

Economics 462
Quiz 6

December 7, 2006
Professor Parker

Time: 25 minutes.

The United States is an exporter of agricultural products such as cotton. The U.S. government provides a significant production subsidy to U.S. farmers, often equal to as much as two-thirds of the costs of production. The market is very competitive, and though individual producers have significant internal economies of scale the overall market exhibits the standard upward sloping marginal cost (supply) curve.

- a) Assume for a moment that the U.S. is a small country in the international cotton market. Show a supply and demand graph for the U.S. cotton market, for both market equilibria (with and without the government subsidy). How does the production subsidy affect the market price of cotton, the domestic production of cotton, and the domestic consumption of cotton?
- b) Using your first graph, explain the distributional effects of the subsidy on domestic producer surplus, domestic consumer surplus, and the government budget. Assuming there are no externalities from cotton production, what happens to overall welfare in the United States?
- c) Compare the effects of this production subsidy to an export subsidy.
- d) If the U.S. is a major exporter of cotton, how will the subsidy affect the world price of cotton?
- e) Using another graph for the cotton market in East Asia, which has few cotton producers but a large textile industry, show the effects of the U.S. production subsidy on Asian prices, production, consumption, producer surplus, consumer surplus, and overall Asian welfare.
- f) Using yet another graph for the cotton market in Africa, where farmers have a comparative advantage, explain the effects of the U.S. subsidy on African cotton producers, consumers, and overall African welfare.