PC 4: Trade Policies

Exercise #1: Import quotas and free trade agreements

US imports of sugar are subject to a quota. Although rounded up, the figures used in this exercise are close to reality. Thanks to the quota, US production of sugar is 6 million ton/year, instead of 5 million without the quota, and US consumption of sugar is 8 million ton/year, instead of 9 million without the quota. The US consumer pays \$480/ton, whereas the world price is \$280/ton.

- 1. What is the volume of the quota? Plot US supply and demand curves and show graphically the impact of the quota for consumers and producers. Why is the US price higher with the quota?
- 2. Calculate the monetary losses and gains for US consumers and producers. How much would the latter be disposed to pay for the quota not being removed?
- 3. Calculate the quota "rent". Who receives this rent?
- 4. Comment the following graph.



Quota rents: the case of tariff-rate quotas Rent by importing country, in \$Mn in 2001

World trade = \$4277Bn in 2001. A tariff-rate quota is a value or a volume of a specific good that can be imported at a reduced tariff rate during a certain period. Any additional import is taxed at the normal tariff.

Source: CEPII, MacMaps database.

5. Despite intense lobbying by US sugar producers, a free-trade agreement is concluded between the US and the EU. European sugar can now be imported tariff-free with no limitation in the US. The European price is \$380/ton. The price of sugar in other regions (Brazil, Australia, Thailand, Cuba) is \$280/ton, but each imported ton is subject to a \$200 tariff in the US.

Show graphically the impact of the FTA compared to a situation where the US imports its sugar from other regions at the world price with the \$200 tariff. Is there trade creation or diversion? The world price is assumed constant at \$280/ ton. Is this assumption realistic?

Exercise #2: The North-American Free-Trade Agreement (NAFTA)

Over the last two decades, regional trade has developed in the textile & clothing industries, contrasting with the globalization trend observed from 1950 to 1980. Comment the three graphs.



Graph 1 – Share of developing countries in world exports of clothing (in %)



Source: R. Avisse and M. Fouquin (2003), « Commerce du textile et de l'habillement : le multilatéralisme face au régionalisme », *Economie internationale*, No. 94-95. Data is from CEPII-CHELEM.