

Problem Set 6

Due in class on Tuesday, May 9.

To be handed at the beginning of lecture.

Please write your name, GSI name and section time in your problem set.

Problem 1: International diversification

Return to the example in Chapter 21 of the two countries that produce random amounts of kiwi fruit and can trade claims on that fruit. Suppose now that the two countries also produce raspberries that spoil if shipped between countries, and that therefore are non-tradable. How would this affect the ratio of international asset trade to GNP for Home and Foreign? What can you say about the amount of risk in these countries as compared to the original example in the textbook?

Problem 2: Measuring financial integration

- (a) Sometimes it is claimed that the international equality of real interest rates is an accurate barometer of international financial market integration. Give two reasons why there might exist real interest rate differentials despite deep financial integration.
- (b) A very common measure of financial integration is the volume of capital a country receives. Again, give two reasons why the volume of capital flows might be a misleading, incomplete, or otherwise unsatisfactory measure of financial integration.
- (c) Indeed, Feldstein and Horioka (1980) looked at the correlation between savings and investment (as shares of GDP) as an indicator for financial integration. Using cross-country data for 16 OECD economies between 1960 and 1974, they found a high positive correlation between savings and investment. Moreover, other studies using more recent data have still found this high positive correlation, although since then capital mobility has increased considerably. How do you interpret these findings? Why do you think these findings have been regarded as a puzzle in international macroeconomics?

Problem 3: Capital controls

- (a) Developing countries often have imposed restrictions on capital outflows. What reasons might they have to choose such capital controls?
- (b) It has been argued that controls on capital outflows are neither effective nor beneficial policy measures. For example, in the 1980's debt crisis, countries that have imposed capital controls (Argentina, Mexico, Brazil) did not do better than countries that did not impose such controls (Chile, Colombia) with respect to

managing the crisis and achieving macro-stability. Give reasons why this might be the case. More specifically, when are these capital controls an effective and wise policy and when not?

- (c) In contrast, other countries have imposed restrictions on capital inflows. If a developing country requires capital for growth and development, for what economic reasons might they choose to restrict capital inflows? What are the costs and what are the benefits of such policy?

Problem 4: Argentina's crisis

- (a) From what you know from lecture and the book regarding the evolution of Argentina's real exchange rate during the 1990s, why do you think a sector of the economy put pressure on the government to abandon the currency board? The sharp devaluation of the peso produced a wealth redistribution across different sectors of the economy. What sectors benefited from and what sectors were hurt by the devaluation of the peso?
- (b) In Argentina, as in other emerging market economies, most debt obligations to foreigners and domestic residents are denominated in dollars. This phenomenon is sometimes called liability dollarization. How might liability dollarization have worsened the financial market disruption caused by the devaluation of the peso? Among the financial market participants, who wins and who loses with the devaluation?
- (c) During the prolonged recession that preceded the collapse of Argentina's economy in late-2001 and 2002 different ideas were proposed to put an end to the recession. Some groups advocated a sovereign debt default and a halt in payments to the International Monetary Fund. This would have forced the country to live in autarky since trade and capital flows would have stopped completely. In this context, what do you think are the benefits and the risks of being integrated to world markets?
- (d) Other groups proposed to completely dollarize the economy by adopting the dollar as Argentina's currency. If this were the case, why would Argentina have to give the United States seigniorage? How would you measure the size of Argentina's sacrifice of seigniorage? (To do this exercise, think through the actual steps Argentina would have to take to dollarize its economy. You may assume that the Argentine central bank's assets consist of 100 percent of interest-bearing U.S. Treasury bonds.) Finally, what are the benefits and costs of such policy?
- (e) After an initial devaluation of 40% the peso started to float and depreciated further, finally stabilizing at a rate of around 3 pesos per dollar. Download data on the peso-to-dollar exchange rate from the Internet and plot the evolution of the Argentine peso from 2002 to the present. Argue whether or not the peso presents what is known as fear of floating. Explain the mechanism through which the central bank intervenes in the foreign exchange market and the benefits it seeks by doing so. Also, mention what the risks of engaging in such policy are.

- (f) Argentina completed its sovereign debt restructuring in February 2005. As discussed in lecture, the new bonds are linked to GDP so that additional interest payments are made when the actual GDP growth rate exceeds its target level. Discuss what are the benefits of issuing GDP-linked sovereign bonds with respect to debt sustainability, business cycles, and crisis prevention.

Problem 5

How might a developing country's decision to reduce trade restrictions such as import tariffs affect its ability to borrow in the world capital market?

Problem 6 : True, False, Uncertain

- (a) A country is less vulnerable to a financial crisis if its debt is in the form of bank loans rather than foreign direct investment (FDI).
- (b) Since developing countries are subject to "original sin," they will never be able to issue debt in domestic currency.
- (c) The most effective way for a developing country to reduce inflation is to adopt a currency board.