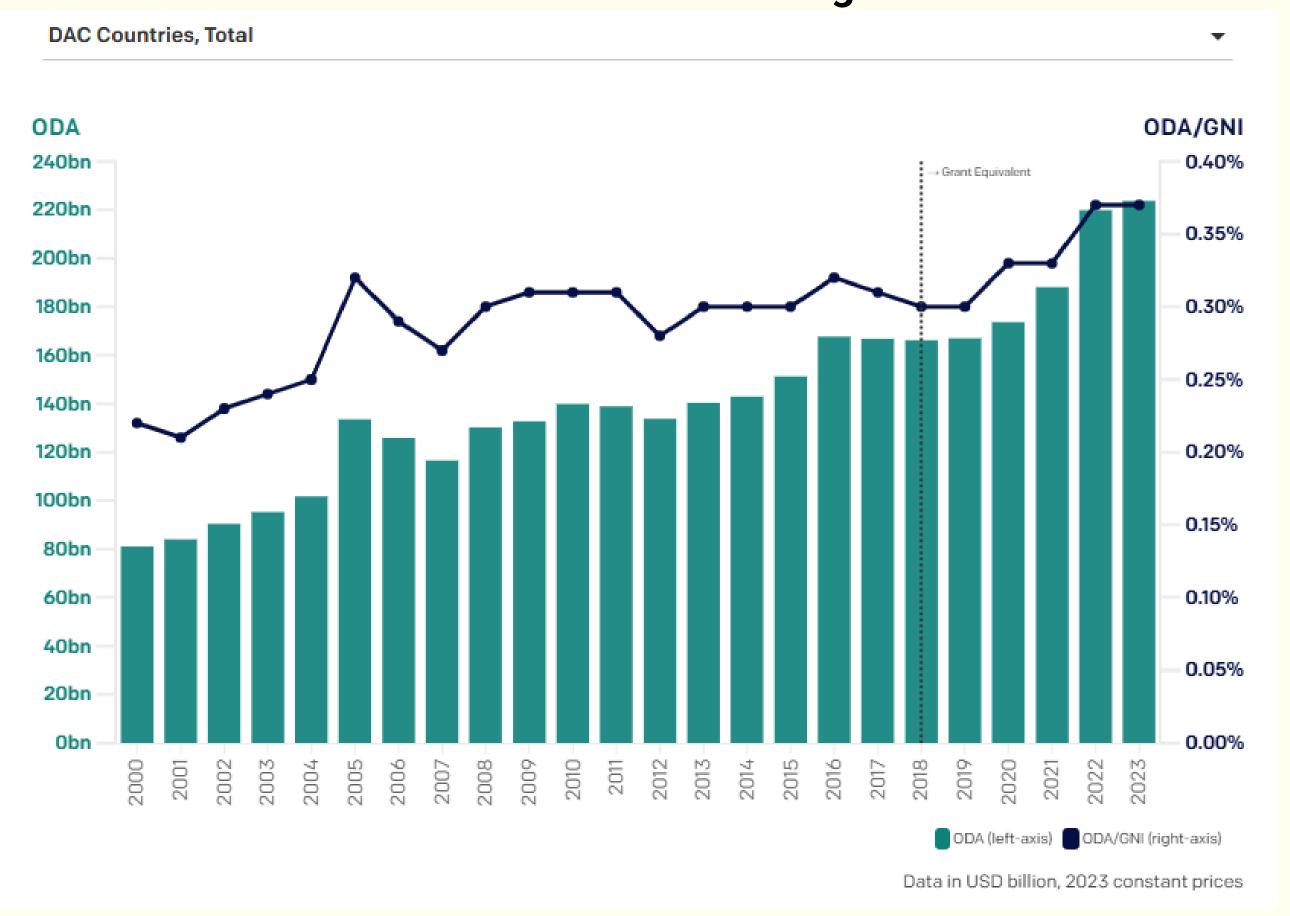


Note: LDCs = Least developed countries; LMICs = lower-middle income countries; OLICs = other low-income countries and UMICs = upper middle-income countries; UNALLINCOME = unallocated by country within income groups.

Source: OECD Data Explorer (2024), Aid (ODA) disbursements to countries and regions [DAC2A] (database).

Source: <u>OECD-Library.org</u>

# Aid has increased significantly in recent years but is far from meeting needs



Source: <u>data.one.org</u>

# Data

3000 9 1951	1286
300040 14000	981
	50054
355 510	478
355 51946 461	4763
462 4764981 4613	3433
51781 4311894	321
54816 1845 136	578
1729 3468778 1	90
655014 29	
13 1682 5161	
9 156453 1616	9
9 156453 1616	5/
1682 32027	
681 1808	
31000	
31862 1808	
1643	15
1643 1011	
145.	_ 5
1451 156984	
846 808	8
046/	

# Data

- 27 countries: 2006-2018
- Manually compiled from multiple datasets

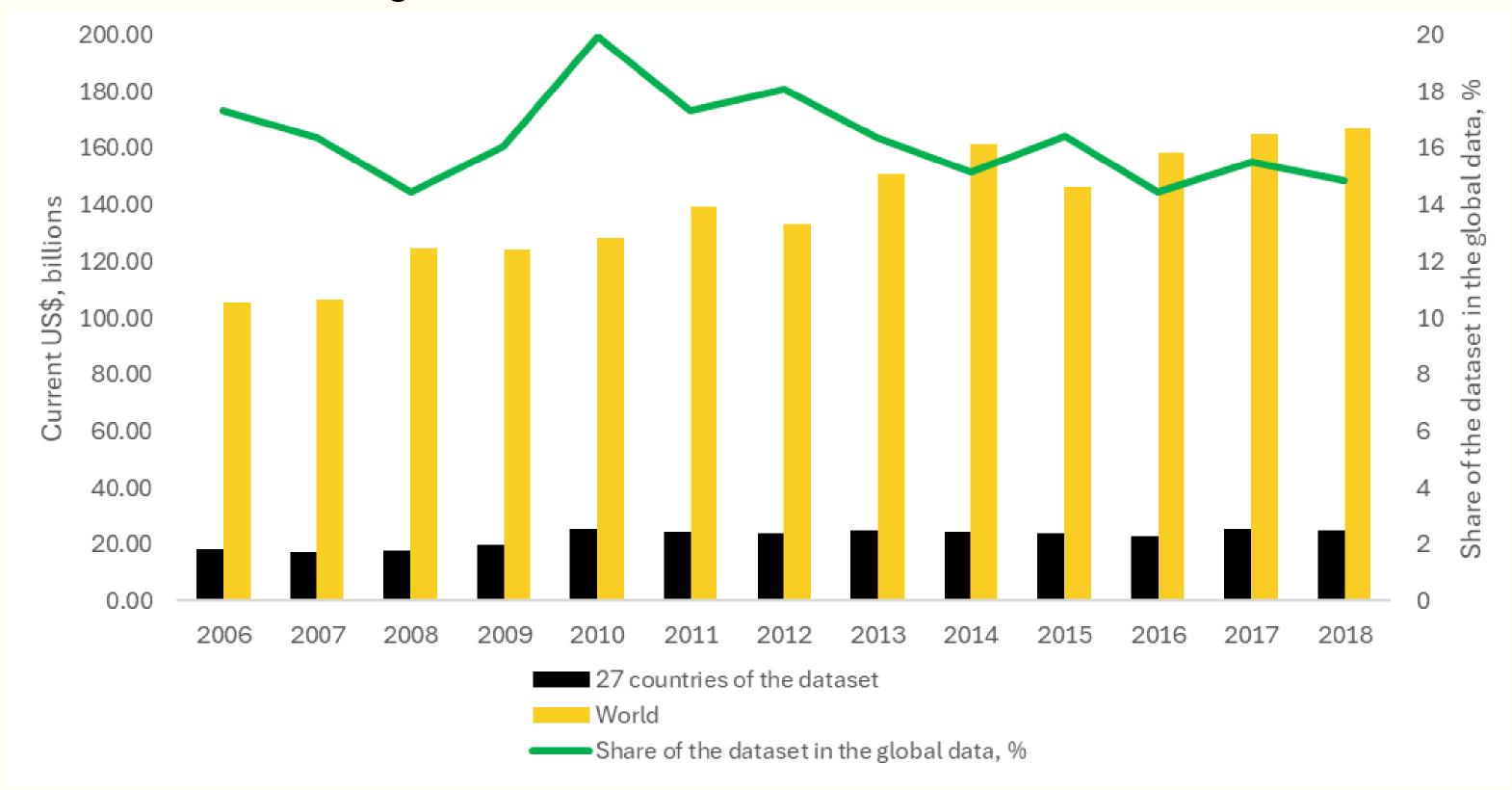
World Bank
World
Development
Indicators





World Bank Governance Indicators

# 27 Countries in Our Dataset Represent an Average of 16% of Global ODA in current US\$



Source: Compiled by the authors from the World Bank dataset, indicator: DT.ODA.ALLD.CD

# Model



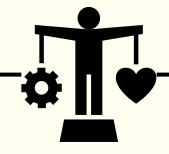
### Inspiration

• We draw inspiration from Burnside and Dollar (2001) and adapt their model

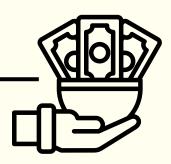
(6) 
$$g_{it} = y_{it}\beta_y + a_{it}\beta_a + \mathbf{p}'_{it}\beta_p$$
$$+ a_{it}(\mathbf{p}'_{it}\beta_p)\theta_1 + \mathbf{z}'_{it}\beta_x + \varepsilon^g_{it}.$$

- o Burnside and Dollar use policies to study the effect of Aid on growth
- We use political and governance factors to study the effect of Aid on growth and Corruption
  - Rule of Law; Voice; Political Stability; Corruption, etc...
    - Normalized for each country

# Hypothesis: aid impacts growth, but its effectiveness depends on the recipient country's economic policies



 In nations with sound policies, aid amplifies growth by complementing these frameworks



• In economies with significant distortions, aid is often misused in unproductive government spending

### Model 1

$$g_{\frac{GDP}{Capita},it}(CurrentUS\$) = \beta_1 \frac{\text{aid}}{\text{GDP}}_{it} + \beta_2 g_{\text{pop},it} + \beta_3 \text{inflation}_{\text{annual},it} + \beta_4 \frac{\text{trade}}{\text{GDP}}_{it} + \beta_5 \frac{\text{GFCF}}{\text{GDP}}_{it} + \beta_6 \frac{\text{M2}}{\text{GDP}}_{it} + \gamma_i + \delta_t + \lambda_{it} + \epsilon_{it}$$

### Model 2

$$\text{corruption}_{it} = \beta_1 \frac{\text{aid}}{\text{GDP}_{it}} + \beta_2 g_{\text{pop},it} + \beta_3 \text{inflation}_{\text{annual},it} + \beta_4 \frac{\text{trade}}{\text{GDP}_{it}} + \beta_5 \frac{\text{GFCF}}{\text{GDP}_{it}} + \beta_6 \frac{\text{M2}}{\text{GDP}_{it}} + \gamma_i + \delta_t + \lambda_{it} + \epsilon_{it}$$

• Gamma: Country-fixed effects

• Delta: Year-fixed effects

• Lambda: interaction term

## Different regressions

- ullet Starting with most simple possible regression for both models:  $g_{rac{GDP}{Capita},it}(CurrentUS\$) = eta_1rac{ ext{aid}}{ ext{GDP}}_{it} + \epsilon_{it}$ 
  - o Effect of aid as percentage of GDP on growth of GDP/Capita and Corruption
    - Then adding time and country FE one at a time to see what changes (if anything changes)
- Repeat operation step by step adding independent variables one by one
  - o Population growth, Inflation, Trade, etc...
- To end up with "final" regression
- Helps us assess what independent variables and which FEs have more effect on growth

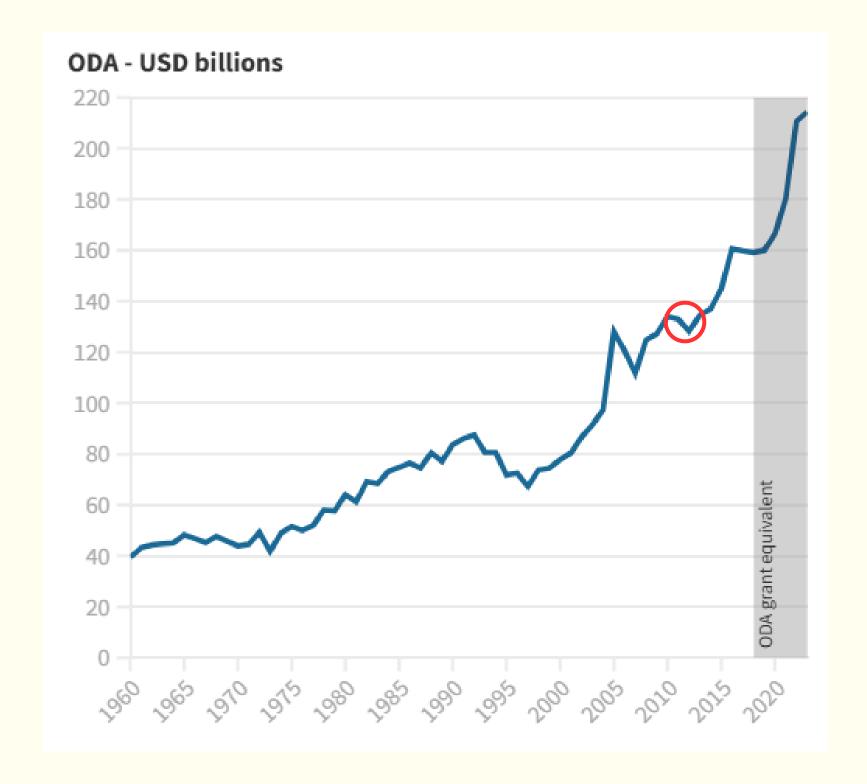
### IV

- There are endogeneity concerns, such as reverse causality (e.g., countries with poor economic growth or high corruption levels attract more ODA) or omitted variable bias (e.g., unobserved governance quality affecting both ODA and outcomes).
- Instrument that influences ODA allocation but does not directly affect economic growth or corruption (except through ODA):
  - Historical ties between donor and recipient countries (For example, in 2021, <u>France</u> enacted new legislation on programming of development cooperation which stipulates that it will <u>focus its bilateral development assistance, and</u> <u>particularly grants, on LDCs, and especially those in sub-Saharan Africa</u>)
  - Donor-specific aid policies or priorities that are exogenous to recipient outcomes
- Advantages:
  - o Provides causal estimates even in the presence of endogeneity
- Challenges:
  - Results depend heavily on the instrument's validity (relevance and exclusion restriction)

### Potential shocks

- The major reallocation of aid that has permitted an increase in aid to low income countries has been the graduation of China.
- In the 1990s, China received just under \$2 billion per year in aid.
- A large part of which was funded by Japan
- By 2010/11, it was repaying \$1.3 billion a year of its concessional debt to bilateral and multilateral donors.
- --> Big donors to China, and especially Japan, were able to reallocate resources, particularly to South-East Asian countries

Sources: MINISTRY OF FOREIGN AFFAIRS OF JAPAN
DONOR TRACKER (Initiative by Seek Development)



Sources: OECD (2024), Flows by donor

Note: <u>ODA on flows and grant equivalent measure by</u> members of OECD Development Assistance Committee (DAC)

# Results



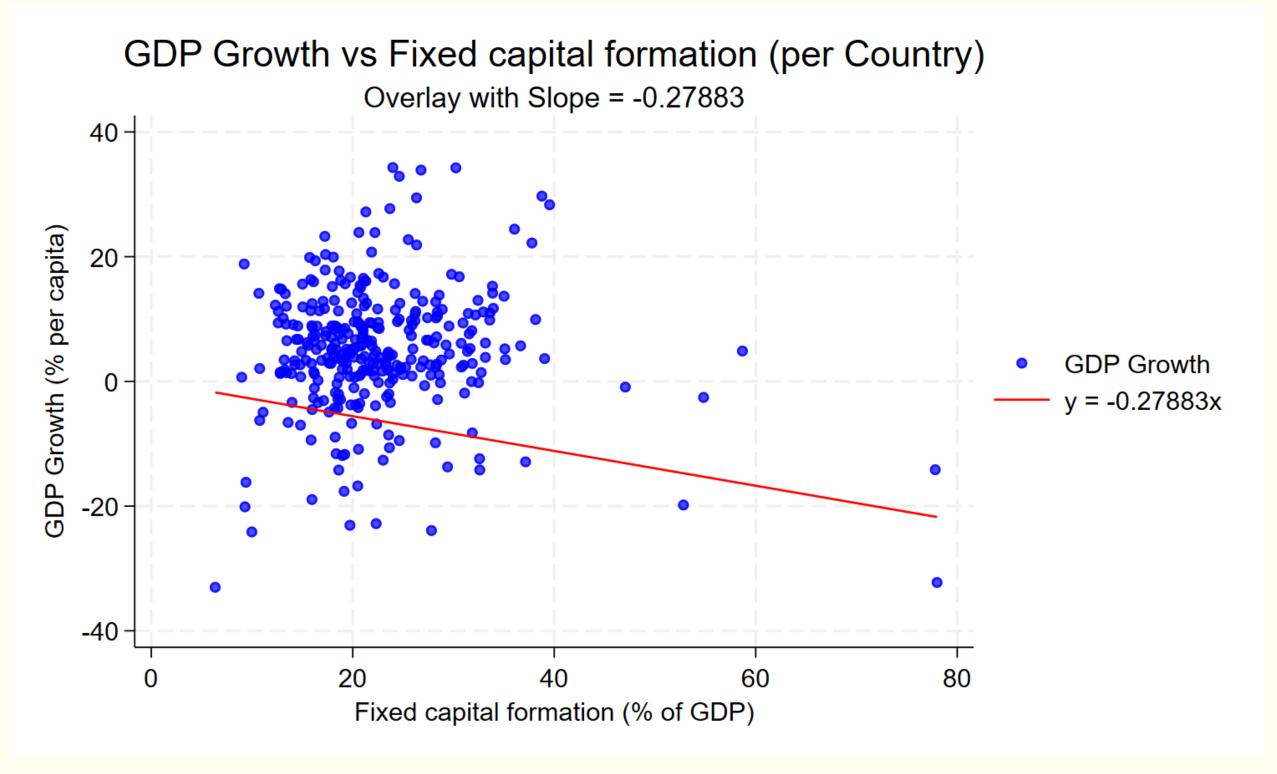
# Aid (% of GDP) shows no significant impact on GDP per capita growth, while higher investment in physical capital is linked to lower GDP growth

#### GDP per capita Growth is the Dependent Variable

(Country × year)

	(1.1.1.)	(1.2.1.)	(1.3.1.)	(1.4.1.)	(1.5.1.)	(1.6.1.)
	b/p	b/p	b/p	b/p	b/p	b/p
Aid (% of GDP)	0.08479	0.08817	0.11222	0.10866	0.13731	0.14607
	0.53844	0.52274	0.41742	0.44449	0.32990	0.30006
Population growth, %		1.08646	1.07620	1.06230	1.29861	1.15488
		0.40007	0.40319	0.41219	0.31184	0.36961
Annual inflation, %			-0.16931	-0.16952	-0.19865	-0.19776
			0.10549	0.10573	0.05669	0.05754
Trade (% of GDP)				0.00626	0.04936	0.05901
				0.90928	0.38312	0.30096
Gross fixed capital formation (% of GDP)					-0.27883**	-0.30619**
					0.00650	0.00345
Broad money supply (% of GDP)						-0.06351
						0.20123
Constant	4.46560***	2.01660	2.81276	2.46217	5.35482	6.89821
	0.00011	0.51885	0.37286	0.57676	0.23322	0.13792
P-value	0.53844	0.58067	0.29393	0.44502	0.04804	0.04630
Number of Observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000
R-squared	0.48986	0.49113	0.49583	0.49585	0.50899	0.51185
F-statistic	0.37936	0.54461	1.24428	0.93320	2.26747	2.16738

### ... Potential inefficiencies or diminishing returns



Note: The coefficient for gfcf\_gdp (gross fixed capital formation as a percentage of GDP) is negative and statistically significant, with p-value of 0.00650; the model is statistically significant, with p-value of 0.04804; R-squared of the model: 0.50899

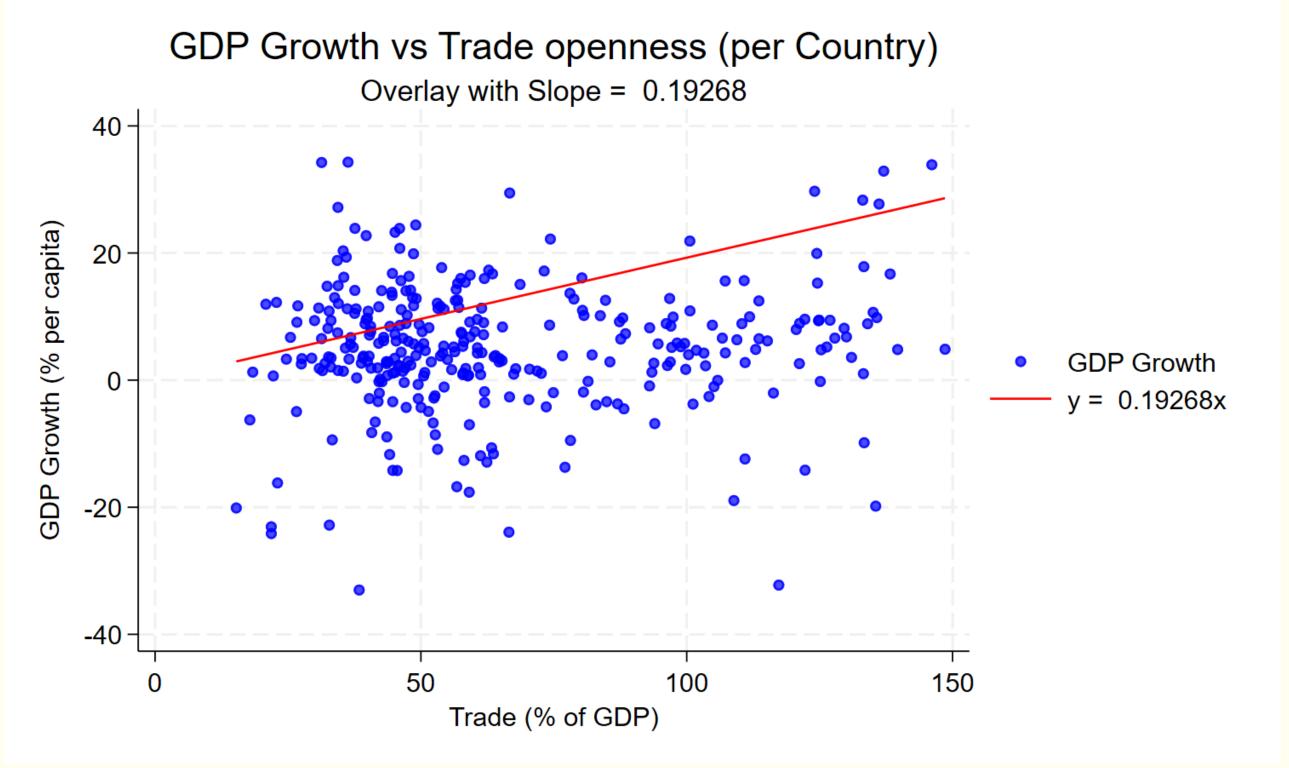
# Country-FE regressions: Aid inflows lack robust impact on growth, while trade openness boosts GDP growth

GDP per capita Growth is the Dependent Variable

(Country-Fixed Effects)

	(1.1.2.)	(1.2.2.)	(1.3.2.)	(1.4.2.)	(1.5.2.)	(1.6.2.)
	b/p	b/p	b/p	b/p	b/p	b/p
Aid (% of GDP)	0.23459	0.23150	0.19525	0.12887	0.16482	0.17976
	0.18210	0.18669	0.26279	0.46847	0.34556	0.30309
Population growth, %		2.67613	2.56061	2.33687	2.58285	2.34194
		0.10337	0.11606	0.15122	0.10638	0.14372
Annual inflation, %			0.29369*	0.27167*	0.20976	0.20260
			0.01369	0.02278	0.07586	0.08575
Trade (% of GDP)				0.11888	0.18128**	0.19268**
				0.08157	0.00910	0.00573
Gross fixed capital formation (% of GDP)					-0.45200***	-0.49158***
					0.00049	0.00019
Broad money supply (% of GDP)						-0.10099
						0.10983
Constant	3.31419*	-2.63030	-3.75600	-10.40953	-4.76161	-2.06895
	0.02393	0.50264	0.33773	0.05705	0.39417	0.72215
P-value	0.18210	0.10890	0.01459	0.00886	0.00010	0.00008
Number of observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000
R-squared	0.00601	0.01492	0.03511	0.04506	0.08409	0.09211
F-statistic	1.78878	2.23406	3.56574	3.45659	5.36143	4.92064

# Greater trade openness positively contributes to GDP per capita growth



Note: The coefficient for trade\_gdp (trade as a percentage of GDP) is positive and statistically significant, with p-value of 0.00573; the model is statistically significant, with p-value of 0.00008; R-squared of the model: 0.09211

# Higher levels of capital investment are associated with higher corruption

#### Corruption Level is the Dependent Variable

(Country × year)

	(2.1.1.)	(2.2.1.)	(2.3.1.)	(2.4.1.)	(2.5.1.)	(2.6.1.)
	b/p	b/p	b/p	b/p	b/p	b/p
Aid (% of GDP)	0.00041	0.00138	0.00648	0.00864	0.00184	0.00214
	0.98213	0.93936	0.71973	0.64119	0.91752	0.90477
Population growth, %		0.31194	0.30977	0.31820	0.26214	0.25735
		0.06689	0.06599	0.06045	0.10680	0.11529
Annual inflation, %			-0.03591**	-0.03578**	-0.02887*	-0.02884*
			0.00880	0.00914	0.02862	0.02904
Trade (% of GDP)				-0.00380	-0.01402	-0.01370
				0.59663	0.05067	0.05875
Gross fixed capital formation (% of GDP)					0.06614***	0.06523***
					0.00000	0.00000
Broad money supply (% of GDP)						-0.00212
						0.73635
Constant	-0.00314	-0.70629	-0.53743	-0.32487	-1.01106	<b>-</b> 0.95959
	0.98342	0.08657	0.19256	0.57255	0.07544	0.10364
P-value	0.98213	0.18600	0.01659	0.03268	0.00000	0.00000
Number of observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000
R-squared	0.01273	0.02435	0.04777	0.04871	0.13062	0.13097
F-statistic	0.00050	1.69202	3.47147	2.66717	7.62130	6.34998

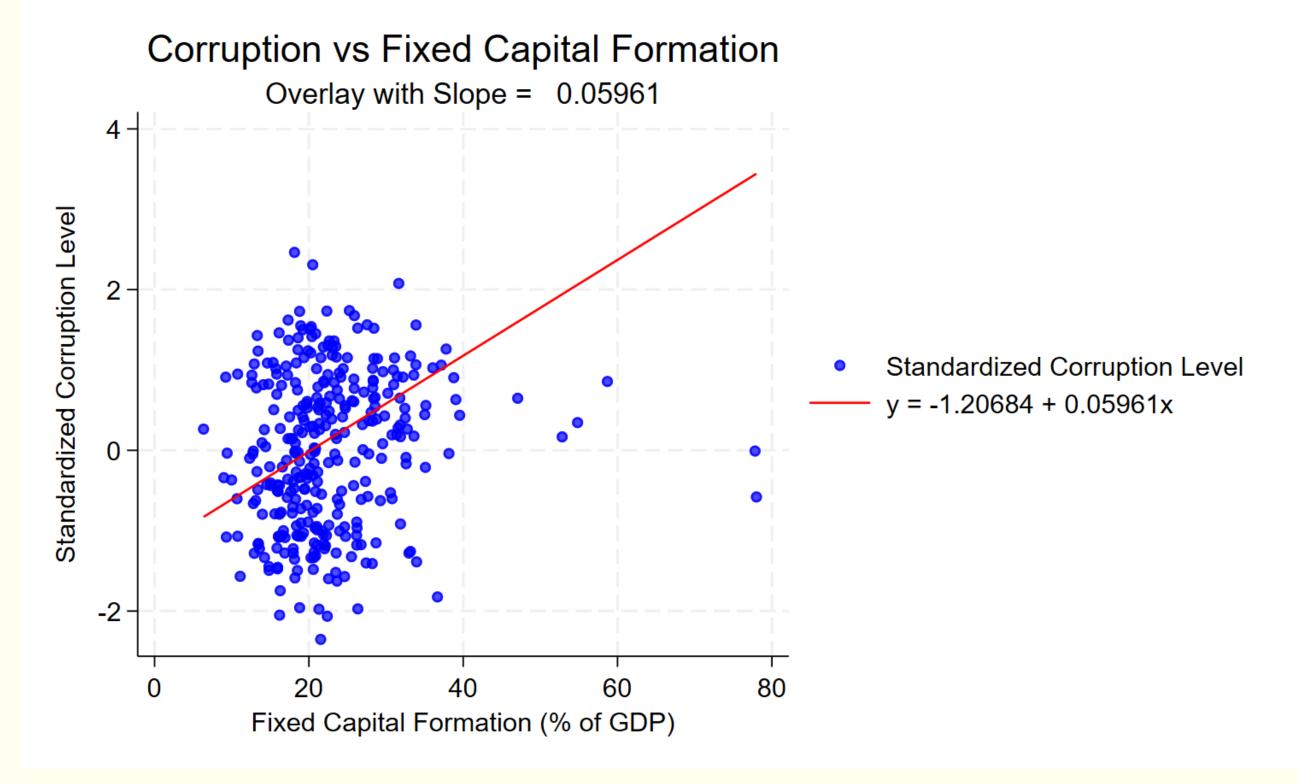
# Country-FE regressions: Higher levels of capital investment remain associated with higher corruption

#### Corruption Level is the Dependent Variable

(Country-Fixed Effects)

	(2.1.2.)	(2.2.2.)	(2.3.2.)	(2.4.2.)	(2.5.2.)	(2.6.2.)
	b/p	b/p	b/p	b/p	b/p	b/p
Aid (% of GDP)	0.00362	0.00324	0.00688	0.00801	0.00316	0.00368
	0.83530	0.85170	0.68994	0.65071	0.85327	0.82979
Population growth, %		$0.33170^{*}$	$0.34330^{*}$	$0.34710^{*}$	$0.31390^{*}$	0.30549
		0.04178	0.03365	0.03255	0.04488	0.05220
Annual inflation, %			<b>-</b> 0.02948*	-0.02911*	-0.02076	-0.02101
			0.01245	0.01428	0.07226	0.06943
Trade (% of GDP)				-0.00202	-0.01044	-0.01004
				0.76591	0.12288	0.14030
Gross fixed capital formation (% of GDP)					0.06100***	0.05961***
					0.00000	0.00000
Broad money supply (% of GDP)						-0.00353
						0.56829
Constant	-0.02786	-0.76467*	-0.65166	-0.53876	-1.30091*	-1.20684*
	0.84776	0.04977	0.09352	0.32123	0.01768	0.03515
P-value	0.83530	0.12280	0.01508	0.03245	0.00000	0.00001
Number of observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000
R-squared	0.00015	0.01412	0.03488	0.03517	0.10767	0.10867
F-statistic	0.04330	2.11215	3.54131	2.66995	7.04652	5.91293

# Higher investment in physical capital is associated with increased corruption



Note: The coefficient for gfcf\_gdp (gross fixed capital formation as a percentahge of GDP) is consistently positive and statistically significant, with p-value of 0.00000; the model is statistically significant, with p-value of 0.00001; R-squared of the model: 0.10867

#### Limitations

- **Time Frame:** The 2006-2018 period may not capture long-term effects of aid on economic growth or corruption
- Causal Relationship Ambiguity: Though ODA has been specified as an independent variable, the causal direction between ODA and corruption or growth might be unclear. Corruption could also influence ODA allocation, creating reverse causality
- Lagged Effect of Corruption: Corruption is a systemic issue that evolves slowly, and the short 2006–2018 study period may not adequately capture long-term effects of ODA on corruption levels or economic growth
- Measurement Challenges with Corruption Index: Corruption indices are often perception-based, subject to biases, and may not accurately reflect actual corruption levels or local variations

#### Omitted Variables

- **Human Capital Development:** Education, healthcare access, and skill levels, which drive long-term GDP growth and potentially reduce corruption, are not included in the model.
- Private Sector and Market Dynamics: Factors like foreign direct investment (FDI), private sector development, and capital market integration are crucial drivers of growth but are not included.
- Sector-Specific Aid Allocation: The impact of ODA may vary depending on whether it is directed toward infrastructure, health, education, or governance reforms, which is not disaggregated in the study.
- External Shocks and Crises: Events such as natural disasters, global financial crises, or regional conflicts could have significantly influenced GDP growth and corruption during the study period.

## Policy Implications (I)

#### • Aid and Economic Growth:

- Current aid mechanisms appear insufficient to foster sustained economic growth.
- o Policymakers should conduct rigorous impact assessments to identify inefficiencies in aid distribution and usage.

#### • Policy recommendations:

- Fostering trade openness and market integration may yield better economic outcomes.
- Enhance trade partnerships and reduce barriers to facilitate economic diversification and competitiveness.
- Link aid to specific, measurable outcomes such as education, healthcare improvements, or institutional reforms to enhance its impact.
- o Invest in strengthening public institutions and governance systems to ensure aid is utilized efficiently and transparently.

## Policy Implications (II)

#### • Corruption and Capital Investments:

- The significant positive relationship between gross fixed capital formation and corruption suggests that capital investments might be prone to rent-seeking behaviors and mismanagement
- Large-scale infrastructure projects and capital-intensive industries, which form a significant portion of GFCF, are particularly susceptible to corruption due to complex procurement processes, lack of transparency, and weak oversight

#### • Policy recommendations:

- Enhance transparency in investments
- Strengthen institutional frameworks in investment-heavy sectors by enforcing anti-corruption laws and empowering regulatory agencies

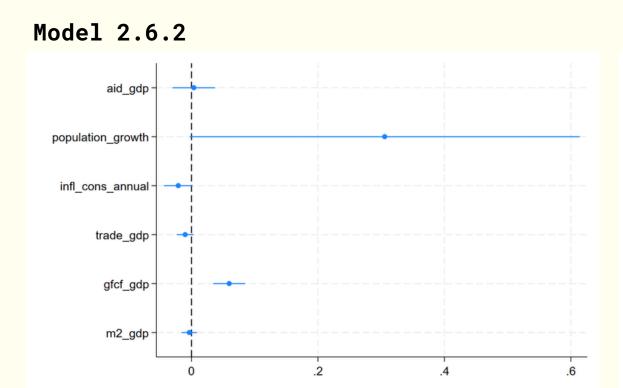
	(1.1.3.)	(1.2.3.)	(1.3.3.)	(1.4.3.)	(1.5.3.)	(1.6.3.)	
	. b/p	b/p ´	<b>b</b> /p	ъ/р ́	b/p	b/p	
Aid (% of GDP)	-0.01043	-0.00046	-0.00070	-0.00066	-0.00197	-0.00303	ADDENDTY A
	0.87059	0.99427	0.99111	0.99172	0.97606	0.96302	APPENDIX A
year=2007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
							GDP per capita
year=2008	2.68034	2.66933	3.79508	3.79408	3.79697	3.90014	Growth is the
	0.21364	0.21131	0.08212	0.08326	0.08357	0.07527	
year=2009	-18.01413***	-17.97179***	-17.98972***	-17.98918***	-17.98440***	-17.93282***	Dependent Variable
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	(Year-Fixed
year=2010	-7.85419***	-7.87421***	-8.05372***	-8.05354***	-8.04694***	-8.02423***	Effects)
	0.00031	0.00026	0.00018	0.00018	0.00019	0.00019	
year=2011	-1.47878	-1.60427	-1.37223	-1.37245	-1.37014	-1.34930	
	0.49216	0.45216	0.51791	0.51856	0.51998	0.52572	
year=2012	-12.43467***	-12.60395***	-12.35016***	-12.35025***	-12.34678***	-12.30971***	
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
year=2013	-10.53807***	-10.73769***	-10.72459***	-10.72447***	-10.71999***	-10.69243***	
2044	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
year=2014	-9.48471***	-9.68253***	-9.75650***	-9.75623***	-9.74819***	-9.71058***	
	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	
year=2015	-19.54639***	-19.75223***	-20.04416***	-20.04341***	-20.03092***	-19.99655***	
2017	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
year=2016	-13.11638***	-13.29147***	-13.54431***	-13.54337***	-13.53066***	-13.48362***	
2017	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
year=2017	-7.94101***	-8.07097***	-8.12164***	-8.12086***	-8.11423***	-8.07602***	
2018	0.00027	0.00019	0.00015	0.00016	0.00017	0.00018	
year=2018	-8.93891***	-9.06737***	-9.07584***	-9.07524***	-9.07002***	-9.03779***	
D1-4i4b 0/	0.00004	0.00003	0.00002	0.00003	0.00003	0.00003	
Population growth, %		-1.08867**	-1.14534**	-1.14445**	-1.13663*	-1.19537**	
A		0.00960	0.00623	0.00857	0.01081	0.00756	
Annual inflation, %			-0.15554* 0.02540	-0.15542* 0.02921	-0.15574* 0.02937	-0.16721* 0.02004	
Tendo (% of CDP)			V.V2J40	0.00011	0.00061	0.02004	
Trade (% of GDP)				0.99394	0.96948	0.76295	
Gross fixed capital formation (% of GDP)				V.22324	-0.00489	-0.03102	
Gross fixed capital formation (70 of GD1)					0.93339	0.61303	
Broad money supply (% of GDP)					ررررر.	0.00788	
Broad money supply (70 of GDT)						0.16415	
Constant	14.08641***	16.54765***	17.49366***	17.48315***	17.54962***	17.86465***	
Constant	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
P-value	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
Number of observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000	
R-squared	0.41007	0.42272	0.43199	0.43199	0.43200	0.43559	
F-statistic	18.01505	17.46143	16.78614	15.61636	14.59358	13.89182	
1. Occupation	10.01505	17.70175	10.70017	15.01050	£7.2220	15.05102	

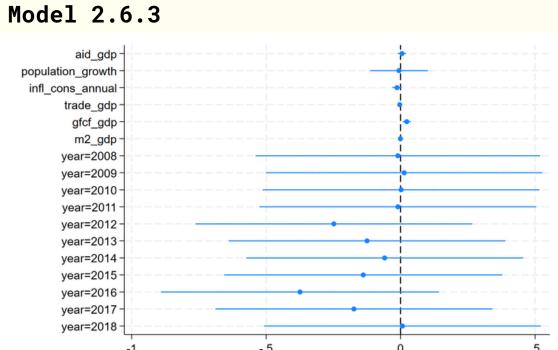
	(2.1.3.)	(2.2.3.)	(2.3.3.)	(2.4.3.)	(2.5.3.)	(2.6.3.)	
	b/p	b/p	b/p	b/p	b/p	b/p	
Aid (% of GDP)	80000.0	-0.00021	-0.00023	-0.00046	0.00501	0.00511	
	0.99157	0.97926	0.97676	0.95381	0.53411	0.52614	
year=2007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	4
year=2008	-0.10342	-0.10310	0.00599	0.01123	-0.00088	-0.01034	(
	0.69589	0.69708	0.98239	0.96709	0.99738	0.96936	
year=2009	0.04373	0.04251	0.04077	0.03797	0.01799	0.01326	
	0.86869	0.87246	0.87723	0.88582	0.94516	0.95956	
year=2010	0.04953	0.05011	0.03272	0.03179	0.00416	0.00208	
	0.85158	0.85002	0.90149	0.90440	0.98731	0.99365	
year=2011	-0.02579	-0.02216	0.00032	0.00151	-0.00817	-0.01008	
	0.92233	0.93331	0.99902	0.99544	0.97509	0.96927	
year=2012	-0.26036	-0.25547	-0.23088	-0.23042	-0.24494	-0.24834	
	0.32554	0.33542	0.38305	0.38469	0.35010	0.34344	
year=2013	-0.10984	-0.10407	-0.10280	-0.10343	-0.12218	-0.12470	
,	0.67812	0.69463	0.69722	0.69591	0.64062	0.63371	
year=2014	-0.01934	-0.01363	-0.02079	-0.02223	-0.05587	-0.05932	
,	0.94173	0.95900	0.93727	0.93307	0.83108	0.82083	
year=2015	-0.05711	-0.05116	-0.07945	-0.08339	-0.13567	-0.13882	
, 500 2015	0.82920	0.84702	0.76417	0.75345	0.60618	0.59782	
year=2016	-0.29222	-0.28716	-0.31166	-0.31656	-0.36976	-0.37407	
year 2010	0.26982	0.27891	0.23913	0.23331	0.16033	0.15553	
year=2017	-0.13720	-0.13344	-0.13835	-0.14243	-0.17016	-0.17366	
year-201)	0.60440	0.61479	0.60066	0.59094	0.51635	0.50775	
vear=2018	0.03198	0.03569	0.03487	0.03177	0.00990	0.00695	
year-2016	0.90385	0.89288	0.89499	0.90449	0.96984	0.97884	
Donulation grounth 9/	0.90363	0.03147	0.02598	0.02134	-0.01139	-0.00600	
Population growth, %							
A1 i 9/		0.54447	0.61630	0.69224	0.83459	0.91271	
Annual inflation, %			-0.01507	-0.01566	-0.01435	-0.01330	
T 1 407 CODDS			0.08157	0.07725	0.10183	0.13186	
Trade (% of GDP)				-0.00058	-0.00266	-0.00305	
o				0.75034	0.17388	0.12577	
Gross fixed capital formation (% of GDP)					0.02045**	0.02285**	
					0.00470	0.00266	
Broad money supply (% of GDP)						-0.00072	
						0.29997	
Constant	0.07270	0.00155	0.09322	0.14808	-0.13014	-0.15901	
	0.71405	0.99464	0.69267	0.61263	0.66983	0.60386	
P-value	0.98258	0.98593	0.91351	0.93895	0.46913	0.46481	
Number of observations	324.00000	324.00000	324.00000	324.00000	324.00000	324.00000	
R-squared	0.01273	0.01390	0.02355	0.02387	0.04899	0.05233	
F-statistic	0.33406	0.33606	0.53221	0.50205	0.98846	0.99396	

## APPENDIX B

Corruption Level is the Dependent Variable (Year-Fixed Effects)

Corruption Level is the Dependent Variable

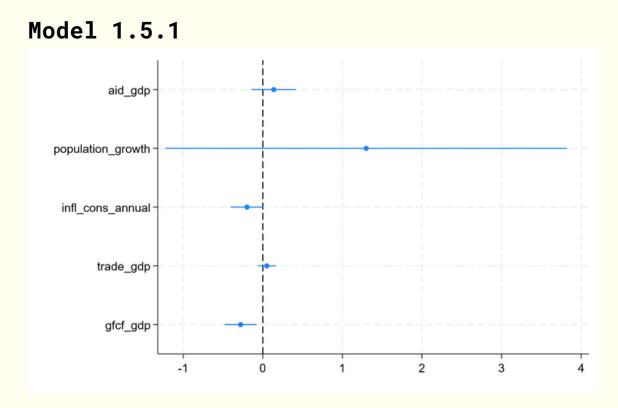


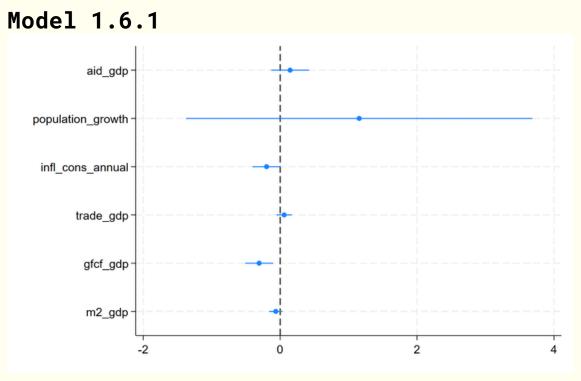


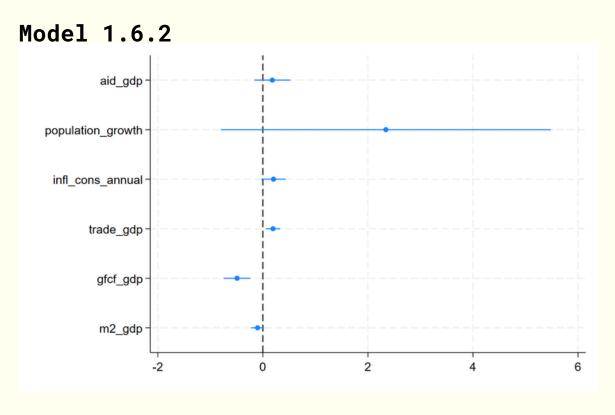
### APPENDIX C

Plots of the coefficients of the selected models

#### GDP per capita Growth is the Dependent Variable









Thank You for your attention

## Bibliography

- Alesina, A., and Dollar, D. (1998) ''Who Gives Foreign Aid To Whom and Why?'' NBER Working Paper 6612. Cambridge, Mass.: National Bureau of Economic Research. <a href="https://ssrn.com/abstract=226334">https://ssrn.com/abstract=226334</a>
- Andersen, Jørgen Juel; Johannesen, Niels; Rijkers, Bob (2022). <u>Elite Capture of Foreign Aid: Evidence from Offshore Bank Accounts</u>. Journal of Political Economy 2022 130:2, 388-425.
- Barro, R. J. (2001). Human Capital and Growth. The American Economic Review, 91(2), 12-17.
- Barro, R.J. and Lee, J.W. (1993). <u>International comparisons of educational attainment</u>. Journal of monetary economics, 32(3), pp.363-394.
- Boone, P. (1996). Politics and the effectiveness of foreign aid. European economic review, 40(2), 289-329. ...
- Burnside, C., & Dollar, D. (2000). Aid, Policies, and Growth. The American Economic Review, 90(4), 847-868. <a href="http://www.jstor.org/stable/117311">http://www.jstor.org/stable/117311</a>
- Casey, Katherine, Rachel Glennerster, and Edward Miguel (2012). "Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan." Quarterly Journal of Economics 127 (4): 1755-1812.
- Casey, Katherine and Glennerster, Rachel and Miguel, Edward and Voors, Maarten (July 2021). Long Run Effects of Aid: Forecasts and Evidence from Sierra Leone. NBER Working Paper No. w29079.
- Chang, C.C., Fernández-Arias, E., & Serven, L. (1998). <u>Measuring Aid Flows: A New Approach</u>, Working Paper, No. 387, Inter-American Development Bank, Office of the Chief Economist, Washington, DC.
- Collier, P. (2011). Conflict, political accountability, and aid. New York: Routledge. ISBN 13: 978-0-415-58727-3 (hbk), 408.
- Easterly, W. (2006). The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good. New York: The Penguin Press, 2006, ISBN 1594200378, 436.
- Easterly, W., & Levine, R. (1997). <u>Africa's Growth Tragedy: Policies and Ethnic Divisions</u>. The Quarterly Journal of Economics, 112(4), 1203–1250. http://www.jstor.org/stable/2951270
- Edwards, S. (2015). Economic development and the effectiveness of foreign aid: A historical perspective. Kyklos, 68(3), 277-316.

## **Bibliography**

- Edwards, S. (2015). Economic development and the effectiveness of foreign aid: A historical perspective. Kyklos, 68(3), 277-316.
- Gulrajani, N. (2011). Transcending the Great Foreign Aid Debate: managerialism, radicalism and the search for aid effectiveness. Third World Quarterly, 32(2), 199–216.
- Islam, M.N. (2005) Regime changes, economic policies and the effect of aid on growth, The Journal of Development Studies, 41:8, 1467-1492.
- Knack, S. (2001). Aid Dependence and the Quality of Governance: Cross-Country Empirical Tests. Southern Economic Journal, 68(2), 310-329.
- Moyo, D. (2009). Dead aid: Why aid is not working and how there is a better way for Africa. New York: Farrar, Straus and Giroux. 208 pages.
- Transparency International. Corruption Perceptions Index.
- Varieties of Democracy (V-Dem) Institute. V-Dem Dataset.
- Vásquez, I. (1998). Official assistance, economic freedom, and policy change: Is foreign aid like champagne. Cato J., 18, 275-286.
- World Bank (2024a). World Development Indicators.
- World Bank (2024b). International Debt Statistics.
- World Bank (2024c). Worldwide Governance Indicators.