ECN320 Open Market Macroeconomics

Exercise 1: Trade implications in volume and value from a policy-induced exchange rate change

Objective: This assignment is designed to illustrate the implications of using the exchange rate as a tool of trade policy to achieve some balance of trade or balance of payments objective.

Assignment: For the scenarios below, analyze the effects of currency changes on a three-country market using a partial equilibrium model (Houck, chapter 15). Let two of the countries be net exporting countries competing for the market of the net importer. Each country has its own currency, but trade is denominated in the international reserve currency (the lead exporter's currency). Each scenario is a situation where the value of local currency changes relative to the lead exporter. Think about what your economic intuition tells you should be the result and *then* provide a model to complete the following table. Explain the changes in the world price (in the reserve currency) and in terms of local currency (lc). Explain whether the trade volume (Q_T) or value (V_T) increases (↑), decreases (↓) or whether it is uncertain (?). Follow the changes on the world market (price and volume traded into the respective countries' supply and demand. How do the quantities supplied (Q_S) and demanded (Q_D) change? The good traded is a close substitute (homogeneous product) in the 3-country market.

	Lead exporter (reserve currency)	Secondary exporter (local currency)	Importer (local currency)	World (reserve currency)
New price in local currency terms				
Volume of trade				
Value of trade in the lead currency				
Value of trade in local currency terms				
Changes in production				
Changes in consumption				

Scenarios (1.3 and 1.4 are the more complicated situations):

1.1. The value of the currency of the secondary exporting country decreases relative to the others
1.2. The value of the currency in the net importing country decreases relative to the others.
1.3. The value of the reserve currency (lead exporter) decreases relative to the other currencies.
1.4. The value of the reserve currency (lead exporter) increases relative to the other currencies.

Questions for discussion (not intended for submission):

1. Do the partial equilibrium results suggest an improvement in the balance of trade for country whose currency depreciates/devalues? Why or why not? Would the partial equilibrium results be the same in a general equilibrium setting?
2. Why might a devaluation/depreciation of the currency take some time before it results in an improvement of the overall balance of trade situation?
3. Which trade policy does the change in exchange rate most resemble?
4. What type of country would try to impose a multiple exchange rate regime? What would be the objective(s) of such an exchange rate policy regime? Could such a regime be effective?