International Economics
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Answer key

PROBLEM 1

1.1 *Everyone gains from trade in the Ricardian model.*

True. There is only one production factor in the Ricardian model and there are gains from trade, so everyone gains.

1.2 *The effect on trade from joining a currency union may be overstated if cross section data is used.*

True. There is an endogeneity problem as increased trade means more integration which makes it more likely that the country finds it beneficial to join a common currency area. Rose (2000) finds a very large impact of currency unions using cross section data. Using panel data instead of cross section data may help alleviate this problem.

1.3 *Domestic market failures may be used as an argument against free trade.*

True. Marginal social benefits may not be captured by producer surplus, and so a government intervention that appears to distort incentives in one market may increase welfare by offsetting the consequence of market failures elsewhere.

1.4 *Everyone gains from international labor mobility.*

False. Labor moves from countries where it is abundant to countries where it is scarce until wages are equalized. This raises total world output, but it also generates strong income distribution effects, so that some groups are hurt.

1.5 *Trade models cannot explain the fact that only a subset of firms within industries export.*

False. In the monopolistic competition model with firm-level cost heterogeneity and per unit trade costs only the lowest cost firms will export, medium cost firms sell only in the domestic market while high cost firms earn negative profits and exit.

1.6 *The benefit from doing greenfield investments is lower fixed costs.*

False. The benefit is marginal costs savings from avoidance of trade costs. The cost is the additional fixed cost for the new plant.

1.7 *The concept of offshoring captures both foreign outsourcing and vertical foreign direct investments.*

True. Foreign outsourcing is about a parent firm that contracts with an independent firm to perform parts of the production process abroad. Vertical FDI is about fragmentation of the production process such that different parts are undertaken within the same firm in different countries. Offshoring is about the relocation of parts of the production process abroad and so captures both foreign outsourcing and vertical FDI.

PROBLEM 2

Question 2.1: *List the assumptions in the Hecksher-Ohlin model and discuss the type of trade it aims to explain.*

There are two countries, two production factors and two goods. Production factors are mobile across sectors but internationally immobile. One good is intensive in the use of one factor while the other good is intensive in the use of the other factor. The countries are different in their factor endowments, such that one country is relatively well endowed with one production factor. There is a constant returns to scale production technology, which is identical across countries. All markets are perfectly competitive and there are no transportation costs.

Since factors are mobile across sectors the H.O. model is a long run model, and since there are factor endowment differences across countries the model aims to explain trade between dissimilar countries. This is also called inter-industry trade.

Question 2.2: *Explain the main results derived in the Hecksher-Ohlin model.*

The following results should be explained:

- The Stolper-Samuelson theorem
- The Rybczynski theorem
- The Hecksher-Ohlin theorem
- The factor price equalization theorem
- The finding that there are aggregate gains from trade
- The finding that there are winners and losers from trade due to changes in relative goods prices and the Stolper-Samuelson theorem

Question 2.3: *Discuss the empirical evidence for the Hecksher-Ohlin model. Related to this, are some assumptions in the Hecksher-Ohlin model particularly problematic?*

The following empirical findings should be discussed:

- The extent to which trade explain rising wage inequality.
- The Leontief paradox and tests on U.S. data. A broader interpretation of capital that includes human capital is called for.
- Tests on global data and the factor content of trade.

- The case of the missing trade.
- Within and across product specialization

The particular problematic assumptions in the H.O. model includes common technology/productivity across countries, that countries produce the same set of products and that costless trade equalizes goods prices.