

This segment of the project explores the international interactions of your economy. The goal is to describe the institutions of the international sector and to assess the extent to which it conforms to the implications of the textbook models.

As before, you should submit both a report and a supporting spreadsheet with the relevant calculations. Useful graphs and tables from the spreadsheet should be copied into the report at appropriate places.

Descriptive discussion

- Discuss whether your country fits the paradigm of the “small open economy.” Is it small relative to the rest of the world? Is it open? The usual measure of openness is to add imports and exports together, then divide by GDP. (This measure is bounded from above by 200%—it can be larger than 100% in very open countries.) Compute this measure for your country for appropriate time periods (either every year or a selection of years).
- Does your country have “perfect capital mobility” with the rest of the world, and with the United States in particular? Or are there institutional controls on the movement of investment funds into or out of the country? How (if at all) has this changed over your sample period?
- Does your country have a fixed or flexible exchange rate (or is it part of a monetary union, which resembles a fixed rate)? How has the exchange-rate regime varied over time? Show a time plot of the nominal exchange rate against one or more appropriate alternative currencies. You may choose an “effective” exchange rate that is a weighted average of many trading partners or a couple of important individual currencies chosen based on the volume of trade. (And you should probably include the U.S. dollar because you’ll be using that below.)
- What is your country’s present primary current account (or trade balance) as a percentage of GDP? Show a time path for the current account (or trade balance) as a percentage of GDP over your available sample.

Analysis

- Long-run purchasing-power parity says that $\frac{\Delta S}{S} = \pi^* - \pi$. Explore this relationship for your country over your sample using the exchange rate vs. the U.S. dollar as S and U.S. inflation as π^* .

- Interest-rate parity says that $i = i^* - \left(\frac{\Delta S}{S}\right)^e + \psi$, where ψ is a risk premium

associated with the country's currency/assets. Explore this relationship, again treating the dollar as the "world" currency, an interest rate on a government bond in your country for i , and a corresponding U.S. government interest rate for i^* . You may either assume perfect foresight (so that the expected exchange-rate appreciation is the actual appreciation) or implement one of the expectation hypotheses that you used in the Phillips curve analysis. How has the risk premium for your country varied over time? Can you explain this variation in terms of historical events such as crises, wars, or institutional changes?

- The primary current account (or trade balance) should depend on, among other factors, the real exchange rate $\sigma = \frac{SP}{P^*}$. Compute and plot a time series for the real exchange rate (again, using the U.S. as the rest of the world) through your sample. (Because you will be using a price index rather than the actual currency price of a good, you shouldn't expect that your real exchange rate would equal one. Focus on the changes in the real exchange rate, not the level.) To what extent do changes in the real exchange rate seem to be correlated with changes (in the opposite direction) in the primary current account (or trade balance), as predicted by theory? Note that this relationship may involve lags: a change in the real exchange rate may take a year or two to have its full effect on patterns of trade.