Public Affairs 856 Spring 2017 University of Wisconsin-Madison

## Problem Set 3

Due in Lecture on Wednesday, April 5<sup>th</sup>.

1. Consider a small country applying a tariff, *t*, to imports of a good.

1.1 Suppose that the country decides to reduce the tariff to t'. Using a graph, show what happens to production at home, what happens to imports?

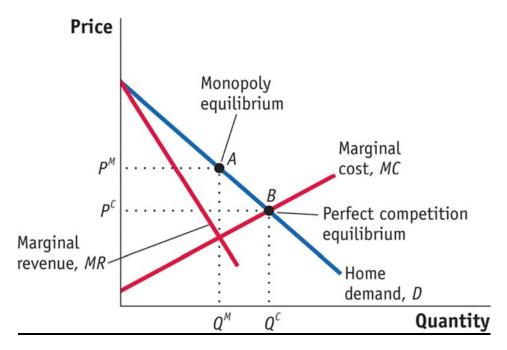
1.2 Show the changes to consumer and producer surplus.

1.3 Show the changes to government revenue.

1.4 Show the overall change to welfare.

2. Consider a large country. Compare a tariff that is large vs. one that is small. In which case is the terms of trade gain likely to exceed the dead weight loss?

3. Consider the following monopoly in an autarkic country:

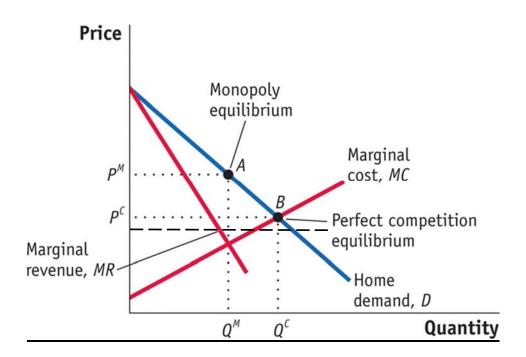


3.1 Show consumer surplus under perfect competition. Show producer surplus.

3.2 Show consumer surplus under monopoly. Show producer surplus.

3.3 Show deadweight loss (DWL) due to monopoly.

4. Assume the economy in Problem 3 opens up to international trade. The world price is shown by the horizontal dashed line. Show the gains from trade.



5. Consider a small country that exports widgets. Suppose the marginal social cost of widget production is less than the marginal (private) cost.

5.1. Show what happens if an export subsidy of z is applied.

5.2 Show what happens if a production subsidy of z is applied (same amount as in 5.1)

5.3 Which policy is preferable? Explain why?

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