Prof. Dr. Axel Dreher
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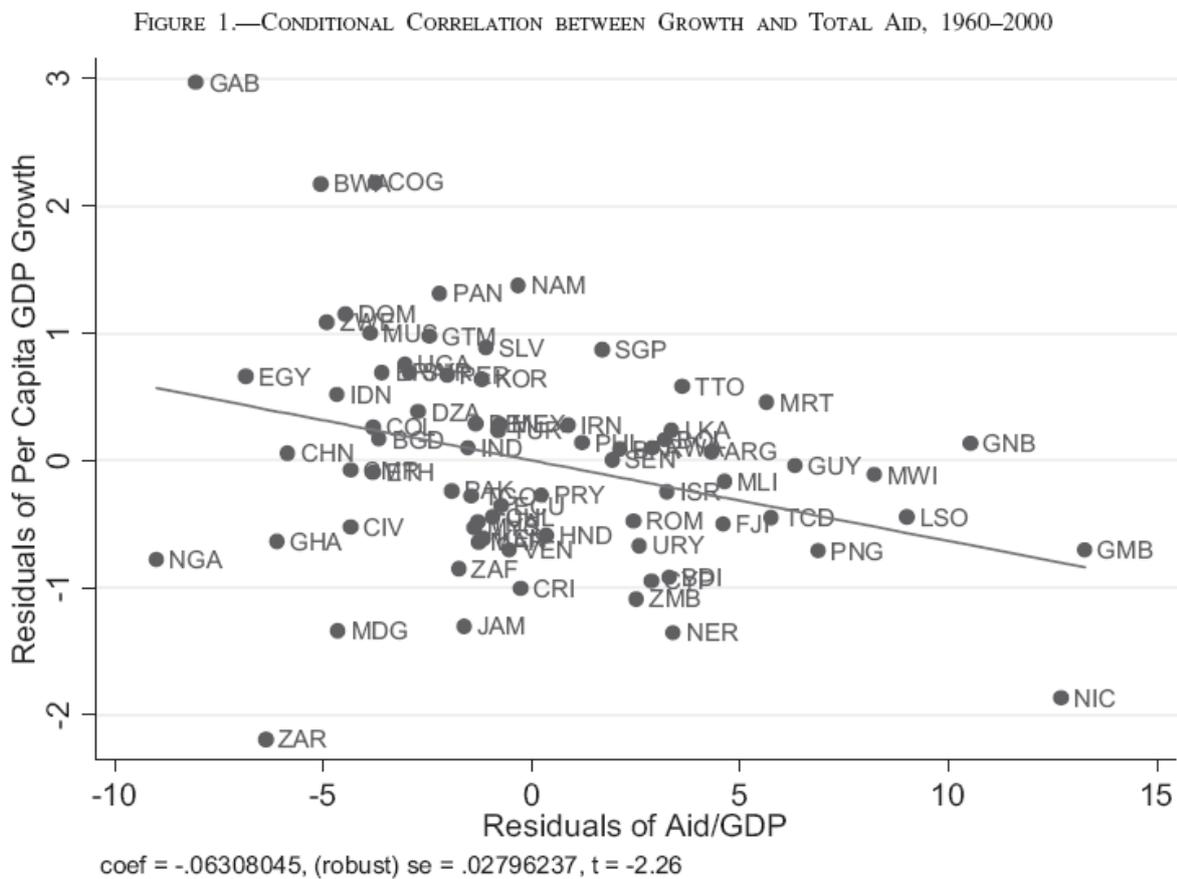# Advanced Development Economics

Winter Term 2009/10

Exam 90 min.

Part I: Answer all short questions (30 min). Each question carries the same weight.

1) Briefly discuss the issue of aid selectivity and explain political and other motives donor countries may consider in their allocation of aid. Provide arguments why aid selectivity could be detrimental to the effectiveness of aid and development.

2) Briefly discuss potential negative effects of natural resource wealth on economic growth. Is development aid like oil?

3) Briefly discuss the problem of adaptation when relying on subjective indicators of well-being.

4) Briefly discuss the most important problems with measuring poverty in developing countries using the $1 a day poverty indicator used by the World Bank.

5) Briefly discuss the empirical and econometric challenges when trying to assess the impact of income inequality on economic growth. Briefly name advantages and disadvantages of different approaches to measuring this relationship.

Part II: Choose two questions from different lecturers (30 minutes each).

Dreher:
1) Figure 1 shows a negative relationship between development aid and economic growth, controlled for other determinants. Does the figure imply that aid is indeed ineffective? How should this question best be addressed empirically? Among others, discuss the relevant covariates, method of estimation, time structure, definition of the aid and dependent variables.

FIGURE 1.—CONDITIONAL CORRELATION BETWEEN GROWTH AND TOTAL AID, 1960–2000

coef = -.06308045, (robust) se = .02796237, t = -2.26

Source: Rajan and Subramanian (2008)

2) Describe the rational for settler mortality as an instrument for institutional quality. The instrument has been criticized. Why? How can these criticisms be addressed? In light of the evidence, is settler mortality a good instrument for institutional quality?

Grün:

3) Table 1 shows the income elasticity with respect to output and fertilizer prices in various countries. To what extent do these elasticities support the call for fertilizer subsidies to promote rural development? In your answer, please also comment on policy failures in the past regarding fertilizer use and on recently implemented policies in Sub-Saharan African countries to facilitate access to variable input factors.

Table 1: Real income elasticity with respect to output and fertilizer prices

	Response of income to	
	Output prices	Fertilizer prices
South Korea	0.40	-0.10
Malaysia	0.67	-0.07
Taiwan	0.90	-0.11
Thailand	0.10	-0.03

Source: Singh, 1986.

4) Discuss potential linkages between the formal and informal sector in traditional as well as more recently developed models of segmented labour markets. Also comment on the empirical evidence of interlinkages on the household level.

Klasen:

5) Carefully discuss how spillovers and complementarities in production can generate vicious cycles trapping entire countries in poverty. Clearly spell out the mechanisms that generate these poverty traps, propose testable hypotheses that derive from these models, and discuss possible policy implications to overcome these poverty traps.

6) Carefully discuss three regression tables from Deininger and Squire (1998): New Ways of looking at old issues: Inequality and Growth (JDE) reproduced below. What do they say about the impact of inequality on growth? What do they say about the mechanisms driving these relationships? How does this relate to various models and theories about the possible impact of inequality on growth? Critical evaluate any possible policy implications that may arise from these findings.

Table 3
Growth regression (1960–1992) with income and land inequality

	All countries						Developing countries[a]	
Intercept	2.614	1.346	2.949	2.379	4.738	3.389	4.246	3.906
	(2.94)	(1.40)	(4.12)	(2.39)	(4.47)	(2.17)	(2.93)	(1.51)
Investment	0.132	0.122	0.134	0.123	0.107	0.115	0.130	0.148
	(6.15)	(5.09)	(6.38)	(4.77)	(4.68)	(4.00)	(3.94)	(3.59)
Initial GDP	−0.302	−0.205	−0.288	−0.264	−0.308	−0.248	−0.301	−0.338
	(3.70)	(2.23)	(4.39)	(3.49)	(4.50)	(3.06)	(1.39)	(1.54)
Income Gini	−0.047	−0.019			−0.025	−0.019	−0.018	−0.045
	(2.80)	(0.95)			(1.34)	(0.86)	(0.60)	(1.27)
Land Gini			−0.034	−0.022	−0.037	−0.027	−0.039	−0.053
			(4.07)	(1.95)	(3.85)	(2.09)	(2.43)	(2.10)
Latin Dummy		−0.530		−0.432		0.018		2.765
		(0.85)		(0.87)		(0.03)		(1.83)
Africa Dummy		−0.214		−0.254		0.324		2.191
		(0.32)		(0.46)		(0.46)		(1.52)
Asia Dummy		1.320		0.668		0.798		1.882
		(2.32)		(1.36)		(1.46)		(1.51)
R2 adj	0.3781	0.468	0.549	0.564	0.550	0.547	0.576	0.585
No. Obs.	87	87	64	64	55	55	27	27

[a] Only developing countries with a population of more than two million have been included.
Here and in all subsequent tables, figures in brackets denote *t*-values.

Table 4
Growth regression for democratic and undemocratic countries separately

	Democratic countries		Undemocratic countries	
Intercept	3.365	2.356	6.153	5.358
	(2.28)	(1.41)	(4.40)	(2.11)
Investment	0.093	0.076	0.162	0.191
	(3.28)	(2.65)	(4.45)	(3.93)
Land Gini	−0.016	−0.012	−0.041	−0.050
	(1.38)	(1.05)	(2.66)	(2.08)
Gini	−0.022	0.025	−0.046	−0.055
	(0.86)	(0.75)	(1.71)	(1.76)
Initial GDP	−0.251	−0.290	−1.162	−1.073
	(3.96)	(4.28)	(2.43)	(2.05)
Latin Dummy		−1.353		1.597
		(2.21)		(1.38)
Africa Dummy				1.467
				(1.33)
Asia Dummy		−0.596		1.055
		(1.09)		(1.06)
R2 adj	0.543	0.595	0.690	0.677
No. Obs.	28	28	25	25

The number of observations for democratic and undemocratic countries does not add up to the total as the 'civil liberty' variable was missing in a number of cases.

Table 5
Determinants of education and investment

	Schooling			Investment	
Intercept	5.35	9.41	Intercept	7.42	12.88
	(3.91)	(7.30)		(8.15)	(3.11)
Land Gini	−0.04	−0.03	Education	1.77	1.34
	(2.09)	(2.08)		(5.42)	(3.58)
Initial GDP	0.87	0.03	Initial GDP		0.60
	(8.80)	(1.41)			(1.32)
Infant mortality		−0.04	Black Mkt. Prem.		0.00
		(6.18)			(0.21)
Urbanization		0.00	Land Gini		−0.04
		(0.02)			(0.80)
R2 adj	0.48	0.71	R2 adj	0.52	0.48
No. Obs	53	53	No. Obs	81	52