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WELFARE IMPLICATIONS OF THE BYRD AMENDMENT

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Welfare Implications of the Byrd Amendment

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INTRODUCTION

The Continued Dumping and Subsidy Offset Act (CDSOA) of 2000 allows producers, who successfully petition the U.S. government to impose anti-dumping or countervailing tariffs on competing imports, to keep the proceeds of those tariffs. In Louisiana, hundreds of crayfish farmers and processors are vying for a portion of over seven million dollars in duties on Chinese imports. U.S. candle makers are also fighting over $65 million collected from Chinese candle companies who pay 54% tariffs to get their products into the U.S (King). One candle company, Candle-lite, received $38 million in fiscal year 2002 while one ball bearings company, Torrington, received $ 37 million in 2002 (U.S. Customs Service). This amendment also has implications for steel, rubber, pencil, pineapple, and pasta markets (King). In fiscal year 2002, the U.S. government wrote checks totaling nearly $320 million to companies that could prove that they were involved in any anti-dumping or countervailing case that eventually led to imposed tariffs (U.S. Custom Service).

The so-called "Byrd Amendment" effectively allows U.S. producers and processors to collect the resulting import tariff revenue that would otherwise accrue to the U.S. government. Furthermore, even though CDSOA was passed in 2000, there is a grandfather clause that allows these groups to collect the tariff revenue from certain anti-dumping and countervailing (ADCV) duties that were implemented prior to the 2000 Act. The CDSOA has serious present and future welfare implications in terms of transfers in Ricardian Rent among consumers, producers, and taxpayers. It also provides an even greater incentive for a proliferation of future anti-dumping lawsuits.

We begin by providing a general discussion of CDSOA and provide empirical evidence regarding ADCV tariffs placed on specific products. We then draw upon partial equilibrium trade theory in order to develop an "optimal anti-dumping tariff" that maximizes the sum of producer surplus and tariff revenue. This optimal anti-dumping

tariff represents the first-best situation for producers that successfully lobby for ADCV tariffs against competing products from other countries under the Byrd amendment. The optimal anti-dumping tariff is compared to the optimal revenue tariff (the one that maximizes tariff revenue only) and the optimal welfare tariff (the one that maximizes the sum of producer surplus, consumer surplus, and tariff revenue).[i] Tariff revenue and producer surplus associated with the optimal anti-dumping tariff are discussed and compared to those under the optimal revenue and optimal welfare tariffs. Finally, conclusions are drawn.

THE BYRD AMENDMENT

The Continued Dumping and Subsidy Offset Act of 2000, known as the CDSOA or "Byrd Amendment," was enacted on October 28, 2000 as Title X of the Agriculture, Rural Development, Food and Drug Appropriations Act, 2001 ("Act"), Public Law 106-387 (U.S. Department of Treasury).[ii] The CDSOA modifies Title VII of the Tariff Act of 1930 by instructing Customs to put all collected anti-dumping and countervailing tariffs into special accounts, one for each case, and to pay out these collected revenues directly to companies successfully participating in each case (U.S. Department of Treasury). Previously, the collected tariff revenues accrued to the general Treasury (eBearing.com). For a company to be eligible for payouts, it must prove that it successfully litigated a dumping or countervailing duty case against a specific industry in a specific country. If eligible, a company shares, with the other original litigating companies, all past and future collected ADCV duties. Companies that did not participate in an original dumping or countervailing duty case do not receive any of the collected funds (eBearing.com).

The CDSOA went into effect for 2001 and was controversial from its inception. President Clinton signed the "Act" but asked Congress to revisit and repeal the CDSOA before adjournment; however, Congress did not act. In industries that receive protection from imports under U.S. ADCV duty laws, ineligible companies for CDSOA payouts complain that eligible companies receive an unfair advantage derived from the subsidies (payouts). Small companies complain that their industry is harmed by unfair imports but they do not have the money to hire expensive lawyers to litigate ADCV cases (eBearing.com). The U.S. Treasury Department's budget report states that the CDSOA allows "double dipping" because eligible companies not only receive protection from imports through increased import prices due to ADCV tariffs but now also receive corporate subsidies from the collected ADCV revenues (Thomas).

U.S. trading partners have also reacted vigorously against the CDSOA. Eleven member countries asked the WTO to form a panel to investigate the CDSOA with respect to the U.S. WTO obligations under the WTO Anti-Dumping Agreement and the WTO Subsidies Agreement. The WTO formed a panel on September 10, 2001, and on September 16, 2002, that panel found against the U.S. on the CDSOA payments and recommended that the CDSOA be repealed (U.S. Department of State). On October 18, 2002, the U.S. appealed the ruling to the WTO Appellate Body, but on January 16, 2003, the Appellate Body confirmed that the CDSOA was incompatible with WTO rules (Lamy).

President Bush's budget for fiscal year 2004 also calls for a repeal of the CDSOA. However, in spite of this and the WTO ruling, as of February 4, 2003, 67 U.S. senators had signed a letter to the President requesting that the President resist the WTO action and maintain the CDSOA. With such strong support in the U.S. Senate for the CDSOA, it is still not clear that the law will be repealed.

In fiscal year 2001, the first year of payouts, 900 claimants received $230 million dollars (Table 1). In 2002, the second year, over 1200 claimants received almost $330 million (Table 1). Although most of the payouts go to non-food companies, food companies received over $22 million in 2001 and almost $20 million in 2002 (Table 1). In 2001, there were nine food-industry anti-dumping and four food-industry countervailing duty cases for which companies received tariff revenues under the CDSOA. In 2002, food-industry anti-dumping cases in which companies received payouts increased to 12 while

Table 1: CDSOA FY 2001 and 2002 Disbursements for Food Products

Case Number	Case Name	FY2001 (1000$)	FY2002 (1000$)
A-570-848	Crawfish tail meat/China	0	7,469
A-475-818	Pasta/Italy	17,533	4,674
C-475-819	Pasta/Italy	2,480	2,528
A-533-813	Preserved mushrooms/India	171	2,155
A-351-605	Frozen concentrated orange juice/Brazil	0	1,175
A-570-831	Fresh garlic/China	25	536
A-549-813	Canned pineapple/Thailand	1,792	531
A-560-802	Preserved mushrooms/Indonesia	83	443
A-337-803	Fresh Atlantic salmon/Chile	0	173
A-403-801	Fresh and chilled Atlantic salmon/Norway	46	59
C-403-802	Fresh and chilled Atlantic salmon/Norway	18	29
A-570-851	Preserved mushrooms/China	0	20
C-408-046	Sugar/EU	8	17
C-489-806	Pasta/Turkey	7	9
A-489-805	Pasta/Turkey	11	4
A-570-855	Non-frozen apple juice concentrate/China	0	1
A-301-602	Fresh cut flowers/Columbia	33	0
	Food Total	22,209	19,824
	Grand Total for all Products	231,202	329,871

Source: U.S. Customs Service.

food-industry countervailing duty cases remained at four.

In some cases, the same company that received payouts under an anti-dumping case also received payouts under a countervailing duty case. For example, eligible U.S. pasta firms shared $17.5 million and $4.7 million under the anti-dumping case A-475-818 in 2001 and 2002, respectively, and shared $2.5 million under countervailing duty case C-475-

810 in both 2001 and 2002. In the anti-dumping case A-540-843, canned pineapple/Thailand, one company, Maui Pineapple, received the entire revenue of $1.8 million in 2001 and $0.5 million in 2001.

In fiscal year 2002, crayfish firms receive in total the largest food-industry CDSOA payouts. These firms and the CDSOA payouts that they received are reported in Table 2. Of the 27 eligible firms, Atchafalaya Crawfish Processors received payouts of $.8 million. Four received payouts of over $.5 million and another 17 firms received over $.1 million. On average, the 27 crayfish firms received $.3 million in fiscal year 2002. In total, CDSOA payouts (column 3) were 21% of production and operating costs (column 4) of these firms. In fiscal year 2002, three citrus processors received $1.18 million in CDSOA payouts. Citrus World received 67% of the payouts for a total of $.8 million (Table 3).

DERIVATION OF OPTIMAL TARIFFS

In order to derive and compare the optimal anti-dumping tariff, the optimal revenue tariff, and the optimal welfare tariff, we consider the following system of equations that represent the supply, demand, and excess demand curves for a particular product in the United States along with the excess supply curve for the foreign market (i.e., the rest of the world). To make the solution tractable, we assume that each of these equations is linear and that the U.S. and foreign markets are competitive. This system can be viewed as a linear approximation to the actual underlying behavioral relationships,

$$\begin{aligned} P_D &= a + bQ_D \\ P_S &= \alpha + \beta Q_S \\ P_{ED} &= c + dI \\ P_{ES} &= \gamma + \delta I \end{aligned} \qquad (1)$$

in which P is the price, Q_S is the quantity supplied by the U.S., I represents U.S. imports from the foreign market, and Q_D is the quantity demanded, which equals the quantity supplied (Q_S) plus imports (I). If we introduce a specific tariff T, then T drives a wedge between the excess demand and excess supply curves. In partial equilibrium, the following relationship must hold:

$$P_{ED} - P_{ES} = T\,. \qquad (2)$$

Inserting the relationships for P_{ED} and P_{ES} and solving for imports (I) yields:

Table 2: CDSOA Disbursements for Crawfish Tail Meat from China, FY2002

Claimant	Claim Filed (1000$)	Amount Paid (1000$)	Allocation Percentage
Atchafalaya Crawfish Processors	3,758	793	10.6
Seafood International Distributors	3,347	707	9.5
Catahoula Crawfish	2,937	620	8.3
Prairie Cajun Wholesale Seafood Dist.	2,449	517	6.9
Bayou Land Seafood	1,990	420	5.6

Crawfish Enterprises, Inc. (CPA)	1,892	399	5.3
C.J.'s Seafood & Purged Crawfish	1,773	374	5.0
Riceland Crawfish	1,517	320	4.3
Cajun Seafood Distributors	1,511	319	4.3
Acadiana Fishermen's Co-Op	1,508	318	4.3
Bonanza Crawfish Farm	1,482	313	4.2
Randol's Seafood & Restaurant (CPA)	1,445	305	4.1
L.T. West	1,126	238	3.2
Sylvester's Processors	1,036	219	2.9
Carl's Seafood	1,037	219	2.9
Choplin Seafood	999	211	2.8
Blanchard Seafood, Inc (CPA)	990	209	2.8
Louisiana Seafood	947	200	2.7
Harvey's Seafood	783	165	2.2
Louisiana Premium Seafoods	771	163	2.2
Bellard's Poultry & Crawfish	502	106	1.4
Phillips Seafood	450	95	1.3
A&S Crawfish	330	70	0.9
Becnel's Meat & Seafood	324	68	0.9
Teche Valley Seafood	225	48	0.6
Arnaudville Seaford	171	36	0.5
Lawtell Crawfish Processors	80	17	0.2
TOTAL for A-570-848	35,380	7,469	100

Source: U. S. Customs Service
(CPA) indicates member of the Crawfish Processors Alliance.

Table 3: CDSOA Disbursements for Frozen Concentrated Orange Juice from Brazil, FY2002

Claimant	Claim Filed (1000$)	Amount Paid (1000$)	Allocation Percentage
Citrus World	277,335	784	66.7
A. Duda & Sons dba Citrus Belle	75,817	214	18.2
LD Citrus, Inc	62,553	177	15.0
TOTAL for A-351-605	414,705	1,175	100

Source: U.S. Customs Service

$$I = \frac{T + \gamma - c}{(d - \delta)}. \qquad (3)$$

The equilibrium U.S. price is derived by inserting equation (3) into the excess demand curve (P_{ED}), which yields:

$$P = c + \frac{d(T + \gamma - c)}{(d - \delta)}. \quad (4)$$

Finally, the U.S. quantity supplied in equilibrium can be derived by inserting equation (4) into the demand curve (1):

$$Q = \frac{(c - \alpha)(d - \delta) + d(T + \gamma - c)}{\beta(d - \delta)}. \quad (5)$$

Equations (3-5) give the equilibrium quantity imported, the U.S. price, and the quantity supplied as functions of the specific tariff *T* and the parameters of the various supply and demand equations. These relationships can be used to find the equilibrium tariff under various tariff regimes.

As a base of reference, we first derive the optimal revenue tariff in terms of the parameters of the various supply and demand equations. We then derive the optimal anti-dumping tariff, rewrite it as a function of the underlying optimal revenue tariff, convert the parameters to point elasticities, and then compare the two. Finally, we make inferences with respect to the optimal welfare tariff.

First, consider the optimal revenue tariff. The objective of the optimal revenue tariff is to maximize tariff revenue with respect to the tariff. However, since tariff revenue is simply equal to the specific tariff (*T*) multiplied by equilibrium imports (*I*) this problem can be written mathematically as:

$$MAX_T \left\{ TR = \frac{T(T + \gamma - c)}{(d - \delta)} \right\} \quad (6)$$

which makes use of equation (3). The optimal revenue tariff (T_{ORT}) is found by taking the derivative of equation (6) with respect to the specific tariff (*T*), setting it equal to zero, and solving for *T*. The derivative of equation (6) with respect to *T* is:

$$\frac{\partial TR}{\partial T} = \frac{2T + (\gamma - c)}{(d - \delta)} = 0. \quad (7)$$

After simplification, the optimal revenue tariff becomes:

$$T_{ORT} = \frac{(c - \gamma)}{2}. \quad (8)$$

Hence, the optimal revenue tariff is always exactly one half of the distance between the intercept of the excess demand curve and the excess supply curve.

Now, consider the optimal anti-dumping tariff defined as the tariff that maximizes the sum of producer surplus and tariff revenue. The tariff revenue (*TR*) is the same as in equation (6). Producer surplus for U.S. producers (as defined by Just, Hueth, and Schmitz, 1981) is equal to the area above the supply curve, bounded by the domestic price. Since the supply curve is linear, producer surplus is:

$$PS = \frac{1}{2} Q_S (P - \alpha). \quad (9)$$

However, the quantity supplied (Q_S) can be written in terms of P, α, and β using equation (1), so that producer surplus can be rewritten as:

$$PS = \frac{(P - \alpha)^2}{2\beta}. \qquad (10)$$

The optimal anti-dumping tariff is derived by making use of equation (4) to get the price in terms of the specific tariff (T), and maximizing the sum of producer surplus and tariff revenue. This can be written as:

$$MAX_T \; TR + PS = \frac{T(T+\gamma-c)}{(d-\delta)} + \frac{1}{2\beta}\left[(c-\alpha) + \frac{d(T+\gamma-c)}{(d-\delta)}\right]^2. \qquad (11)$$

Taking the derivative of (11) with respect to T and setting it equal to zero yields:

$$\frac{\partial(TR+PS)}{\partial T} = \frac{2T+(\gamma-c)}{(d-\delta)} + \frac{d(c-\alpha)}{\beta(d-\delta)} + \frac{d^2(T+\gamma-c)}{\beta(d-\delta)^2} = 0. \qquad (12)$$

Solving for equation (12) with respect to T and simplifying yields:

$$T_{ANT} = \frac{-d(c-\alpha)(d-\delta) + \beta(c-\gamma)(d-\delta) + d^2(c-\gamma)}{2\beta(d-\delta) + d^2}. \qquad (13)$$

Solution (13) holds only if $\beta \neq 0$ and $d \neq \delta$. However, these conditions are not too restrictive. The former holds as long as the supply curve is not perfectly elastic. The latter relationship holds as long as the excess demand curve is downward sloping and the excess supply curve is upward sloping.

In order to simplify this relationship further, the above parameters must be converted into their elasticity equivalents using the technique developed by Schmitz and Schmitz, 2003. Assuming that the point elasticities for each of the four curves are taken at the price, domestic quantity, and import levels that would exist under free trade, each of the parameters can be written in terms of elasticities and corresponding values that would exist under free trade using the following relationships:

$$\begin{aligned}
a &= P_W\left(1 - \frac{1}{\varepsilon_D}\right), \qquad b = \frac{P_W}{\varepsilon_D(Q_W + I_W)} \\
\alpha &= P_W\left(1 - \frac{1}{\varepsilon_S}\right), \qquad \beta = \frac{P_W}{\varepsilon_S Q_W} \\
c &= P_W\left(1 - \frac{1}{\varepsilon_{ED}}\right), \qquad d = \frac{P_W}{\varepsilon_{ED} I_W} \\
\gamma &= P_W\left(1 - \frac{1}{\varepsilon_{ES}}\right), \qquad \delta = \frac{P_W}{\varepsilon_{ES} I_W}
\end{aligned} \qquad (14)$$

in which P_W, Q_W, and I_W are the equilibrium price, quantity, and imports, respectively, that would exist under free trade and ε_D, ε_S, ε_{ED}, and ε_{ES} are the elasticities of demand, supply, excess demand, and excess supply, respectively. If we further substitute (14) into equation (13) and performing several rounds of simplifications, the optimal anti-dumping tariff can be expressed as:

$$T_{ANT} = \frac{P_W(v-1)w\left(1+\varphi(1-v)\right)}{\varepsilon_{ED}\left(1+2w\varphi(1-v)\right)} \quad (15)$$

in which v is the ratio of the excess demand elasticity with respect to the excess supply elasticity, w is the ratio of the excess demand elasticity with respect to the domestic supply elasticity, and φ is the ratio of imports that would exist under free trade (I_W) with respect to the domestic quantity that would exist under free trade (Q_W).

In order to compare the optimal anti-dumping tariff in equation (15) with the optimal revenue tariff in equation (8), we substitute the relationships in (14) into equation (8) and simplify to get:

$$T_{ORT} = \frac{P_W(v-1)}{2\varepsilon_{ED}}. \quad (16)$$

To obtain the optimal anti-dumping tariff in terms of the optimal revenue tariff, take relationship (16) and insert into (15) to get:

$$T_{ANT} = T_{ORT}\frac{2w+2w\varphi(1-v)}{1+2w\varphi(1-v)} = mT_{ORT} \quad (17)$$

in which m represents the percentage markup of the optimal anti-dumping tariff over the optimal revenue tariff. The top and the bottom of the markup rule m have a common right-hand term that contains v, w, and φ. This common right-hand term is always negative because v and w are always negative as long as the domestic and excess supply curves are upward sloping and the domestic demand and excess demand curves are downward sloping. Furthermore, φ is a share parameter that is always positive.

After accounting for the common right hand term, the only remaining terms to compare are $2w$ in the numerator with the number one in the denominator. The numerator is always negative because w is negative and the right-hand term is also negative. However, the denominator of m could be positive or negative depending upon whether $2w\varphi(1-v)$ is less than -1 or greater than -1. If $2w\varphi(1-v) < -1$, then the optimal anti-dumping "tariff" would mathematically be negative (in other words the optimal anti-dumping "tariff" would actually be an export subsidy). However, if we explicitly rule out the possibility of a negative tariff, then we must come to the conclusion that under the cases in which $2w\varphi(1-v) < -1$, the optimal anti-dumping tariff is zero. In other words, this case behaves essentially as a corner solution.

The only viable case in which the tariff is positive occurs when the term $2w\varphi(1-v) > -1$. Under these situations, both the numerator and the denominator of m are negative, meaning that the optimal anti-dumping tariff is positive. Furthermore, the absolute value of the numerator is always larger than the absolute value of the denominator because $2w$ is always a negative number, while the number one is a positive number and the common right-hand term in the numerator and the denominator is negative. Hence, we must come to the conclusion that under the cases in which $2w\varphi(1-v) > -1$ (which generates a positive tariff), the markup rule m is always greater than one, which implies that the optimal anti-dumping tariff (if it exists and is positive) is always larger than the optimal revenue tariff.

To summarize, the optimal anti-dumping tariff is either zero (representing a corner solution) or it is larger than the optimal revenue tariff (when it is positive). This argument can be taken one step further in order to compare the optimal anti-dumping tariff discussed above (that maximizes the sum of tariff revenue and producer surplus) with the optimal welfare tariff (that maximizes the sum of tariff revenue, producer surplus, and consumer surplus). It is well-known that the optimal welfare tariff is always smaller than the optimal revenue tariff (Schmitz and Schmitz, 1994). Hence, through transitivity, the optimal anti-dumping tariff is either zero (representing a corner solution) or it is larger than the optimal welfare tariff (when it is positive).

The above arguments are further illustrated in Figure 1 in which S and D in the left-hand panel represent the supply and demand curves and ES and ED in the right-hand panel represent the excess supply and excess demand curves. First, consider the optimal anti-dumping tariff. The optimal anti-dumping tariff is the tariff that maximizes the sum of tariff revenue and producer surplus. In the figure, the optimal anti-dumping tariff is represented by (p_1-π_1) where p_1 is the domestic price under the optimal anti-dumping tariff and π_1 is the resulting equilibrium world price under the optimal anti-dumping tariff. Tariff revenue under the optimal anti-dumping tariff is given by area (*hiknr*) and producer surplus under the optimal anti-dumping tariff equals area (*abc*). So total producer welfare equals (*hiknr*+*abc*).

The optimal revenue tariff in figure 1 is (p_2-π_2) in which p_2 is the domestic price under the optimal revenue tariff, and π_2 is the resulting equilibrium world price. While the tariff revenue under the optimal revenue tariff (area *ijklnor*) is always larger than the tariff revenue under the optimal anti-dumping tariff, producer surplus (*ab*) is always lower under the optimal revenue tariff.

Now consider the optimal welfare tariff represented by (p_3-π_3) in which p_3 is the domestic price, and π_3 is the resulting equilibrium world price. The tariff revenue under the

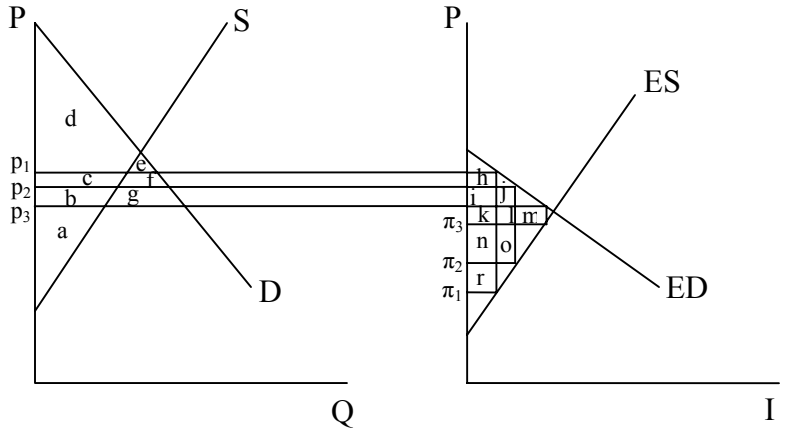

Figure 1: Optimal Anti-Dumping, Revenue, and Welfare Tariffs

optimal welfare tariff (area *klm*) could be larger or smaller than the tariff revenue under the optimal anti-dumping tariff. Producer surplus (area *a*) is always lower under the

optimal anti-dumping tariff. However, the sum of consumer surplus, producer surplus, and tariff revenue under the optimal welfare tariff (area *abcdefg* + *klm*) is always larger than the sum of producer surplus and tariff revenue under the optimal anti-dumping tariff (area *hiknr*+*abc*).

CONCLUSIONS AND FURTHER DISCUSSION

The Continued Dumping and Subsidy Offset Act of 2000 allows manufacturers that successfully petition the U.S. to impose anti-dumping or countervailing tariffs on imports to keep the proceeds of those tariffs. This paper analyzes the welfare implications of the so-called "Byrd" amendment by deriving an "optimal anti-dumping tariff" for U.S. producers that receive anti-dumping or countervailing tariffs and comparing it to the optimal revenue and optimal welfare tariffs. We show that the optimal anti-dumping tariff is either zero or (when it is positive) is always larger than either the optimal revenue or the optimal welfare tariffs.

We also compare tariff revenue and producer welfare under the optimal anti-dumping tariff, the optimal revenue tariff, and the optimal welfare tariff. We show that tariff revenue is always largest under the optimal revenue tariff but show that producer surplus is always largest under the optimal anti-dumping tariff. Tariff revenue under an optimal anti-dumping tariff may be larger or smaller than under the optimal welfare tariff. Although producer welfare is always lowest under an optimal welfare tariff, total surplus (consumer and producer surpluses plus tariff revenue) is always largest under an optimal welfare tariff.

REFERENCES

eBearing.com. "Continued Dumping and Subsidy Offset Act of 2000 (CDSOA): The Byrd Amendment." http://www.ebearing.com/legislation/2000act.htm.

Just, R.E., D.L. Hueth, and A. Schmitz. *Applied Welfare Economics and Public Policy*. Prentice-Hall, Inc. 1982.

King, Neil Jr. "Trade Imbalance: New Dumping Law Lines the Pockets of Manufacturers." *The Wall Street Journal*. Dow Jones & Company. December 5, 2002. Page 1.

Lamy, Pascal. "WTO Appellate Body Condemns the 'Byrd Amendment' The Us Must Now Repeal It." Delegation of the European Commission to the United States. http://www.eurunion.org/news/press/2003/2003003.htm. January 16, 2003. No. 03/03.

Schmitz, A., and T.G. Schmitz. "Tariffs and Trade." Academic Press, Inc. 4(1994):269-279.

Schmitz, T.G. and A. Schmitz. "Food Supply Management and Tariffication: A Game Theoretic Approach." *Journal of Agriculture & Food Industrial Organization*. 1,1(2003):1-19.

Thomas, Bob. "Bush Budget Slashes Byrd Amendment, Alters Byrd Bill." *The Intelligencer Wheeling News Register*. http://www.news-register.net/news/story/025202003_new03.asp. February 5, 2003.

U.S. Customs, Customs.gov. "CDSOA FY2001 and FY2002 Disbursements, Final." http://www.customs.ustreas.gov/xp/cgov/import/add_cvd/.

U.S. Department of State, Office of International Information Programs. "USTR Seeks to Comply with WTO Ruling on Byrd Amendment: Underlying antidumping laws not affected, USTR emphasizes." http://usinfo.state.gov/topical/econ/wto/03011601.htm. January 16, 2003.

U.S. Department of Treasury, Customs Service. "Distribution of Continued Dumping and Subsidy Offset to Affected Domestic Procedures; Notice." http://frwebgate.access.gpo.gov/cgi-in/getdoc.cgi?dbname=2002_register&docid=02-16693-filed.pdf. *Federal Registry* 67, No. 128, Wednesday, July 3, 2002.

World Trade Organization. "United States - Continued Dumping and Subsidy Offset Act of 2000" Second Panel Hearing: Oral Statement by Australia (WT/DS217 and WT/DS234). Geneva, Switzerland. March 2002.

[i] The optimal revenue tariff and optimal welfare tariff are well-known results from trade theory. A detailed discussion of each tariff instrument can be found in Just, Hueth, and Schmitz, 1981 or Schmitz and Schmitz, 1994.

[ii] Senator DeWine (Ohio) was the original author of the CDSOA, but it was Senator Byrd (West Virginia) who added the CDSOA to the Agriculture Spending bill of 2000.