

## HOMEWORK 2

ECN 481/581  
Prof. Bruce Blonigen

**Due Date: Thursday., Feb. 29**

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### **1) Intra-Industry Trade Questions**

**a)** Read the appendix to Chapter 10 of your textbook on pages 195-196 in your textbook. Then go to a link at the U.S. Census website that allows you to get monthly trade data between the U.S. and other countries at different industry classifications:

<http://censtats.census.gov/sitc/sitc.shtml>

Look up December 2006 U.S. trade at the 1-digit SITC level with 1) Argentina and 2) Canada.

Calculate the share of intraindustry trade between the U.S. and these countries, using the correct formula from the appendix of Chapter 10 in your textbook. Use “Customs Value Basis” for import data. Do these IIT shares compare as you would expect given what you now know about the new trade theory model?

**Why or why not?**

**b)** Now calculate and report 2-digit IIT shares for the U.S. and Argentina only (you can find this by clicking on the “All 2-Digit” link. There are a lot of numbers here, so an Excel spreadsheet and use of formulas there can save a lot of time. What happens in general to the IIT shares going from 1-digit to 2-digit? Is this what you expected? **Why?**

### **2) Tariffs and the Small Country Case**

Suppose the country of Chile has the following domestic demand and domestic supply for t-shirts:

Domestic Demand:  $Q_D = 35 - P$

Domestic Supply:  $Q_S = 1/2P - 5/2$

Prices are in pesos and quantities are in millions. Show your work for all questions.

**a)** Calculate the equilibrium price and quantity of t-shirts in Chile in autarky?

**b)** Now suppose that the international price t-shirts is 15 pesos. Calculate how many t-shirts Chile will import.

**c)** T-shirt manufacturers in Chile get upset at the imports and get their government to levy a 20 percent tariff on imports ( $t = 0.2$ ). What is the new effective international price for Chileans and what is the level of imports after the tariff? Draw the market for t-shirts in Chile, showing the autarky equilibrium, the free trade equilibrium, and the restricted trade equilibrium, labeling all prices, quantities, and import levels.

**d)** Using the functions and numbers given above, calculate the exact numbers for the following expressions when the tariff is imposed on t-shirt imports: 1) tariff revenue collected by the government, 2) producer surplus gained, 3) deadweight loss from the tariff, and 4) consumer surplus lost.

**Turn page over for further questions**

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e) What would be the collected tariff revenue at a tariff rate of 67 percent? What would be the deadweight loss (calculate a number) of such a tariff? How does this relate to the gains from going from autarky to free trade?

f) Using the demand and supply functions for t-shirts, generate an excess demand diagram t-shirts by Chile. Make sure to label axis, graphs, and intercepts properly.