

Econ 4415 International Trade – Fall 2020

Final Exam

Problem 1 (35points)

The US-China Trade war: Winners and Losers.

- a. What is the impact of a tariff? Describe the role of country size and the determinants of the degree of "pass-through". Use graphical illustrations to support your arguments.

***Answer:** Answer should be based on slides and recommended literature related to the topic "Welfare and trade policy". It should use graphs to show the impact in partial equilibrium. It should be showed and argued that the impact differ for small and large country along two dimensions: (1) A small country's actions only affect the country itself, while the actions of a big country affect trading partners through the terms of trade; (2) In a large country the price increase following the tariff introduction will be smaller than the tariff itself as part of the tariff is passed on to foreign producers (pass through effect). The degree of pass through depends on the elasticity of the foreign export supply.*

- b. Discuss the ongoing US-China trade war, and analyse the consequences of the trade war for different groups in the US, in China and in the rest of the world. Your analysis should draw on international trade theory and should consider both partial equilibrium effects and general equilibrium effects.

***Answer:** The answer should draw on open sources and relate to the non-compulsory term paper. It should build on the slides and recommended literature on "welfare and trade" and "the factor proportion theory" (Stolper Samuelson theory). It should relate to the answer in 1a) and discuss the optimal tariff argument and retaliation. It should discuss winners and losers (the consumers,*

the producers buying intermediate goods, protected producers and competing producers) on both sides based on a partial equilibrium framework. It should also, by using Stolper -Samuelson and a general equilibrium framework, and setting up a model with two sectors (import competing and exporting), show that the introduction of a tariff means increased prices and trigger structural change that decreases the exporting sector and increases the import competing sector. this means less efficient resources allocation and reduced welfare for the country as a whole. But those who are employed in expanding/shrinking sectors will gain/be hurt.

Problem 2 (25 points)

Gains from trade

- a. Give an account of, and describe, the different sources of gains from trade in a world where firms within each in industry in a country are homogeneous. Describe the mechanisms that produces the gains and use graphical illustrations where appropriate.

***Answer:** Two main sources should be mentioned: (1) Comparative advantage leading to increased specialization and more efficient use of resources. Graphical illustration from the introduction slides or the factor proportion theory slides, should be used. (2) Interaction Imperfect competition and trade: leads to reduced markups/more variety, discussion should be based on the slides and literature on imperfect competition and trade.*

- b. Give an account of, and describe, the different sources of gains from trade in a world where firms within each in industry in a country are heterogeneous. Describe the mechanisms that produces the gains and use graphical illustrations to support your arguments.

***Answer:** Discussion should be based on the slides and literature on the Melitz model with heterogeneous firms, and contain text and graphical illustration. the*

key point is how trade leads to intra-industry reallocation of resources as the least productive firms exit or shrink while the more productive ones expand.

Problem 3 (25 points)

Growth in country size

- a. Does country size matters? Discuss the question in light of international trade theory.

***Answer:** Discussion should use the insights from neoclassical trade theory (factor proportion theory) and imperfect competition and trade. It should make the point that in the typical neoclassical model country size as such does not matter for the patterns of trade and for the gains from trade. But with imperfect competition and trade size matters. Drawing on the slides on the home market effect and the related literature, the role of country size for welfare, the fact that bigger countries have higher welfare than smaller countries and the role of country size for specialization (home market effect), should be explained.*

Imagine that a trading partner has experienced a sudden and substantial growth in its labor force and thus in its market size.

- b. What trade theories would you use to address the consequences for welfare in our country and in the country of our trading partner? What do these theories tell us? Use graphical illustrations and mathematical expressions to support your arguments. Pay attention to total welfare and welfare for different groups, and to short and long term.

***Answer:** Should use the Ricardian model with a continuum of goods (slides and related literature) and the imperfect competition and trade model (monopolistic competition). Important to bring out that with a neoclassical trade model the country experiencing the growth in size is worse off, while the trading partner gains, while with imperfect competition and trade, both countries gain, while the*

country experiencing the growth will gain more when there are positive trade costs.

Problem 4 (15 points)

State whether the following claims are false or true. Explain your answer with a couple of sentences.

- a. "Our terms of trade have deteriorated over the last years. To tackle this challenge we should raise our import tariffs."

***Answer:** For a small country, wrong. For a big country, deteriorated terms of trade will improve. But the general concerns related to using a tariffs (e.g. retaliation) remains; hence probably not wise.*

- b. "We have decided to not enter into a Free trade agreement with Big-Land since they share the same technology and factor endowment as we do and there will therefor not be any gains from trade."

***Answer:** Based on neoclassical trade theory, this makes sense. But if there are markets with imperfect competition, then there may still be gains from trade.*