## Trade Barrier Assignment

Read the Case Below and answer the questions that follow:

## Is This a Sweet Deal ?

Every year U. S. consumers pay from $500 million to $3 billion extra for sugar and products containing sugar because the U.S. government imposes import quotas and provides subsidies for sugar beet and sugar cane farmers. True, even at $3 billion, this works out to only around $10/consumer, but what about the other side of the fence? Sugar trade policies allow approximately 10,000 growers to each reap anywhere from $40,000 to $250,000 annually, with a relatively few larger growers receiving the greatest benefits. How did cane and beet farmers get this sweet deal?

A look at the history of the American sugar industry reveals that government involvement in the sugar market is anything but new. In 1789, the First Congress of the United States imposed a tariff on foreign sugar. Its simple purpose – to raise revenue – proved to be a sweet deal for a government that had no income tax with which to pay its expenses. Although the purposes varied and the legislation became more complex, the federal government's sweet tooth was in evidence throughout the next century. Between 1789 and 1930, Congress enacted a total of 30 pieces of sugar tariff legislation.

In the 1930s the focus of sugar policy changed from raising revenue to protecting sugar growers from foreign competition, and the 1934 Jones-Costigan Act initiated the use of quotas to control the supply of sugar in the U.S. market. Under that legislation, the Department of Agriculture determined the demand for sugar; that is, it made an educated guess about how much sugar people and businesses would buy. The next step was to choose who would supply the sugar to meet this estimated demand. The USDA allocated just over 99% of the supply quota to:

1. U.S. suppliers of beet and cane sugar, and
2. Cane sugar suppliers from Cuba and the U.S. dependencies of Hawaii, Puerto Rico, the Virgin Islands, and the Philippines.

Once the *domestic* supply was allotted, the quota for *imported* sugar was determined by subtracting the amount produced by groups 1 and 2 from the total estimated demand. Thus, foreign producers were allowed to supply less than 1% of the sugar that American consumers wanted.

While the legislation obviously had an impact on foreign producers of sugar who hoped to sell in the U.S., the quotas also affected the income-earning ability of American sugar producers. Because the Jones-Costigan Act was designed to stabilize the domestic sugar industry, the quota system could impose limits on individual growers. Anticipating the possibility that some American producers would not be allowed to grow as much sugar as they wanted to or as they had in the past, Jones-Costigan provided for a tax on sugar processing. The tax was, of course, ultimately paid for by consumers in the form of higher prices on sugar and products using sugar. Tax revenues were used to compensate those beet and cane growers who had to reduce production.

In the late 1940s, the U.S. started using sugar quotas as a foreign policy tool. For example, Cuba received preferential treatment in the assignment of 1948 quotas because Cuban cane growers had increased output during WWII and supplied the U.S. with low-priced sugar. Ironically, in 1960 the sugar quota was once again used as a foreign policy tool in Cuba, but this time all sugar imports were banned to protest the communist takeover of Cuba’s government.

Beginning in 1970, world consumption of sugar increased significantly and resulted in record high world sugar prices. Because of these high prices, the U.S. government removed the quotas on raw sugar and the Agriculture Department stopped allocating sugar quotas for *domestic* areas. Only a small tariff remained on imported sugar.

Predictably, the high world price called out increased production by both domestic and foreign producers and the price declined sharply. In response to this decline the U.S. government increased the tariff on imports and instituted subsidies for domestic growers through a loan guarantee program. Growers are allowed to obtain government financing at a below-market rate and commit raw sugar as collateral. If the market price does not reach the level of the loan rate the producer simply gives the collateral sugar to the government to repay the loan. Definitely a sweet deal for sugar farmers.

During the early 1980s this loan program was expanded to include estimated interest and shipping costs, and the USDA designated a “Market Stabilization Price” (MSP). When the world price of sugar continued to fall, the U.S. re-imposed the sugar quota in 1982. The quota worked as expected, reducing the amount of sugar available to purchase and thus pushing the price higher. Since that time the U.S. has continued to use quotas to regulate the volume of raw sugar imports so that domestic sugar prices don't fall below the MSP. If the volume of sugar on the domestic market increases – say, because of an extraordinarily good crop year – the import quota is reduced. If domestic production is very low for some reason, then the import quota may be expanded. (Wouldn't the local pizza delivery love it if the government closed his competitors whenever an increasing supply of pizzas threatened to make the pizza price drop!)

During the 1980s the U. S. continued to use the sugar quota as a foreign policy tool with South Africa, Nicaragua, and Haiti. Also of significance was that U.S. food processors, faced with the relatively high price of sugar, dramatically increased use of high fructose corn syrup, a close substitute for refined sugar. This led to a decline in the domestic demand for refined sugar, but rather than domestic growers adjusting their output, the global quota amount was reduced to keep the sugar price from falling.

In 1989, in response to Australia's challenge under GATT (the General Agreement on Tariffs and Trade), the U.S. changed to a "tariff-rate quota." Under the TRQ system a quota-holding country can export up to the quota amount at a tariff rate of 0.625 ¢/lb. The same country may export additional sugar to the U. S., but the tariff rate jumps to 16.72¢/lb.

The North American Free Trade Agreement (NAFTA) also addressed the sugar trade. One result of the NAFTA process of reducing and eliminating trade barriers is that Mexico’s sugar production increased dramatically from the 3.8 million tons of sugar in 1994 to almost 5.5 million tons in 1998. In addition, Mexico’s imports of U.S. high fructose corn syrup, a good substitute for sugar, increased from 52,000 metric tons in 1995 to over 207,000 tons in 1998.

The farm bill of 1996 removed all controls on domestic production and reduced the tariff rate-quota on imported sugar to 15.36¢/lb, but kept in place the practice of taking sugar at guaranteed prices in payment of government loans to sugar farmers. This practice, of course, reduces or eliminates incentives for growers to cut back on production.

Trends that have developed in the past few years include a decrease in the number of domestic sugar producers, but an increase in the average number of acres farmed by each producer. Fiscal year 2000 domestic production of sugar is estimated at a record 9 million metric tons, a surplus of almost 2 million tons in U.S. production. Some growers blame the surplus on the rapid development of alternative sweeteners and on the flexibility of U.S. farmers who switch among grain, oilseed, cotton, rice, and sugar depending on the market prices of the different crops. Regardless of the validity of those claims, it is certainly the case that government sugar subsidies increase the incentives for farmers to make the switch to sugar when the prices of other crops fall.

World sugar production in 1999 was a record 132 million metric tons. 2001 world sugar production is forecast to be down by about 6 percent, with Brazil, one of the world's largest sugar producers, expected to decline by about 26%, and the European Union, the leading producer of beet sugar, expected to drop 13%.

World prices have, for the most part, declined since 1998, with the average world price being around 6¢/lb. The U.S. domestic price for the same period is approximately 17.5¢/lb.

With the significant emphasis on reducing trade barriers during the last decade of the 20th century, why have quotas and subsidies been retained in the sugar industry, and why haven’t consumers raised a fuss over the extra millions of dollars they spend each year for sugar and sugar-related products?

**Addendum: 2006 update:**

The world sugar trade situation has remind relatively unchanged since 2000 with the exception of increased production in Brazil, (probably the world’s low cost producer of sugar), and decreased production in the EU. In fact the EU has become a net importer of sugar. The 2005 world price of sugar was approximately 13¢ lb. and the U.S. price was 37¢ lb. (2005 prices are quoted because as of mid-2006 the sugar price has been very volatile do to the changing price of petroleum.)

Sugar subsidies were a major topic at the contentious 2006 Doha Round of the World Trade Organization talks that broke up with no agreement on agricultural policies.

## Is U.S. Sugar Policy A Sweet Deal?

1. Is sugar policy a sweet deal for the U.S. government?
* How is the use of sugar tariffs and/or quotas a sweet deal for the U.S. government? Using the background reading on the history of U.S. sugar policy, list the benefits government derives from sugar trade barriers.
1. Is sugar policy a sweet deal for consumers and producers in the sugar market?
* Hints: Use your common sense and your experience to answer the following:
* If you are a **buyer** of sugar, would you rather there be **more sugar** and more sugar sellers or **less sugar** and fewer sugar sellers in the market? Why? (Hint: What do you think happens to the price of sugar when there is more sugar available? When there is less sugar available?)
* If you are a **seller** of sugar, would you rather there be **more sugar** and more sugar sellers or **less sugar** and fewer sugar sellers in the market? Why? (Hint: What do you think happens to the price of sugar when there is more sugar available? When there is less sugar available?)
1. What trade-offs must be considered in the decision about whether or not to impose sugar trade barriers?

Suppose Diagram 1, below, represents the world sugar market when U.S. quotas are in effect. All sugar grown in the U.S. goes into the U.S. market. Foreign sellers, attracted by the higher price in the U.S. market, would like to come in, but they are prevented by the tariffs and quotas and end up selling to non-U.S. buyers.

Diagram 1 - Current situation

***US trade barriers***

World sugar consumers

*(buyers)*

U.S.sugar producers

*(sellers)*

Brazilian sugar producers

*(sellers)*

Other sugar producers

*(sellers)*

Mexican sugar producers

*(sellers)*

U.S. sugar consumers

(buyers)

**17.5¢/lb.**

**6 ¢/lb.**

What would happen if the trade barriers were removed? How would the diagram change? Draw in the arrows and the prices.

Diagram #2

World sugar consumers

*(buyers)*

U.S.sugar producers

*(sellers)*

Brazilian sugar producers

*(sellers)*

Other sugar producers

*(sellers)*

Mexican sugar producers

*(sellers)*

U.S. sugar consumers

*buyers*

*US trade barriers removed*

If Trade Barriers On Sugar Are Removed

Fill in the chart. Remember that there are 2 markets – the U.S. market for sugar and the world market. First decide what will happen to the price of sugar in each market if the trade barriers are reduced or removed. (Use arrows, êé, to show whether the price will go up or down). Then decide whether each of the listed interest groups will support or oppose the removal of U.S. tariffs and quotas.

|  |  |  |
| --- | --- | --- |
| **Interest Group** | **Price change** **if U.S. quotas** **removed (ê é)** | **Position on removal of U.S. sugar quotas ?** |
| **Support or Oppose removal of sugar quotas?** |
| **U.S. Market:** |  |  |
| **U.S. sugar growers** |  |
| **U.S. sugar buyers** |  |
|  |  |  |
| **World market:** |  |  |
| **World sugar growers** |  |
| **World sugar buyers** |  |

Now you should be able to answer the original questions from the reading:

1. Is U.S. sugar policy a sweet deal? (For whom?)
2. Considering the numbers of people who benefit and the numbers who bear the cost of U.S. sugar policy, why have the quotas and tariffs remained in effect so long? Offer evidence from the article to back up your argument.
* Hint: Sugar policy is enacted by Congress. Which groups have the greatest incentive to lobby Congress and to vote for Congressmen who support sugar quotas?

Current events and the sugar market:

The reading on the history of sugar policy mentions two interesting recent developments in the sugar market:

* The rising demand for and availability of sugar substitutes (mostly corn-based), and
* The North American Free Trade Agreement (NAFTA) that allows Mexico to avoid the U.S. sugar trade barriers.

That adds two new interest groups to the chart. Do they support or oppose removal of U.S. sugar quotas?

|  |  |  |
| --- | --- | --- |
| **Interest Group** | **Price change if U.S. quotas removed****(ê é)** | **Support or Oppose removal of U.S. sugar quotas ?** |
| **U.S. corn growers** | **Corn:** |  |
| **Mexican sugar growers** | **Sugar:** |  |

Why Would They DO That?

In 1985, large domestic sugar-buying companies began importing from Canada cake mixes that had high sugar content.\* They extracted the sugar from the mix and sold it. Why would they engage in such weird behavior?

Clues:

* In 1985, the world price of sugar fell below 3¢/lb.
* Importation of cake mix from Canada was not subject to a quota.
* The domestic price of sugar averaged more than 3X the world price of sugar through the 4th quarter of the 20th century.

## Teacher Guide

Class Discussion: Is U.S. Sugar Policy A Sweet Deal?

1. Is sugar policy a sweet deal for the U.S. government?
* *Refer to the background reading for the benefits of sugar policy to the federal government. Benefits include revenue, foreign trade influence, and political support from farmers.*
1. Is sugar policy a sweet deal for consumers and producers in the sugar market?
* *The policy generates huge benefits for sugar growers. It is not a sweet deal for consumers who bear the higher costs of sugar. (Note that the benefits of the policy are relatively concentrated and therefore noticeable to each individual producer, while the costs are diffuse and therefore not very noticeable to individual consumers.)*
* Hints: Use your common sense and your experience to answer the following:
* If you are a **buyer** of sugar, would you rather there be **more sugar** or **less sugar** on the market? Why? (Hint: What do you think happens to the price of sugar when there is more sugar available? When there is less sugar available?) *Buyers want there to be* ***more*** *sugar on the market as that will generate downward pressure on prices.*
* If you are a **seller** of sugar, would you rather there be **more sugar** or **less sugar** on the market? Why? (Hint: What do you think happens to the price of sugar when there is more sugar available? When there is less sugar available?) *Sellers want* ***less*** *sugar on the market, because that which is available – theirs – will sell for a higher price.*
1. What trade-offs must be considered in the decision about whether or not to impose sugar trade barriers?
* *Are the foreign policy advantages worth the costs that are imposed on U.S. consumers and on the world's producers of sugar? Students may also look at the more personal question that elected officials must face: Are the advantages of support from groups supporting the sugar quota worth the costs those quotas impose on consumers?*

Diagram 2

*Diagram 2 should be completed as follows to show the effect of removing the tariff. Note that the world price of sugar will rise above 6¢ as some is diverted to U.S. buyers and the U.S. price will fall in response to foreign competition.*

**Higher than 6¢ /lb**

**Lower than 17.5¢ /lb**

**Higher than 6¢ /lb**

World sugar consumers

*(buyers)*

U.S.sugar producers

*(sellers)*

Brazilian sugar producers

*(sellers)*

Other sugar producers

*(sellers)*

Mexican sugar producers

*(sellers)*

U.S. sugar consumers

*buyers*

*Trade barrier removed*

**If Trade Barriers On Sugar Are Removed (Teacher Guide)**

|  |  |  |
| --- | --- | --- |
| **Interest Group** | **Price change if quotas removed****(ê é)** | **Support or Oppose removal of sugar quotas ?** |
| U.S. Market: |  |  |
| U.S. sugar growers | *Oppose* |
| U.S. sugar buyers | *Support* |
|  |  |  |
| World market: |  |  |
| World sugar growers | *Support* |
| World sugar buyers | *Oppose* |

1. *Sugar policy is a sweet deal for sugar growers.*
2. *The policy has lasted because of the distribution of benefits and costs. The concentrated benefits give growers an incentive to lobby Congress to make sure the benefits continue. Meanwhile, the costs to individual consumers are too low (and not clearly apparent) to provide any incentive to organize in opposition.*

Current events and the sugar market: (Teacher Guide)

|  |  |  |
| --- | --- | --- |
| **Interest Group** | **Price change if U.S. quotas removed** **(ê é)** | **Support or Oppose removal of U.S. sugar quotas ?** |
| U.S. corn growers | Corn: | *Oppose* |
| Mexican sugar growers | Sugar: | *Oppose* |

*U.S. corn growers benefit from the higher domestic price of sugar because demand increases for corn-based sugar substitutes.*

*Mexico, once an opponent of U.S. sugar import restrictions, is now a supporter because NAFTA makes Mexican growers no longer subject to the quota. Thus, Mexican sugar producers benefit from the fact that the U.S. price is higher than the world price.*

World sugar consumers

*(buyers)*

 **6 ¢/lb.(+)**

Brazilian sugar producers

*(sellers)*

Mexican sugar producers

*(sellers)*

Other sugar producers

*(sellers)*

U.S.sugar producers

*(sellers)*

**17.5¢/lb. (-)**

U.S. sugar consumers

(buyers)

*(Mexican sellers go around trade barrier)*

**17.5¢/lb. (-)**

Additional Teacher Notes: Charts in student exercise

In considering the answers in the chart, it is important to think about the role of supply, demand, and price in the sugar market, the markets for products that use sugar and sweeteners, and the markets for alternatives to sugar like high fructose corn syrup.

U.S. farmers will favor the continuation of quotas because they keep the domestic price of sugar high. The quota is set so that there is just enough sugar to meet the demand at a relatively high price. If the price starts to fall, the quota for foreign producers is reduced.

World sugar farmers favor the removal of quotas that shut them out of the U.S. market. Understandably, they'd love to offer their sugar in a market with a price above that they face in the world market. From their point of view, even if the entry of foreign sugar caused prices in the U.S. market to fall, they'd still be above current prices on the world market.

If U.S. consumers thought about it, they would favor the removal of quotas. No quotas means more sugar offered on the market, which means lower prices. (However, as noted in the exercise, sugar consumers have little incentive to engage in the organized activity necessary to bring about the removal of quotas.)

In the short run, world consumers benefit from the continuation of quotas because without the U.S. demand in the world market prices of sugar and sugar products remain fairly low. If the quotas are removed the world price will undoubtedly rise, affecting, at least in the short run, the food budgets of many poorer people in third world countries.

U.S. corn farmers also benefit from sugar quotas because the demand for alternatives to high priced domestic sugar, such as high fructose corn syrup, helps keep the price of corn high.

World corn farmers should favor the removal of quotas because the rise in world sugar prices would increase the demand for sugar alternatives in countries other than the U.S.

Mexican sugar farmers favor the continuation of the quotas because under the NAFTA agreements they can export large quantities of sugar to the higher priced U.S. market. *(On the overhead transparency of diagram 1, show the Mexican arrows sliding around the end of the trade barrier.)*

Concentrated benefits, diffuse costs:

The primary reason that sugar quotas continue to be used by the U.S. is the benefit that they bring to the approximately 10,000 U.S. sugar farmers. Simply put, the benefit to each of the farmers is far greater than the cost to each U.S. consumer who pays higher prices for sugar and sugar products each year. The incentive for the farmers to lobby Congress and engage in public relations campaigns is very strong; even the growers at the lower end of the range have a $40,000 benefit from the policies. For any given consumer, however, the effort to lobby Congress to remove the quotas or to launch a public relations campaign aimed at quota removal is simply not worth the benefits – approximately $10-$20 each year – that lower sugar prices would bring.

Why Would They DO That? (Teacher Guide)

*The domestic price of sugar was so high that it was profitable for the companies to buy the cake mixes, bear the cost of extracting the sugar, and then sell the sugar. The Canadian cake mixes were produced relatively inexpensively with sugar purchased at 3¢/lb. Because of U.S. – Canada trade agreements, no quota stopped the mixes at the border. U.S. producers found that even the expense of extracting the sugar from the cake mixes was cheaper than paying the domestic price of sugar.*