Written Exam Economics Winter 2016-2017

Advanced development economics:
Applied macroeconomic and policy analysis

07-08 January 2017

This exam question consists of 3 pages in total (including this page).

The paper must be uploaded as <u>one PDF document</u>. The PDF document must be named with exam number only (e.g. '1234.pdf') and uploaded to Digital Exam.

Focus on Exam Cheating

In case of presumed exam cheating, which is observed by either the examination registration of the respective study programmes, the invigilation or the course lecturer, the Head of Studies will make a preliminary inquiry into the matter, requesting a statement from the course lecturer and possibly the invigilation, too. Furthermore, the Head of Studies will interview the student. If the Head of Studies finds that there are reasonable grounds to suspect exam cheating, the issue will be reported to the Rector. In the course of the study and during examinations, the student is expected to conform to the rules and regulations governing academic integrity. Academic dishonesty includes falsification, plagiarism, failure to disclose information, and any other kind of misrepresentation of the student's own performance and results or assisting another student herewith. For example failure to indicate sources in written assignments is regarded as failure to disclose information. Attempts to cheat at examinations are dealt with in the same manner as exam cheating which has been carried through. In case of exam cheating, the following sanctions may be imposed by the Rector:

● 1. A warning

● 2. Expulsion from the examination

● 3. Suspension from the University for a limited period or permanent expulsion.

Advanced development economics: Applied macroeconomic and policy analysis	
Exam	
January 2017	

Instructions

Answer all three questions, in English.

The recommended length of your answer to each question should be around three sides of A4.

In addition to written text, you may include a small number of figures or tables (if relevant), as well as a list of references.

Be aware that exam regulations stipulate that manuscripts that are either too long or too short should not be assessed. The maximum number of pages (in total) that will be examined is 12 (twelve).

Questions

1) Propose a set of practical criteria to evaluate the quality of official macroeconomic statistics provided by national statistics agencies in developing countries. Provide examples of failures to meet these criteria.

2) Use the government's inter-temporal budget constraint to outline the structure of a simple debt sustainability analysis.

3) Equations (1a) – (1d) on the following page set out the basic Polak model, which represents the heart of a simplified Financial Programming framework. Table 1 (also overleaf) describes historical (2014-2015) and projected (2016-2020) values for the parameters, exogenous variables and policy instruments of a stylized (toy) economy. Answer the following:

   a) Use the Polak model to complete the projections in Table 1 for the endogenous outcomes: Y (nominal GDP); and ΔR (change in foreign reserves).

   b) Interpret the completed scenario for the evolution of the economy.

   c) In light of your results, reflect on the strengths and weaknesses of the basic Polak model.

Material for Question 3

Basic Polak model:

$$L_s = L_d = kY \qquad\qquad \text{(1a)}$$
$$M = mY \qquad\qquad \text{(1b)}$$
$$\Delta L_s = \Delta R + \Delta D \qquad\qquad \text{(1c)}$$
$$\Delta R = X - M + K \qquad\qquad \text{(1d)}$$

Table 1: Historical values and projections for a stylized economy
(all monetary values are in US$ billions)

Item	Abbrev.	Historical 2014	2015	Projections 2016	2017	2018	2019	2020
Inverse velocity of money	k	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Propensity to import	m	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Imports	M	35.0	40.0	43.3	45.6	47.0	48.0	48.7
Money supply	L_s	70.0	80.0	86.7	91.1	94.1	96.0	97.4
Net capital inflows	K	25.0	25.0	10.0	10.0	10.0	10.0	10.0
Exports	X	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Change in domestic credit	ΔD	0.0	0.0	15.0	15.0	15.0	15.0	15.0
Nominal GDP	Y	87.5	100.0	-	-	-	-	-
Change in foreign reserves	ΔR	0.0	10.0	-	-	-	-	-