A Sweet Deal for Sugar

Jeff LeBlanc
A SWEET DEAL FOR SUGAR

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"Some people win the lottery; other people grow sugar."
- James Bovard

I. INTRODUCTION

Agricultural subsidies are a hot topic. The evolution of the world economy through globalization and loosening of trade restrictions has inspired caution and trepidation, while simultaneously creating tremendous economic benefits. The future of agriculture in the developed world is one of the most important issues facing the global economy today. Through closed markets, tariff schemes, and domestic subsidies, many developed countries support domestic agricultural production and limit the importation of cheaper, more efficiently made products from developing countries. Sugar is one such product. This paper will analyze the United States domestic sugar market as an exemplar of domestic subsidy and tariff programs in general. The purpose of this analysis is to advocate market efficiency and reduce waste through application of the perfectly competitive economic model. The paper will provide a brief introduction to the history of sugar. An overview of the sugar program in the Farm Security and Rural Investment Act of 2002 will be provided as well. The Farm Security and Rural Investment Act of 2002 is the current law in regards to agricultural subsidies, although a new farm act is currently being proposed and should be enacted by the end of 2007. For the most part, the proposed 2007 act’s proposed sugar system is nearly

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1 James Bovard is a libertarian author and speaker who targets government largesse and waste. Mr. Bovard is a frequent contributor to a number of magazines, scholarly articles, and newspapers. Mr. Bovard has also authored a number of libertarian leaning books such as LOST RIGHTS (1994), FREEDOM IN CHAINS (1999), and TERRORISM AND TYRANNY (2003).
identical to the 2002 system. The six fundamental assumptions of the perfectly competitive market will be discussed and applied to the domestic sugar industry. Finally, there will be a discussion of the domestic and international impact of the United States sugar program. The argument that an elimination of the tariff system and abolition of the government non-recourse loan program is in the best interests of the United States, and international sugar farmers will be presented.

II. A BRIEF HISTORY OF SUGAR

The Western World's first exposure to sugar occurred during the campaigns of Alexander the Great, near the end of the fourth century B.C.E.\(^2\) Nearchos, one of Alexander's commanders referred to a crop grown by the Indians as a "reed that gives honey without bees."\(^3\) This crop was sugar cane, which is thought to have originated on New Guinea.\(^4\) Sugar was first brought to the Americas by Columbus.\(^5\) In August of 1492, Columbus stopped for supplies at the Canary Islands, and was gifted sugar cane cuttings by the island's governess, Beatrice de Bobadilla.\(^6\)

Initially, sugar production in the Americas was concentrated in the Caribbean and South America.\(^7\) However, sugar growing has long since spread to the United States. The United States government has long relied on the imposition of government tariffs on sugar as a means of generating revenue.\(^8\) The modern sugar program is based upon the Federal

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5 Sugar Cane—History, supra note 2.
6 Id.
7 Id.
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Agriculture Improvement and Reform Act of 1996 (FAIR).\(^9\) FAIR expired in 2002 and was supplanted by the Farm Security and Rural Investment Act of 2002.\(^10\) The 2002 farm statute is in effect until enactment of the 2007 farm act and has maintained, or supplemented, most of FAIR’s sugar related provisions.\(^11\) Both the 1996 and 2002 farm statutes provide pricing support for sugar cane and sugar beet farmers through low interest government loans and restrictive import tariffs and quotas.\(^12\)

In the United States, sugar cane is grown principally in Florida and Louisiana, with some production in Texas and Hawaii.\(^13\) Sugar cane production was 26,604,000 short tons\(^14\) in 2005 and is estimated to be 29,799,000 short tons in 2006.\(^15\) Sugar beets are grown in California, Colorado, Idaho, Michigan, Minnesota, Montana, Nebraska, North Dakota, Ohio, Oregon, Washington, and Wyoming.\(^16\) Total United States production of sugar beets was 27,537,000 short tons in 2005 and 33,765,000 short tons in 2006.\(^17\)

III. PRICE CONTROLS AND NON-RECOURSE LOANS

United States agricultural policy protects sugar prices in two ways: through a non-recourse loan program under the Farm Securities and Rural Investment Act of 2002 and the Tariff Rate Quota system through the Office of the United States Trade Representative.

\(^12\) See U.S.D.A. Economic Research Service, 2002 Farm Bill, supra note 11.
\(^14\) One metric ton is equivalent to 1.10231125 short tons.
\(^15\) See U.S. DEP’T OF AGRIC., NAT’L AGRIC. STATISTICS SERV., supra note 13.
\(^17\) Id.
The United States sugar program provides non-recourse loans to domestic sugar producers in exchange for their crops whenever the domestic sugar price falls below the government loan rate. Non-recourse loans are commodity secured loans with a set duration. At the end of the set time, usually 9 months, farmers can either repay the loan plus interest, or forfeit their crop. An American farmer can grow sugar cane or sugar beet with the knowledge that, should the domestic price of sugar drop below the loan rate per pound of crop (and considering incidental expenses), the farmer can transfer his crop to the government Commodity Credit Corporation for money. The raw cane sugar loan rate is 18 cents per pound, and the current refined beet sugar loan rate is 22.9 cents per pound of sugar. The loan rates are the same under the Farm Security and Rural Investment Act of 2002 as the loan rates under 1996's FAIR.

The Farm Security and Rural Investment Act of 2002 and the Office of the United States Trade Representative utilize import restrictions called Tariff Rate Quotas to restrict the importation of foreign sugar into the United States based upon quantities negotiated during the Uruguay Round of negotiations. Quotas are established for each country and state how much sugar can be imported into the United States from each particular country.

The Farm Security and Rural Investment Act of 2002 requires, "to the maximum extent practicable, the Secretary shall operate the program established under this section at no cost to the Federal Government by avoiding the forfeiture of sugar to the Commodity Credit

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21 Id. at 183.
24 See e.g. Office of the United States Trade Representative, http://www.ustr.gov.
By contrast, FAIR did not require a "no cost" operation of the sugar program. However, despite the affirmative statement present in the 2002 farm statute, the 2002 statute actually reduces the capacity of the sugar program to operate at no cost to the government as compared to the 1996 act. The elimination of marketing assessments, forfeiture penalties, and a reduction in the loan interest rate have increased potential costs under the Farm Securities and Rural Investment Act of 2002 when compared with FAIR.

The Agriculture Appropriations Act of 2000 suspended marketing assessments for sugar in 2001 and marketing assessments were officially terminated in the 2002 farm statute. Marketing assessments are fees levied per unit of production (i.e. pounds, short tons) that producers must pay to the government to help pay for a commodity program's costs. Without marketing assessments, the government program is operated at a greater cost since there has been an elimination of user fees.

The ability to operate the sugar program at no cost was further eroded by Farm Securities and Rural Investment Act elimination of forfeiture penalties. Prior to the enactment of the Farm Securities and Rural Investment Act of 2002, sugar producers who forfeited their sugar crop collateral were required to pay a penalty to the government for their forfeiture. Forfeiture penalties were a deterrent for farmers to prevent crop forfeitures. Sugar forfeiture penalties effectively lowered the necessary domestic sugar price at which it became economically sensible to forfeit a farmer's crop. Rational farmers will seek to maximize their profits. As a result, farmers exchange their crops for low interest government loans when the price of sugar drops below eighteen cents per pound, including consideration of additional costs involved in the loan

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27 Id.
program such as the interest rate, transportation, and forfeiture penalties. Under FAIR, sugar cane producers paid a penalty of $.01, and beet producers paid $.0107 on each pound of sugar forfeited.\(^{30}\) The "no cost" mandate of the sugar program in the Farm Securities and Rural Investment Act was hampered further by the reduction in loan interest rates to farmers. The 2002 law reduced the loan interest rate by one percentage point, thereby reducing government income.\(^{31}\)

Despite the "no cost" language in 2002's Farm Securities and Rural Investment Act, the net affect of its provisions is to reduce payments to the government from sugar farmers in the event of forfeiture. Elimination of forfeiture fees, marketing assessments and reduced interest rates operate to keep additional money in the pockets of sugar producers at tax payers' expense in the event of forfeiture. Sugar farmers could forfeit their sugar crops for loans at reduced interest, and without penalty under the Farm Securities and Rural Investment Act. Based on the forfeiture scheme in effect as a result of the Farm Securities and Rural Investment Act of 2002, farmers should only forfeit their crop to the Commodity Credit Corporation when the loan rate and costs of forfeiture, transportation, forfeiture penalties, and the interest rate make forfeiture more profitable than crop sales at the domestic sugar price. Elimination of forfeiture costs, such as penalties and reduction of the interest rate, can result in forfeitures at higher domestic prices under the Farm Securities and Rural Investment Act of 2002 than under FAIR.

IV. THE PERFECTLY COMPETITIVE ECONOMIC MODEL

A perfectly competitive market creates an environment where resources are allocated to their maximum efficiencies, and there is no economic waste. The perfectly competitive market is an unachievable ideal, but represents an ideal worthy of study. The closer a particular market gets to the ideal of the perfectly competitive market, the less waste results and the greater the efficiency of the market. Therefore, it is beneficial to work towards the ideal as much as possible. There are six


\[^{31}\text{See U.S.D.A. Economic Research Service, 2002 Farm Bill, supra note 26.}\]
fundamental assumptions for the operation and formation of a perfectly competitive market. These six assumptions are: (1) there must be numerous buyers and sellers with each operating independently and rationally; (2) no one buyer or seller can affect price such that each buyer and seller consumes and produces such a negligible amount of a product so that no one market participant can influence the price; (3) there are no barriers to entry or exit from the market; (4) all market participants are fully and costlessly informed; (5) every product in the market must be homogenous and perfectly interchangeable with every other product; and (6) the forces of supply and demand must be unfettered. The perfectly competitive market assures maximum efficiency by ensuring that the supply of a produced good is exactly what is needed to meet demand for that good. If supply precisely matches demand, then there is no waste.

A. There must be numerous buyers and sellers. Each must be operating independently and rationally as profit maximizers.

The perfectly competitive economic model relies on the assumption that there are numerous rational and independent buyers and sellers. Actors must not be acting in collusion so as to affect the market. Actors must also be rational in so far as they seek to maximize profit, or “opulence” in the vocabulary of Adam Smith. Certainly there are numerous buyers of sugar. Virtually every resident of the United States is a buyer and consumer of sugar. There are also numerous companies that use sugar in the manufacturing processes for everything from cakes and bread to canned foods and ice cream. The American Sugar Alliance, an industry group, cites United States Department of Agriculture statistics,

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32 Some economists list the six fundamentals as four, the fundamental assumptions listed are actually the same; there is simply a more divisive classification in the six fundamental assumptions approach. See e.g. STEPHEN A. MATHIS & JANET KOSCIANSKI, MICROECONOMIC THEORY; AN INTEGRATED APPROACH 323-325 (Prentice Hall 2002), EDWIN MANSFIELD & GARY YOHE, MICROECONOMICS 289-291 (W.W. Norton & Company 2004) (1970), PHILIP E. AREEDA, JOHN L. SOLOW & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION 5 (Aspen Law & Business 2002).

33 See MATHIS & KOSCIANSKI, supra note 32.

finding that in 2002, on average, each American consumed about forty-five pounds of sugar per year.  

There are numerous sugar sellers as well, at least in regards to farmers. According to the 2002 Census of Agriculture conducted by the United States Department of Agriculture, there were 5,027 sugar beet farms and 953 sugar cane farms at an average size of 271.7 acres and 1026.6 acres, respectively. These totals are down from the 1997 Census of Agriculture when there were 7,057 sugar beet farms, and 1,079 sugar cane farms. Nevertheless, the 2002 Census numbers, whether indicative of a consolidation of raw sugar producers or not, still represents a multitude of raw sugar sellers. Each sugar grower, as a private business venture, seeks to maximize its profits. Maximization of profits represents rational market behaviour. In seeking to maximize profits in a rational manner, sugar growers may make the justifiable business decision to forfeit their sugar crop to the government’s Commodity Credit Corporation whenever the price of sugar drops below the 18 cents per pound federal loan rate after consideration of loan interest and transportation costs.

However, while there are numerous sugar buyers and sellers, sugar growers/sellers do not act independently. Sugar farmers and refiners are part of powerful lobby organizations such as the American Sugar Alliance. Raw sugar is an industry that produces a good which is indistinguishable regardless of who grows it. It also enjoys a controlled, partially closed market where domestic production does not exceed domestic demand. Through the federal government’s non-recourse loan

35 American Sugar Alliance, Frequently Asked Questions, http://www.sugaralliance.org/desktopdefault.aspx?page_id=97 (question number six) (Forty-five pounds per year, per person, is a tremendous amount of sugar. Sugar is used in a variety of industrial and culinary activities as a preservative, a sweetener, a bulking agent, and a fermenting agent. In addition to use of refined sugar in the home, sugar is used in many processed foods) (last visited Oct. 24, 2007).
37 Id.
programs, sugar farmers can exchange their crops as collateral for a low interest government loan whenever domestic sugar prices fall below the loan rate plus transportation and interest.\textsuperscript{39} In addition, sugar importation is controlled through Tariff Rate Quotas.\textsuperscript{40} Farmers are thereby part of a larger federal pricing and production scheme controlled by the federal government through the \textit{Farm Security and Rural Investment Act of 2002}. 

\textbf{B. No one buyer or seller can affect price.}

A perfectly competitive economic model requires that each buyer and seller consumes such a negligible amount of a product, so that no one buyer or seller can influence the price, due to the amount that they produce or consume. Sugar must be extracted from the cane or the beet root in preparation for human consumption. Sugar consumers are many and varied. Almost every person in the United States is a consumer of sugar in some quantity, and even industrial consumers do not consume such a tremendous amount of production so as to affect the price. While there are numerous sugar refiners in the United States, the three biggest refiners are essentially super-buyers and were responsible for 67\% of production in 2004 (down from 76\% in 1999).\textsuperscript{41} Imperial, Domino Foods, and United Sugars have 19\%, 24\%, and 24\% of the market share for sugar refining, respectively.\textsuperscript{42} With two-thirds of the domestic sugar refining market controlled by three players, there is clearly a possibility, under normal circumstances, to influence price due to the amount produced. However, the United States sugar market cannot be defined as being under “normal circumstances.” What is relevant in regards to the ideal efficiency of domestic raw sugar production is not the finished product output of the


\textsuperscript{40} Id.


\textsuperscript{42} Id.
individual sugar refiners, but rather their share of the domestic raw sugar crop that is purchased by those refiners. Absent control, three refiners with a 67% market share could certainly affect the price of raw sugar. However, raw sugar prices are insulated by both minimum price and maximum price protections. Raw sugar producers are protected by the non-recourse loan program under the 2002 farm statute. Whenever the domestic price of sugar dips below 18 cents per pound, a farmer can borrow 18 cents per pound of raw sugar from the government Commodity Credit Corporation in exchange for their raw sugar crop. The price is protected from rising too high by the Tariff Rate Quota system, which allows the government to authorize increased sugar imports whenever domestic production cannot meet domestic demand. Insufficient domestic supply would result in increased price, but for the ability to increase supply through increased imports. Under the controls imposed by the Farm Security and Rural Investment Act of 2002, the impact of the super-buyers is effectively controlled. Therefore, in practice the United States sugar market does not violate the second principal of the perfectly competitive economic model.

C. There are no barriers to entry or exit in and out of markets.

Producers of a good must be able to enter or leave the market easily without the imposition of artificial barriers by governments, firms, or costs. In the case of many goods, this fundamental assumption is rarely achieved, and sugar is no exception. There are barriers to entry into the domestic United States sugar market that include import quotas and tariffs. For 2006, the import quota, or “Tariff Rate Quota” for raw sugar, was set at 1,901,497 short tons raw value. This was the amount of

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44 Id.
46 MATHIS & KOSCIANSKI, supra note 32.
foreign sugar that could be imported into the United States market. The refined sugar Tariff Rate Quota is set at 529,013 short tons raw value.\(^48\) Tariff Rate Quotas tend to be set fairly low, and then adjusted once domestic sugar demand and production can be predicted with more accuracy.\(^49\) For instance, the raw sugar Tariff Rate Quota for fiscal year 2006 comprised the minimum amount negotiated through the World Trade Organization of 1,231,497 short tons; an additional 120,000 short tons announced on August 19, 2005; 300,000 short tons announced December 2, 2005; and a further 250,000 short tons on February 2, 2006.\(^50\) Due in part to hurricane damage in 2005\(^51\) and increased domestic demand, the domestic sugar industry remains incapable of supplying enough sugar to meet domestic demand.\(^52\) The sugar Tariff Rate Quota system limits the amount of sugar that can be imported into the United States by setting a maximum amount of sugar that a foreign country can export into the United States market.\(^53\) The Tariff Rate Quota essentially reduces the number of "sellers" in the United States market, which reduces the supply. This results in an increase in the cost of sugar, and a resulting decline in demand, which is in turn stifled by the increased cost. The result is waste in the market, as not every buyer who would buy sugar at the optimal cost will do so when the supply is artificially constricted and the price is

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\(^{48}\) [id.](#)
\(^{49}\) [id.](#)
\(^{50}\) [id.](#)
artificially high. This can be demonstrated by the following movement along a hypothetical sugar demand curve:

The graph above demonstrates the movement along the demand curve for sugar when considering two prices, D1 and D2. D1 is the demand at the United States Market price, whereas D2 is the hypothetical demand at the world market price. The quantity of sugar demanded is lower than it should be due to the high United States price as compared to the world market price.

D. All market participants are fully and costlessly informed.

The perfectly competitive market also requires that all buyers and sellers in the market have complete and accurate access to all pertinent information regarding the good. Market participants must be fully cognizant of price, technology, benefits, quality, and any other related market information. Full and costless information is perhaps the most idealistic prerequisite of the fully competitive market. In reality, all information has a price, whether that price is from research, studies, experience, or advertising. In order to costlessly keep all market participants informed, information would have to be disseminated in a manner that is beyond our current capabilities, like electricity along a perfect superconductor. Furthermore, it is nearly impossible for all market participants to be fully informed about a product. Full information requires a level of perfection which almost always exceeds technical and practical capabilities. However, what is achievable is a level of relatively full information and dissemination of that information. “Perfectly full information that is costlessly disseminated” can be compared to the hypothetical point at which a hyperbola intersects an X or Y axis. However, there is a level of product enlightenment that is generally economically acceptable.

Raw sugar meets the requirement for full and costless information as much as any product feasibly could. Sugar market participants have been working with sugar for millennia. Health benefits such as increased energy, draw backs such as sugar lows, and repercussions such as cavities are common knowledge for not just growers and refiners, but the masses of end users as well. Furthermore, information is available relatively costlessly through experience, common knowledge, labeling and the dissemination of information across such media as the internet. While no transfer of information is completely free, the transfer of information about sugar is either of such a low cost as to be insignificant, or the cost is so shielded by time as to be effectively costless for current market

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55 Mathis & Koscianski, supra note 32.
56 Id.
57 A hyperbola crosses the X or Y axis only at infinity, which is a practical impossibility, as is perfect information.
participants.\textsuperscript{58} As such, raw sugar does not substantively offend the requirement of the perfectly competitive economic model that all market participants be fully and costlessly informed.

\textit{E. Every product in this particular market must be homogeneous or a perfect substitute for every other product.}

Perfect competition requires that the buyer of any product to not care about which seller they purchase that product from.\textsuperscript{59} Each good or service that is produced within the market is homogeneous and interchangeable. Markets for agricultural goods are excellent examples of markets in which the good produced by one firm is generally indistinguishable from the good produced by another firm.\textsuperscript{60} Sugar from producer A and sugar from producer B are homogenous in that a buyer of sugar will not care whom he purchases his sugar. The sugar produced by A is indistinguishable from that produced by B. This homogeneity is manifested in the complete lack of advertising in favor of particular producers of sugar. The granulated sugar crystals from producer A, if mistaken for those from producer B, would be indistinguishable by a consumer. In contrast, an example of a market where the product of one firm is distinguishable from that of another firm is the automobile industry.\textsuperscript{61}

\textit{F. The unfettered forces of supply and demand.}

The final basic assumption for the perfectly competitive economic model is that the forces of supply and demand are unconstrained. Buyers and sellers must be free to produce and purchase the amount that they require free of control or artificial barriers. However, supply is effectively

\textsuperscript{58} This would be the case in situations where research has been done decades ago, and the information gleaned from such research continues to be used today, and will continue to be used in the future.\textsuperscript{59} \textsc{Edwin Mansfield} \& \textsc{Gary Yohe}, \textit{Microeconomics} 290 (W.W. Norton \& Company 2004) (1970).\textsuperscript{60} \textsc{Mathis} \& \textsc{Koscianski}, supra note 32.\textsuperscript{61} For instance, Toyota has its specific “Corolla” and Ford has its specific “Explorer” brand of vehicle. Each brand and each manufacturer is distinct and produces distinct products.
controlled by the federal sugar Tariff Rate Quota system.\textsuperscript{62} The Tariff Rate Quota system controls supply by dictating the amount of international sugar that is permitted access to the United States market. This control of supply has the additional effect of curtailing demand. Sugar consuming companies in the United States know that they will only have access to a certain supply of sugar in a given year. As a result, production becomes geared to the government mandated supply of sugar rather than to what demand may actually exist should there be no constraint on the supply. Due to the constricted supply, it is difficult to anticipate what the true demand for sugar in the United States would be if companies could buy sugar off of the relatively inaccessible world market, let alone at the world market price. Rather, sugar users are told how much sugar they can use through the amount that is permitted into the country by the sugar Tariff Rate Quota system plus domestic production. This serves as an unnecessary and disruptive fettering of the forces of supply and demand.

V. AT NO COST TO TAXPAYERS?

The Department of Agriculture and the Sugar Alliance, an industry advocacy organization, laud the sugar provisions in the \textit{Farm Securities and Rural Investment Act of 2002} for operating at no cost to taxpayers.\textsuperscript{63} While it is true that the program has not resulted in wide scale crop forfeitures to the Commodity Credit Corporation, this is due only to the high cost of sugar in the United States, not the inherent fairness of the 2002 farm statute.\textsuperscript{64} Sugar growers can exchange their crop for the low interest government loans when the price of sugar drops below eighteen cents per pound, while factoring in the rate of interest and cost of

\textsuperscript{64} \textit{See} United States Sugar data, available at http://www.ers.usda.gov/Briefing/Sugar/data/Table04.xls (Appendix A-4) (last visited Oct. 25, 2007).
However, for only one year in the past 20 years has the price of sugar in the United States stayed below twenty cents per pound. The average price of raw sugar in the United States has hovered around twenty-one cents per pound, while the average world price of raw sugar has hovered around ten cents per pound. The price has been kept high as a result of the Tariff Rate Quota system which controls the supply of raw sugar, thereby increasing the price and constraining the market demand of sugar to the available sugar supply. This increased price is what sugar consumers, whether they are refineries, factories, or households, wind up paying. It is therefore technically true that the sugar program itself is operated at zero cost to the taxpayers under the 2002 farm legislation, however, the sugar program is integrally tied to the Tariff Rate Quota system which keeps the price of sugar in the United States at almost twice the world price of sugar, and above the loan default rate under the 2002 farm legislation. The two programs operate in tandem, with the one operating at “no cost” only because the second maintains an even higher cost than the first. The resulting cost to United States consumers is tremendous, and any claim of “no-cost” by the sugar industry is disingenuous and inaccurate.

VI. IMPACT OF SUGAR PRICE CONTROL

A. Domestic impact.

The United States sugar program should be radically altered or eliminated. The United States General Accounting Office wrote a report to congressional requesters entitled Sugar Program: Supporting Sugar Prices Has Increased User’s Costs While Benefiting Producers, which

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65 Forfeiture penalties have been eliminated and interest rates are 1% lower than under 1996’s FAIR. Id.
66 2000 is the only year that sugar prices did not exceed 20 cents per pound; sugar prices in 2000 were about 19 cents per pound, which is still above the non-recourse loan level of 18 cents per pound. See United States Sugar data, available at http://www.ers.usda.gov/Briefing/Sugar/data/Table04.xls (Appendix A-4) (last visited Oct. 25, 2007).
68 Id.
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succinctly sums up the sugar problem in its title. 69 According to the report, the General Accounting Office concluded that in 1998, the sugar program resulted in a loss to consumers of $1,938,000, in 1999 dollars. 70 However, this loss was partially offset by financial gains to sugar producers of $1,045,000, in 1999 dollars. 71 According to the General Accounting Office, the net loss to the United States economy was $893,000,000 in 1999 dollars. 72 Adjusting the totals based on an average annual rate of inflation of 2.62% 73 for the eight years from 1999 to 2006, the loss to sugar consumers in 2006 dollars is approximately two billion, three hundred and ninety-eight million dollars ($2,398,000,000). Net losses to the economy based upon the annual inflation rate and adjusted dollars are approximately one billion, one hundred and five million 2006 dollars ($1,105,000,000). 74 The adjusted total loss to consumers represents a loss of approximately eight dollars per person in the United States, offset by the payments to sugar growers. 75 When one considers that these totals represent the losses caused by only one crop, of the dozens grown in the United States, the potential economic waste caused by economic protectionist programs such as the sugar program is staggering. Abolishment of the United States sugar program could have

70 Id. at 21.
71 Id.
72 Id.
73 See Historical U.S. Inflation Rate 1914-Present, http://inflationdata.com/inflation/Inflation_Rate/HistoricalInflation.aspx (additional information and figures based upon data compiled by the Federal Bureau of Labor Statistics) (last visited Apr. 18, 2007). The average annual inflation rate was arrived at by averaging the annual rates of inflation as follows: 2.19% for 1999; 3.38% for 2000; 2.83% for 2001; 1.59% for 2002; 2.27% for 2003; 2.68% for 2004; 3.39% for 2005; and using the combined average for the current year, 2006 for an average of 2.627% over 8 years.
74 Id.
significant benefits for the United States economy. The abolition of similar programs for cotton, soybeans, tobacco and many other crops could result in additional savings to the United States economy.76

This discussion is not intended to ignore the benefits accrued to the United States economy by the sugar industry. However, the economic benefits provided by the sugar industry are based upon an inflated price for sugar that benefits a few producers to the detriment of many consumers. The high price of sugar in the United States encourages increases in domestic production (supply) that would not occur if market forces under the perfectly competitive economic model were allowed to control supply and demand. This leads to more sugar produced in the United States, as well as more sugar jobs in production. An artificially higher sugar price also leads to more land being used for sugar production as opposed to more efficient activities.77 Should the price of sugar in the United States drop towards the world sugar price,78 then there would be less incentive to continue increasing domestic sugar production in the United States.79 In fact, there would likely be a decrease in domestic production as cheaper sugar becomes accessible to United States consumers and land that is currently being used for sugar could be converted to other, more efficient uses. Some land currently under


78 The General Accounting Office report estimated that removal of the sugar program in 1998 would drop the price of sugar in the United states from 22 cents per pound to about 12 ½ cents per pound, which is comparable to and competitive with the world price of sugar. Robertson, supra note 69, at 14, 24.

79 Robertson, supra note 69, at 15. United States sugar production has been steadily increasing, due to technological innovation and increase in land used for cane and beet production. “Many farmers have increased the size of their sugarcane and sugar beet crops because these crops have offered better returns than cotton, wheat, or other crops that the farmers grew in the past.” Id.
cultivation for sugar cane or beet is only being efficiently used under the current distortional pricing.

The United States sugar program of Tariff Rate Quotas and non-recourse loan system guarantees profits for sugar producers. This results in increased employment for sugar producers, but results in a net decrease for United States employment. High sugar prices create primary industry jobs, but increase the costs of secondary industry manufacturers and consumers. As a result, companies that use sugar as a raw material pay higher costs and therefore enjoy lower profits and have less money to reinvest into their business. This results in fewer jobs in sugar-using industries such as candy and food manufacturing. According to the Grocery Manufacturers of America, a manufacturing industry group, the United States sugar program has resulted in the loss of about 10,000 refining and manufacturing jobs.  

Eliminating the United States sugar program and allowing market forces under the perfectly competitive model would result in cost savings, more efficient use of land and more employment in the United States.

B. International impact.

Sugar is not the only crop in need of market openness, nor is the United States the only country that protects its domestic farmers. Despite the recent stalling of the Doha round of global trade negotiations, programs such as the United States sugar program should be used as reciprocal bargaining chips for global trade liberalization. Mutual elimination of trade barriers would provide economic benefits for all countries involved. For instance, the European Union and Japan also have extensive agricultural protection and subsidization programs. The opening of markets in developed countries to agricultural products in developing countries would have the twofold benefit of reducing the consumer costs in developed countries while concurrently providing stable employment

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Employment brings stability, economic growth, and satisfaction. This would have a positive effect on major issues such as the rise of global fundamentalism, conflict, and the mass movement of people. Rather than sending armies and aid overseas, the United States should open its markets to allow foreign goods in, not only to improve its own economy, but to benefit developing economies and promote global stability. With the expiration of the Farm Security and Rural Investment Act of 2002 in late 2007, the United States has a tremendous opportunity to benefit its own taxpayers as well as people around the world. Rather than cling to outdated ideals of agricultural protectionism, the United States government should take the opportunity to eliminate costly programs such as the sugar program in exchange for greater economic openness in other countries. By allowing market forces to affect prices and thereby the supply and demand of commodities, greater economic efficiencies can be achieved. The United States should take a leadership role in the push for free trade that steps beyond empty rhetoric and seeks substantive change.

VII. CONCLUSION

The United States sugar program fails to meet the basic assumptions of the perfectly competitive economic model. Legislated through the Tariff Rate Quota system and the Farm Security and Rural Investment Act of 2002, the sugar program results in economic waste and inefficiency. This results in substantial economic losses to the United States economy. The sugar program, non-recourse loans, and Tariff Rate Quotas for sugar should be abolished. Abolishment of the programs would result in economic gains to the United States economy. With the imminent expiration of the Farm Security and Rural Investment Act of 2002, though the implementation of a new farm bill late in 2007, the federal government has an opportunity to redress many of the inequities.

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81 For instance, Professor Dale Jamieson mentions that United States subsidies to 25,000 domestic cotton farmers are "greater than the entire economic output of Burkina Faso, a country in which two million people depend on cotton for their livelihoods." Dale Jamieson, Duties to the Distant: Aid, Assistance, and Intervention in the Developing World, 9 J. ETHICS 151, 168 (2005).
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and wasteful practices of the existent agricultural subsidy system. Furthermore, great economic gains could likely be achieved through bilateral or multilateral international trade negotiations that result in the elimination of similar wasteful programs in developing countries. The United States sugar program, while bad, is a manifestation of a larger problem that costs consumers in the developed world money and economies and in the developing world jobs for the benefit of a small coterie of domestic agricultural producers. The few benefit at the expense of the many, and this must be stopped.