International Economics
Field Exam

August 2011

GENERAL INSTRUCTIONS:
Answer **three** of the **four** questions

1. The uncovered interest parity condition states that if i_t is the domestic nominal interest rate and i_t^* the foreign nominal interest rate, then the difference $i_t - i_t^*$ is the expected depreciation rate of domestic currency against foreign currency.

   (a) Briefly describe an empirical test that has been carried out to examine this proposition, and the results of that test, carefully listing maintained hypotheses that might be necessary to draw conclusions from the data.

   (b) Sketch a version of the Kouri portfolio-balance model. When is the risk premium on domestic currency bonds positive and when is it negative in that model? Why?

   (c) Derive an explicit model of the risk premium based on investor optimization with quadratic preferences over future wealth. How do government debt levels affect foreign exchange risk premia in that model?

2. Set up and analyze a sticky-price exchange rate model in which consumers optimize utility over their lifetimes. What major implications does the model have for optimal monetary policy in open economies with flexible exchange rates?

3. Standard International Business Cycle models assume efficient risk sharing, typically achieved by trading a complete set of Arrow-Debreu securities. Present and discuss critically the main elements of the following two models:

   (a) In the first model, agents have identical preferences, there are no transport costs and efficient risk sharing can be achieved with constant holdings of a riskless bond and of claims to future domestic and foreign output. Assuming that labor income is a constant fraction of domestic output, discuss what this implies for the optimal international portfolio allocation.

   (b) In the second model, preferences are such that efficient risk sharing can be achieved *regardless* of the international portfolio allocation. Be sure to explain how risk sharing is achieved in this model.

   Discuss the implications of both models for the theoretical benefits of international risk sharing and contrast with the empirical evidence.

4. Carefully set-up a model of capital flows between a small developing country and the rest of the world, based on (a) intertemporal optimization by domestic households, (b) diminishing marginal returns to physical capital. Describe the main predictions of the model for the relationship between (a) initial levels of development, and net capital flows and (b) expected future productivity growth and net capital flows. The following two figures document the relationship between real output growth relative to US output growth between 1970 and 2004 (vertical axis) and the change in net external public and private assets relative to output (horizontal axis) for a set of developing countries. Net public external assets are defined as official reserves holdings minus outstanding public and publicly guaranteed debt. Net private assets are defined as the net foreign asset position of the country, minus net public assets. Discuss whether the two figures conform to your theory. Based on your reading of the literature, discuss which features of the model may need to be modified to match the empirical evidence.
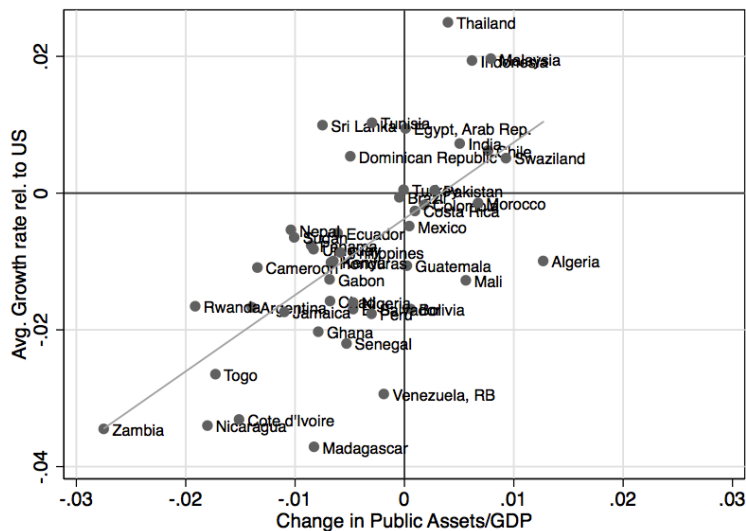
Figure 1: Change in Net Public Assets (relative to output) against average growth in output per capita (relative to the US). 1970-2004
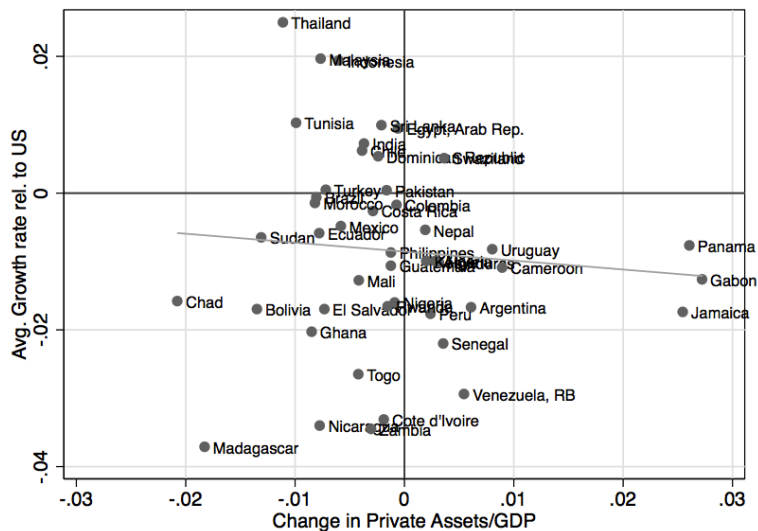

Figure 2: Change in Net Private Assets (relative to output) against average growth in output per capita (relative to the US). 1970-2004.