# Wirtschaftswissenschaftlicher Prüfungsausschuss der Georg-August-Universität Göttingen



# Masterprüfung

Klausuren für Volkswirte, Betriebswirte, Handelslehrer und Wirtschaftsinformatiker, MA und Diplom-Studierende

Datum: 19.04.2010	
Prüfungsfach: Kreditpunkte-Kla	usur
"Development Aid"	
Themensteller: Prof. Dr. Axel Dr	eher
Kandidat:	
Name:	
Vorname:	
Matrikel-Nr.:	
Fachrichtung:	
Semesterzahl:	
Raum:	

#### Remarks:

- Please leave 5cm on each edge of every page and number each page.
- Please write your name or matriculation number on each page.
- When you start a new question, please use a separate sheet.
- A non-commented language dictionary can be used.

Prof. Dr. Axel Dreher Wintersemester 2009/10

# **Exam Development Aid**

Part	Topic	Points
I	short questions	15
II	regression	30
III	essays	45
Σ		90

1	2	3	Σ

#### Remarks:

The exam is divided into three parts. Please answer all the questions in Part 1. Select one of the questions in Part 2 and answer all the questions in Part 3. The assigned points correspond with the estimated time needed to answer the question.

In total, one could receive a maximum of 90 points. The exam lasts 90 minutes. Please be aware of the time limit. Answers can be in English or German.

## Good luck!

#### Prof. Dr. Axel Dreher

# Wintersemester 2009/10 Exam Development Aid

<u>Part 1:</u> Please answer all questions of Part 1. The estimated time needed corresponds to the maximum attainable points. All together, you should use about 15 minutes for this part.

#### Q1) (5 Points)

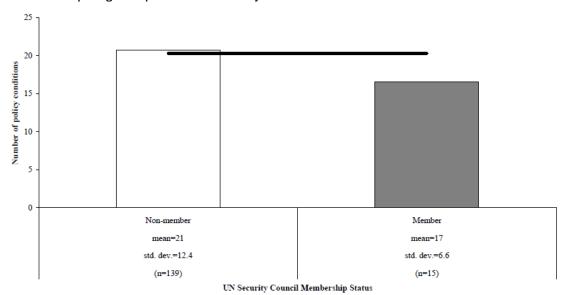
What is the difference between tied aid, partially untied aid and untied aid? What is problematic with the tying of aid flows?

#### Q2) (5 Points)

Propose a model to test whether aid for health has been effective. What would be appropriate variables capturing the aid effort as well as the health situation?

### Q3) (5 Points)

The graph below plots the number of policy conditions under IMF programs by non-permanent UN Security Council membership. Interpret the graph and explain shortly why UN SC membership might impact conditionality.



The horizontal line shows the average number of policy conditions across our entire sample.

Source: Dreher, Sturm and Vreeland (2009)

<u>Part 2:</u> Please answer one of the following two questions. You should spend about **30** minutes for this part. In case both questions are answered, only Question 1) will be graded.

### Q1) (30 Points)

The eight Millennium Development Goals (MDGs), which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education, have been agreed to by all the world's countries and all the world's leading development institutions.

- a) **(15 Points)** Interpreting the regression output below, do the MDGs shape aid allocation?
- b) **(5 Points)** Which other factors not shown in the analysis below are expected to influence the allocation of development aid?
- c) (10 Points) Give some policy advice how to make it more likely that the MDGs will be reached by the target date of 2015. Where should aid be allocated to be effective?

Table 3: Tobit Results for Total Aid by All Donors (unweighted)<sup>a</sup>

Targets/indicators of need b Aid categories c				
Target 2: Hunger	Total aid	Developmental food aid	Emergency food aid	
<ul><li>Undernourishment (99)</li><li>Malnutrition of children (83)</li></ul>	0.03 -0.67***	$0.01 \\ -0.03*$	0.04*** 0.02	
Target 3: Primary schooling  • Net primary enrolment (89)  • Primary completion rate (98)  • Average years of schooling (71)	Total aid -0.20 0.03 0.76	Education 0.02 0.02 0.27	Basic education -0.02 -0.01 0.08	
Target 4: Gender disparity in education • Ratio girls/boys in education (110) • Literacy ratio, males/females (89)	Total aid 0.14 -5.87	Education 0.05 0.09	Basic education $-0.01$ $-0.14$	
Target 5: Under-5 mortality  • Under-5 mortality rate (121)  • Immunization, measles (121)	Total aid -0.02 0.14	Health -0.01 0.02	Basic health 0.00 0.00	
Target 6: Maternal mortality  • Maternal mortality ratio (113)  • Births attended (99)	Total aid 0.00 0.42*	Health 0.00 0.03	Basic health 0.00 0.01	
Target 7: HIV/AIDS	Total aid	Health	Population programs	
• Prevalence of HIV (92)	-0.01	-0.01	0.08***	
Target 8: Malaria, other diseases  • Incidence tuberculosis (121)  • Malaria ecology (111)	Total aid -0.02 0.11	Health 0.00 0.02	Basic health 0.00 0.01	
Target 9: Environmental sustainability	Total aid	Environmental protection	Agricultural land resources	
<ul> <li>CO2 emissions (120)</li> <li>Forest area (117)</li> <li>Nationally protected areas (130)</li> <li>GDP per unit of energy use (79)</li> </ul>	-1.77 0.21 0.10** -0.09	-0.06* 0.01 0.00 0.03	0.00 0.00 0.00* 0.03	
Targets 10/11: Water & sanitation/slum dwellers  • Access to improved water (113)  • Access to improved sanitation (111)	Total aid -0.03 0.11	Water supply & sanitation 0.03 0.03*	Basic drinking water -0.00* -0.00	

<sup>\*\*\*, \*\*, \*</sup> significant at the 1, 5, and 10 percent level, respectively.

<sup>&</sup>lt;sup>a</sup> Based on a Tobit model estimated with per capita income and governance as controls; controls and constant term not reported. — <sup>b</sup> Number of observations in parentheses. For definition and sources, see Appendix Table A1 and A2. — <sup>c</sup> Period average of grant equivalent of aid in 2002–2004, per capita of the recipient countries' population.

#### Definition of Variables:

#### Aid variables

•Grant equivalent per capita

Indicators of need

Access to improved water sourceAccess to improved sanitation

Average years of schoolingBirths attended by skilled health staff

CO2 emissions per capita

Forest area

• GDP per unit of energy use

Immunization, measlesIncidence of tuberculosis

Literacy ratio, males to females

· Malaria ecology

• Malnutrition of children, weight

Maternal mortality ratioNationally protected areas

Net primary school enrolment ratio

Prevalence of HIV

• Prevalence of undernourishment

• Primary completion rate, total

Ratio girls/boys in primary educationRatio girls/boys in secondary education

• Under-five mortality rate

nominal amountxgrant element/100 per population of recipient

percent of population percent of population

relates to the total population aged 15 and over

percent of total

metric tons per capita percent of total land area

2,000 PPP \$ per kg of oil equivalent

percent of children of the age of 12-23 months

estimated incidence rate of all forms of tuberculosis, per 100,000 literacy rate of adult males divided by literacy rate of adult females

predictive of the extent of malaria transmission

percent of children under five

adjusted ratio per 100,000 live births

percent of total land area

percent of the population of the corresponding official school age

percent of population aged 15-49

percent of population

percent of the relevant age group

percent

probability per 1,000 newborn babies

#### Q2) (30 Points)

One of the main purposes of the IMF is to promote exchange rate stability.

- a) (10 Points) What is the impact of IMF involvement on the likelihood of a currency crisis? Are the estimated coefficients of the control variables in line with your expectations? (Model 1&2)
- b) **(10 Points)** Through which channels might the IMF influence the likelihood of a currency crisis? Explain.
- c) **(10 Points)** Are your hypotheses in b) in line with the empirical results shown below? Does the IMF help or hurt?

Table 1: IMF involvement and currency crises, 1976-2000

	(1)	(2)	(3)	(4)	(5)	(6)
IMF program in previous 5 years	-0.81	-0.81			-0.836	-0.10
	(1.97)**	(2.37)**			(1.46)	(1.73)*
Compliant with IMF program, 5 years			-0.75		-0.402	0.002
			(1.80)*		(0.74)	(0.03)
IMF loans (percent of GDP), 5 years				-0.20	-0.055	-0.004
				(1.49)	(0.32)	(0.31)
Interest Rate differential (t-1)	0.00	0.00	0.00	0.01	0.016	0.01
	(1.61)	(0.12)	(0.12)	(1.31)	(0.89)	(2.73)***
Reserves/M2 (t-1)	-0.54	-0.53	-0.59	-0.60	-0.558	0.004
	(2.57)**	(2.71)***	(2.95)***	(2.69)***	(2.36)**	(0.23)
Exports/GDP (t-1)	-5.37	-6.10	-8.00	-5.97	-7.628	0.15
	(2.59)***	(3.41)***	(3.93)***	(3.06)***	(3.43)***	(1.32)
Flexible exchange Rate Regime (t-1)	0.14	0.13	0.13	0.13	0.153	-0.004
	(3.04)***	(3.04)***	(2.69)***	(2.85)***	(2.63)***	(0.78)
Capital Account Oppenness	-0.60	-0.61	-0.52	-0.32	-0.265	-0.01
	(3.38)***	(3.68)***	(2.94)***	(1.77)*	(1.28)	(0.71)
Inflation (t-1)	0.00					
	-0.35					
Current Account/GDP (t-1)	0.49					
	-0.22					
Domestic Credit/M2 (t-1)	0.10					
	-1.08					
Budget Deficit/GDP (t-1)	-3.19					
	-1.23					
(log) GDP p.c. (t-1)	0.38					
	-0.86					
Election, dummy (t-1)	0.17					
	-0.59					
Lagged dependent variable						-0.03
						(0.33)
Observations	759	868	769	695	602	607
Number of countries	50	53	50	46	43	59
Method	Logit	Logit	Logit	Logit	Logit	GMM
Fixed country effects	Yes	Yes	Yes	Yes	Yes	No
Fixed time effects	Yes	Yes	Yes	Yes	Yes	Yes
log likelihood	-203.08	-233.93	-195.42	-199	-159.38	
Prob > chi2	0.00	0.00	0.00	0.00	0.00	
Arellano-Bond-Test (p-level)						0.55
Sargan Test (p-level)						0.16

#### Notes:

The dependent variable is one when at least one speculative attack occurred in a certain year, and zero otherwise.

Absolute value of z statistics in parentheses.

Source: Dreher and Walter (2008) (Definition of variables on next page)

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

#### **Dependent variable:**

**Dummy (Crisis=1):** Currency crisis episodes are identified based on a monthly weighted exchange market pressure index of exchange rate changes, reserve changes, and changes in the interest rate differential (Eichengreen et al. 1995). When at least one speculative attack occurred in a given year, the variable is coded as 1

#### **Variables of interest:**

**IMF Program-Dummy:** Coded as 1 if the country had an IMF Program (SBA, EFF, PRGF, or SAF) for at least 5 months in a certain year.

**Compliance-Dummy (1 = Compliance):** Coded as 1 if the country was compliant with its IMF program. Noncompliance is recorded if more than 25% of the amount agreed for an IMF program remains undrawn at program termination (as suggested by Killick (1995)).

**IMF Loans:** Sum of net financial flows for all IMF programs (in percent of GDP).

<u>Part 3:</u> Please answer all questions. For this part, you should need 45 minutes.

## 1) (15 Points)

Does aid work? Starting with Burnside and Dollar (2000), write a short essay on this question using your knowledge on the results of the bilateral aid effectiveness literature.

## 2) (15 Points)

Discuss the advantages and disadvantages of debt relief in comparison to other forms of aid supply such as project aid.

# 3) (15 Points)

Outline a policy agenda how multilateral aid allocation should be improved.