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COST-BENEFIT ANALYSIS OF A WTO DISPUTE

Josyline Javelosa* and Andrew Schmitz**

ABSTRACT

Since the WTO’s inception in 1995, the number of cases it has dealt with has exceeded the number of disputes under the GATT. This suggests that Members have found the WTO dispute settlement system a useful means to pursue their interests. In this paper, we analyze an ongoing WTO dispute to illustrate the economic and political costs and benefits that accrue to parties when they engage themselves into the formal dispute process. We draw on the Philippine-Australian case, which challenges the latter’s quarantine policy on fresh fruit and vegetables, to understand further how the WTO dispute settlement system affects state behavior and litigation patterns. This particular case is also of keen interest to a number of countries, including the EC, US, Canada, Ecuador, Thailand, China, India and Chile.

Keywords: WTO dispute settlement, sanitary and phytosanitary measures, banana, cost-benefit analysis

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I. INTRODUCTION

The number of cases filed in the first nine years of the WTO’s operation\(^1\), which exceeds the 254\(^2\) cases in the forty-seven years of the GATT (the WTO’s predecessor), seems to indicate that the dispute mechanism is a useful means to pursue WTO Members’ interests. Since the introductory essay\(^3\) of this journal raises the question on the future of WTO dispute settlement, it is an opportune time to analyze a current case within its economic, political and legal context to further understand why public officials resort to the WTO dispute settlement system in resolving trade conflicts. We explore the ongoing Philippine-Australian case concerning the latter’s quarantine policy on fresh fruit and vegetables.\(^4\) This WTO dispute is interesting for at least four reasons. First, it involves sanitary and phytosanitary (SPS) concerns that have implications on a country’s systemic quarantine policy – this means that any WTO ruling on the case will impact a range of products, which makes the case of interest to a number of exporters of fresh fruit and vegetable produce. The European Community (EC) is a co-complainant against Australia on similar grounds that encompass a broader range of products, including live animals, meat and meat products, and dairy products, among others.\(^5\) WTO members who reserved their rights to become third parties to the case raised by the Philippines and EC against Australia were

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\(^2\) As summarized in Chad P. Bown, ‘The Economics of Trade Disputes, the GATT’s Article XXIII and the WTO’s Dispute Settlement Understanding’, 14(3) Economics and Politics 283 (2002), at 285.

\(^3\) Donald McRae, ‘What is the Future of WTO Dispute Settlement?’, 7 (1) JIEL (2004), 3-21.

\(^4\) WTO documents and other case references are summarized in Table 1.

\(^5\) ‘Dispute Settlement Body Minutes of Meeting,’ http://docsonline.wto.org/, WT/DSB/M/156.
Thailand, Ecuador, China, India, Chile, Canada and the United States.\(^6\) Second, it is another case that may further clarify the relatively new Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)\(^7\). The four SPS-related disputes that have confronted the SPS Agreement to date are \textit{EC-beef hormones, Australia-salmon, Japan-varietals, and Japan-apples}.\(^8\) Third, it engages another ‘banana war’ like the high profile US-EC dispute on the sale of bananas into the EC market involving multinational companies. The interests of Chiquita Brands International, Inc. and Dole Food Company, Inc. were advanced by the US in its dispute with the EC\(^9\). These same companies, through Dole Philippines, Inc., Tagum Agricultural Development Company (TADECO) established by Chiquita (United Brands) and Del Monte Fresh Produce (Philippines), Inc. are the multinationals\(^10\) who have business interests on the case brought by the Philippines to the WTO. Fourth, it is a complaint raised by a developing country against a developed economy who is in the forefront of advocacy for free trade in agriculture\(^11\).

Our case study estimates the economic payoffs both the Philippines and Australia may obtain upon a potential change in the trade measure being challenged, particularly Australia’s quarantine policy on Philippine bananas. We also highlight the role of rent-seeking behavior

\(^{6}\) ‘Dispute Settlement Body Minutes of Meeting,’ http://docsonline.wto.org/, WT/DSB/M/153 and WT/DSB/M/157.
\(^{7}\) GATT Secretariat, The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts (Geneva 1994), 69-84.
\(^{8}\) As of 26 March 2004, these are the 4 SPS cases that necessitated panel and appellate body rulings. See above n1 for a listing of all WTO cases with adopted panel and appellate body reports.
\(^{10}\) The Philippines started exporting bananas in the late 1960s upon the establishment of plantations by multinational companies. See ‘Banana Production in the Philippines’, as part of Macquarie University’s Human Geography resource set available at http://www.es.mq.edu.au/humgeog/Bananas/farm_study.htm, authorized by Prof. Robert Fagan.
\(^{11}\) Australia leads the Cairns Group (CG) of 17 countries who account for one-third of the world’s agricultural exports. Since it formed in 1986, the CG has succeeded in putting agriculture on the multilateral trade agenda and keeping it there. The Cairns Group is an excellent example of successful coalition building in the trade area. By acting collectively it has had more influence and impact on the agriculture negotiations than any individual members could have had independently. Members of the Group are: Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Paraguay, the Philippines, South Africa, Thailand and Uruguay. See, http://www.cairnsgroup.org/.
among interest groups in influencing state decisions regarding border disputes and discuss the stakes on a country’s reputation when they engage in legal disputes to challenge or defend trade measures. An assessment of litigation costs is also undertaken to complete the cost-benefit analysis. With this information on the likely scope and extent of payoffs from formally taking a case into the WTO’s jurisdiction, we discuss how these payoffs, attainable within the legal borders of the dispute settlement system, including other factors proposed by some theories in the literature, may influence state behaviors and litigation patterns. We then infer directions for the future of WTO dispute settlement.

II. THE SPS DISPUTE OVER FRESH FRUIT AND VEGETABLES

A. Chronology of the Case

Table 1 briefly lays out the sequence of events pertaining to the Philippine-Australian case over fresh fruit and vegetables. On 29 August 2003, the Dispute Settlement Body (DSB) agreed to establish a panel that would rule on the complaint raised by the Philippines regarding Australia’s import measures on fresh fruit and vegetables, including fresh bananas, plantains and fresh papayas. The Philippines argues that the measures imposed by Australia had, for a long time, effectively prevented access of the Philippines’ exporters of these products into the Australian market, and that despite continued and persistent efforts, including bilateral discussions and exchanges of information, aforementioned products continued to face unreasonable restrictions. Import requests for Philippine fresh papaya fruit have been made pre-1994 and those for fresh plantain and banana in 1995. Bilateral discussions on this issue have commenced since then and various fora such as the Joint Philippine-Australian Bilateral Committee and Association of Southeast Asian Nations (ASEAN)-Australian dialogue have been
utilized in order to reach a mutually acceptable solution. Having failed to resolve these issues in about 7 years, the Philippines decided to raise this matter within the WTO’s jurisdiction when it requested consultations with Australia on 18 October 2002. Philippine consultations (joined by Thailand and the European Communities) with Australia were held on 15 November 2002; however, since the dispute was not settled, a panel was requested by the Philippines to examine the matter. China, EC, Ecuador, India, Thailand, US and Chile reserved their third party rights to the dispute.

\textit{TABLE 1 appears here}

Subsequently, the DSB in its meeting of 07 November 2003 also agreed to establish a panel requested by the European Communities (EC) to rule on Australia’s quarantine regime for imports, particularly of live animals, dead animals and animal parts, meat and meat products, dairy products, bee products, living plants, seeds, plant parts, and fresh fruits and vegetables. EC consultations (joined by Canada, Chile, India and the Philippines) with Australia on 08 May 2003 failed to resolve the dispute. Although Australia was entitled to prevent the establishment of a panel in this meeting, it accepted the panel establishment given the existence of a decision to establish a panel to examine a similar complaint, i.e. the case raised by the Philippines. Australia’s acceptance of panel establishment was in view of facilitating the application of Article 9 of the WTO Understanding on Rules and Procedures Governing the Settlement of Disputes (Dispute Settlement Understanding [DSU]), i.e. procedures for multiple complainants. Australia, however, questions the EC’s motivation for its request because, to a large extent, it was not about commercial considerations. For a number of products referred to in the request,
Australia had no record of Member States of the EC having expressed any export interest to Australia. Countries who have reserved their third party rights to the dispute were Canada, Chile, China, India, Philippines, Thailand and the US.

Up to the time of this writing, no panel has been composed to examine the Philippine-Australian case. The Philippines, in coordination with the EC, is still in the process of crafting the panel’s terms of reference. Meanwhile, Australia has revised its 1998 administrative process of conducting Import Risk Analysis (IRA) in 2003 based on Biosecurity Australia’s experience with IRA, the results of relevant parliamentary reviews, advice from Quarantine and Exports Advisory Council (QEAC) and comments from stakeholders. In addition, Australia also issued a revised draft of its import risk analysis (IRA) on the importation of fresh bananas from the Philippines on February 2004. This revised draft was issued as a consequence of the felt need to make significant changes to the analysis reported in the June 2002 draft IRA report in view of stakeholder submissions, reports, and technical information available to the import risk analysis team. In sum, this revised draft recommends that importation of fresh hard green bananas from the Philippines be allowed.

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12 Article 6.2 of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU) provides that in case the applicant requests the establishment of the panel with other than standard terms of reference, the written request shall include the proposed text of special terms of reference. The standard terms of reference of panels is as follows: To examine, in the light of the relevant provisions in (name of the covered agreement (s) cited by the parties to the dispute), the matter referred to the DSB by (name of party) in document…and to make such findings as will assist the DSB in making the recommendations or in giving rulings provided for in that/those agreements (s).’ Above n7, at 410.


14 Biosecurity Australia is a major operating group within the Australian Government Department of Agriculture, Fisheries and Forestry. It is responsible for import risk analyses (IRAs) and assessments of quarantine risks associated with commodity and germplasm imports, as well as technical negotiations on export market access issues. It also works with other relevant agencies to address Australia’s participation in international standard setting organizations and WTO activities with respect to sanitary and phytosanitary measures. See, ‘Who we are/What we do’ at http://www.affa.gov.au.


17 Ibid. Twenty submissions were received by Biosecurity Australia on the June 2002 Draft IRA, including substantial comments from the Philippine Government and industry, the Australian Banana Growers’ Council (ABGC) and the Western Australian Government.
bananas from the Philippines be permitted subject to certain conditions. Australia invites comments on this revised draft and has posed a deadline of 23 April 2004 for submissions to Biosecurity Australia. The Final Report will take into account any comments received on the draft as well as any new information that may come to hand, and Australia will open this for appeal for a period of 30 days after its release. On the other hand, no import risk analysis for Philippine fresh papaya and plantain has yet been initiated by Australia.

Meanwhile, the new banana IRA draft “sparked outrage from the Australian Banana Growers Council (ABGC), motivated banana workers and concerned citizens to hold a noisy rally in Cairns on 05 March 2004”18. The ABGC were of the opinion that the new draft IRA watered-down Australia’s conservative quarantine standards. On 17 March 2004, Biosecurity Australia reveals that a correction on the February 2004 draft will have to be issued in view of a transcription error in the electronic spreadsheet used in the estimation of risk for this particular IRA19. Another 60-day comment period will be elicited from the date of the release of the addendum containing the correction.

B. The Basis of the Philippine Complaint20

Table 2 enumerates the GATT provisions the Philippines invoked against Australia’s quarantine measures. At question in this dispute are Australia’s quarantine measures on fresh fruit and vegetable imports, including fresh banana fruit, fresh papaya fruit and fresh plantain

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20 This section draws from the Philippines' request to establish a WTO panel (WT/DS270/5/Rev.1 at http://www.docsonline.wto.org/). Through a reading of the Philippine complaint from an outside observer’s perspective, the authors attempt to elaborate on the issues raised by the Philippines and relate them with Australia’s measures and obligations of Members in the WTO. The questions raised on particular Australian measures elaborated on by the authors, although based on the Philippine request for a panel, may not necessarily be the specific arguments of the Philippines.
from the Philippines. Australia implements an a priori prohibition on importation of fresh fruits and vegetables. In particular, Section 64 of Australia’s 1998 Quarantine Proclamation sets out that “the importation into Australia of a fresh fruit or vegetable is prohibited unless the Director of Quarantine has granted the person a permit to import it into Australia.” The Philippines seeks examination by the panel of this a priori mandatory prohibition and the procedures and criteria applied for deciding whether or not to grant a permit for importation of fresh fruit and vegetables.

Table 2 should appear here.

Under the SPS Agreement, SPS measures\(^\text{21}\) need to protect against either (1) so-called ‘food-borne’ risks (human or animal life or health) or (2) pest-or disease-related risks (human, animal or plant life or health).\(^\text{22}\) For the SPS Agreement to apply, these measures also need to ‘directly or indirectly’ affect international trade.\(^\text{23}\) Since Australia’s import regime falls under the foregoing criteria, it has to be bound by the WTO requirements governing SPS measures as outlined in the SPS Agreement. The Philippines claims that Australia has violated several provisions of the SPS agreement\(^\text{24}\) – in particular those that require SPS measures to be based on 1) a risk assessment taking into account various factors (Article 5); 2) sufficient scientific evidence (Article 2.2); 3) international standards (Article 3); 4) regional conditions (of both

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\(^{21}\) For a specific measure to be viewed as an ‘SPS measure’ it should have been enacted with a view to protect human, animal or plant life or health (SPS Agreement Annex A.1, above n7, at 78).


\(^{23}\) SPS Agreement Article 1.1, above n7, at 70.

\(^{24}\) See, for example, Pauwelyn, above n22 for a more detailed discussion of WTO obligations under the SPS Agreement including interpretations in case law and panel and appellate body rulings on the first three SPS cases i.e. *beef hormones, Australia-salmon and Japan-varietals.*
regions of origin and destination), including pest or disease free areas and low pest or disease prevalence (Article 6); and 5) the principle of non-discrimination (Articles 2.3, 5.5).

The product with which the Philippines has obvious economic interest is fresh banana fruit. However, it framed its complaint not only on the basis of the on-going risk analysis on bananas but on the more encompassing regulation on all fresh fruit and vegetables. The papaya fruit and plantain, for instance, had pending import requests since 1994 and 1995, respectively. However, almost a decade has lapsed and no import risk analysis has yet been initiated. Potential questions that could be raised are as follows: Is Australia’s import ban on papaya fruit and plantain justified when no risk analysis for these products has begun? Does this import ban meet the requirements of a WTO-consistent SPS measure as outlined above? If Australia argues that this import ban is only a provisional measure (Article 5.7) on the basis of insufficient scientific evidence, is 9-10 years a ‘reasonable period of time’ for maintaining this ban?

It is also significant to question how different Australia’s situation is from the markets of other Philippine banana importing countries such as Japan, who is known to generally have high standards for its quarantine measures. Japan’s imports of bananas are overwhelmingly from the Philippines, and these are subjected to the intricate provisions of Japan’s Plant Protection Law and Food Sanitation Law.

The tact taken by the Philippines to encompass the quarantine policy on all fresh fruit and vegetables in its complaint (which Australia views as a broad systemic challenge that strikes at

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25 Article 5.7 of the SPS Agreement reads: ‘In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt SPS measures on the basis of available pertinent information, including that from the relevant international organizations as well as SPS measures applied by other Members. In such circumstances, Members shall seek to obtain additional information necessary for a more objective assessment of risk and review the SPS measure accordingly within a reasonable period of time.’, above n7 at 73.


27 Ibid. See the regulations and procedural requirements for the importation of fresh fruits, including bananas, at 5-14.
the fundamental right of WTO Members to have quarantine regulations\textsuperscript{28}) seems to provide a broader basis to show not only violations on the conduct of risk assessments or the use of sufficient scientific evidence, international standards, or adaptation to regional conditions with low disease and pest prevalence as bases for its measure but, in addition, that there has been discrimination between situations and products.

Prior to invoking the SPS provisions, the Philippines, in its complaint, also invoked GATT Article XI.1\textsuperscript{29} and the Agreement on Import Licensing Procedures (Articles 3.5f and 3.2). Here the Philippines essentially seeks the panel’s ruling on whether Australia’s measure is a violation of its obligation to generally eliminate import restrictions. It also seems to pose the following queries: If Australia’s administrative process in the conduct of import risk analysis falls under the definition of non-automatic import licensing (Article 1.1\textsuperscript{30} and 3.1\textsuperscript{31}), has it met the exception to the requirement of observing a 30 or 60-day period for processing applications stipulated in Article 3.5(f)\textsuperscript{32} in the case of papaya, plantain or banana? Are there justified reasons outside the control of Australia to warrant an exception? Is the administrative process for

\textsuperscript{28} See, ‘Dispute Settlement Body Minutes of Meeting,’ www.docsonline.wto.org/, WT/DSB/M/155.
\textsuperscript{29} GATT Article XI.1 reads: “No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory or any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.”, above n7, at 500.
\textsuperscript{30} Article 1.1 of the Agreement on Import Licensing Procedures reads: ‘For the purpose of this Agreement, import licensing is defined as administrative procedures used for the operation of import licensing regimes requiring the submission of an application or other documentation (other than that required for customs purposes) to the relevant administrative body as prior condition for importation into the customs territory of the importing Member.’, above n7, at 255-56.
\textsuperscript{31} Article 3.1 of the Agreement on Import Licensing Procedures reads: ‘Non-automatic import licensing procedures are defined as import licensing not falling within the definition contained in paragraph 1 of Article 2 (which reads: Automatic import licensing is defined as import licensing where approval of the application is granted in all cases…).’, above n7, at 257-58.
\textsuperscript{32} Article 3.5(f) of the Agreement on Import Licensing Procedures reads: ‘the period for processing applications shall, except when not possible for reasons outside the control of the Member, not be longer than 30 days if applications are considered as and when received, i.e. on a first-come first served basis, and no longer than 60 days if all applications are considered simultaneously.’, above n7, at 259.
granting import permits not trade-restrictive and not more administratively burdensome than absolutely necessary to administer (Article 3.233)?

On Australia’s import risk analysis on bananas from the Philippines, potential questions arise in examining how justified Australia’s prescriptions are for managing risk with respect to pests such as Moko (banana wilt), freckle and 2 species of mealy bugs. In order to meet Australia’s allowable level of protection (ALOP), the measures it identified to manage potential risks from Moko, for example, requires that the source of imports should be from an Australian approved plantation in an area of low pest prevalence (ALPP) with a low pest prevalence (LPP) of Moko. The LPP level should not exceed .005 cases (infected mats) per hectare per week, which is about 1 case per 4 hectares per year, i.e. no more than 6,800 infected plants per year. This level should be demonstrated by weekly surveys over a minimum of 2 years immediately preceding harvest of fruit intended for export to Australia. If the prevalence of Moko exceeded the set LPP level, the affected area would be suspended for a minimum of 2 years. Has Australia’s ALOP taken into account as relevant economic factors: the potential damage in terms of loss of production or sales in the event of an entry, establishment or spread of a pest or disease; the costs of control or eradication in the territory of the importing Member; and the relative cost-effectiveness of alternative approaches to limiting risks as called for by Article 5.3 of the SPS agreement? Isn’t there an alternative measure which could meet Australia’s ALOP which is less trade restrictive and more technically and economically feasible as espoused by the SPS Agreement’s Article 5.6?

33 Article 3.2 of the Agreement on Import Licensing Procedures reads: ‘Non-Automatic licensing shall not have trade-restrictive or distortive effects on imports additional to those caused by the imposition of the restriction. Non-automatic licensing procedures shall correspond in scope and duration to the measure they are used to implement, and shall be no more administratively burdensome than absolutely necessary to administer the measure.’, above n7 at 258.
The foregoing questions are potential challenges for Australia and the WTO panel. As for the WTO panel, if Australia, in taking account of economic factors, finds that the potential damage or lost sales due to the spread of pests and diseases is outweighed by the economic gains from importation, will Australia be obliged to relax its ALOP?

III. THE PAYOFFS OF THE WTO TRADE DISPUTE

In this section we provide, among other things, an economic assessment of lifting Australia’s import restriction on bananas, assuming no pests and diseases are brought into Australia by these imports. In the analysis, we will find that the net economic welfare gains for both the Philippines and Australia in this scenario are not negligible. However, certain groups will lose from opening up the Australian banana market.

We can categorize the relevant payoff components of the parties to the dispute as: 1) directly trade-related economic gains and losses; 2) political gains and losses; and 3) litigation costs. We refer to trade-related gains and losses as the economic welfare benefits and costs a party to the dispute incurs as a result of a change in a trade-related measure. In this case, this pertains to the removal or modification of Australia’s import restriction on fresh fruit and vegetables.

Political gains and losses associated with the case depend on the nature and size of the dispute, as well as on the country’s size and political structure (e.g. the importance of interest groups, re-election procedures). In this study, we will discuss the political dynamics, which may

have influenced the case to be raised in the WTO. Political and legal scientists, e.g. Jackson\textsuperscript{35}, especially emphasize the importance of reputation-related payoffs in WTO disputes. Agricultural economists, e.g. Bredahl, et. al.\textsuperscript{36}, Schmitz\textsuperscript{37}, Picketts, et.al.\textsuperscript{38}, have also documented the role of agricultural interest groups in border disputes. While freer trade for agriculture may be in the public economic interest, any reform towards further trade liberalization would involve gainers and losers. Those special interest groups who would lose from the policy change will clearly attempt to block the reform. As the theory of public choice\textsuperscript{39} suggests, although public officials are expected to pursue the ‘public interest,’ first-best policies are not usually practiced because there is no direct reward to the politician for fighting powerful interest groups in order to confer benefits on a public that may not even be aware of the benefits or of who conferred them. Thus, the incentives for good management in the public interest are weak. In contrast, interest groups are organized by people with very strong gains to be made from governmental action. They provide politicians with campaign funds and campaign workers. In return they receive at least the ‘ear’ of the politician and often gain support for their goals.

Litigation costs refer to the legal and organizational costs of engaging into the WTO dispute settlement system. These include lawyers’ and consultants’ fees, and the time invested by government officials and private industry on the case.

\textsuperscript{36} Maury Bredahl, Andrew Schmitz, and Jimmye Hillman,'Rent Seeking in International Trade: The Great Tomato War', 69 (1) American Journal of Agricultural Economics (1987), 1-10.
A. Trade-Related Economic Impacts: A Welfare Analysis of Australia’s Import Restriction

Section A of the appendix provides an overview of the Australian banana market and gives the procedure used to calculate the welfare effects of relaxing Australia’s challenged import ban. Our results show that lifting Australia’s import ban would allow imports of Philippine bananas ranging from 77,000 – 315,000 tons, depending on how responsive producers are to price changes (See Table 3). Assuming that the proportion of marketing margins in 2003 that we used in the calculations hold, the Australian farm gate price will drop from 98 cents/kg to 70 cents/kg when imports come in at 85 cents/kg. This change will reduce producer welfare in Australia ranging from 38-70 million AUD while consumer welfare substantially improves by 175 million AUD. Net economic welfare gains range from 105-138 million AUD; the upper bound is a case where the import price would elicit a no production response by growers. These estimates show (as in the case seven years ago\textsuperscript{40}) that it is in Australia’s economic interest to remove the ban. In addition to these gains are those that could be obtained by wholesalers/rippeners and retailers of bananas for an expanded demand for their services (not quantified in our simple model). If the import price increases by some 38.8 % (increasing the c.i.f. import price to about 118 cents/kg), the net welfare gains from importing bananas will be cancelled out.

Table 3 should appear here.

Australian imports of Philippine bananas can increase Philippine banana exports by 6%-25%. Section B of the appendix gives a profile of the Philippine banana market and shows the

\textsuperscript{40} See n3 of Appendix. James and Anderson’s estimates of net welfare gains from lifting the import ban were substantially greater than the authors’ 2003 estimates. In their calculations, the consumer gain from removing the ban is likely to far outweigh any loss to banana growers, even if pests and diseases would wipe out the industry. Much of the difference lies on the import price used. If the import price of (James and Anderson’s) 50 cents/kg was used in this paper, the net welfare gains (given actual data on marketing margins) even exceed their computations, which were based on assumed marketing margins.
calculations of potential benefits to the Philippines under a scenario where Australia would allow free trade in bananas. Increased Philippine banana exports could translate to an increase in producer surplus amounting to US$14 – 63 million\textsuperscript{41} (Table 4).\textsuperscript{42}

Table 4 should appear here.

While these estimated welfare gains for Philippine producers are a minimum with respect to potential fresh fruit and vegetable exports, these estimates are a maximum for the banana case. The assumed scenario is that of a total lifting of the Australian import ban on Philippine bananas. If Australia allows importation of Philippine bananas while imposing quarantine measures in addition to what Philippine producers are already applying, the cost of these additional measures will determine the extent to which economic benefits accruing to Philippine producers would be diminished. As the cost of these quarantine measures increase, net welfare benefits are reduced. For example, if quarantine measures increase the import price of bananas from the Philippines to 110 cents/kg, the new level of Australian imports will range from 18-285 thousand tons. These amounts of imports translate to an increase in Philippine producer surplus of about US$3-57 million. On the other hand, the Australian economy, despite obtaining less consumer surplus relative to the surplus that could be obtained from a full lifting of the ban, still stands to obtain a net welfare gain of about 22-30 million AUD (See Table 3). The net gain to consumers from a lower price obtained from free trade far exceeds the cost to domestic producers.

\textsuperscript{41} See also n18 of Appendix.

\textsuperscript{42} In the absence of studies looking into the effect of increased demand on Philippine export prices, we assumed that a unit increase in quantity demanded will cause a unit increase in the Philippine export price for bananas. In addition to farm-level producer gains, there will also be gains from the transport of bananas that is usually done through independent reefer carriers or by the fleet owned by the multinational banana companies.
The economic welfare benefits foregone by the Philippines in view of Australia’s ban may conceptually be the basis for calculating trade damages in the WTO as the basis for compensation or retaliatory measures (suspension of concessions)\(^{43}\) should Australia, for example, resist to implement a panel ruling requiring it to lift the ban. However, rather than using economic surplus measures, WTO arbitrators are predisposed to calculate trade damages based on foregone revenues. Importantly, these tend to be greater than foregone economic welfare benefits\(^{44}\). Should Australia fail to implement a ruling that requires her to allow importation of Philippine bananas, a potential compensation amount could reach US$68 million\(^{45}\) (see Table 4). If Australia’s imports had no price effect on Philippine banana exports, the compensation value could be reduced to the amount of foregone revenues amounting to some $14 - $58 million. This amount could also be the basis for retaliatory measures. A potential retaliatory measure could be the Philippines restricting cattle imports from Australia.

B. Political Gains and Losses: Reputation, Rent-Seeking and the Role of Interest Groups

The impetus for the complaint against Australia’s import ban of fresh fruits and vegetables emanates from the Philippine Banana Growers and Exporters Association (PBGEA). This group is composed of major banana industry players mostly affiliated with multinationals, i.e. Dole Philippines, Inc., Del Monte Fresh Produce (Philippines), Inc. and Chiquita Brands

\(^{43}\) DSU Article 22 outlines the principles and procedures for compensation and suspension of concessions, above n7, at 422.

\(^{44}\) Jason Bernstein and David Skully, ‘Calculating Trade Damages in the Context of the World Trade Organization’s Dispute Settlement Process.’ 25 (2) Review of Agricultural Economics (2003)385-398. The hypothesis discussed by Bernstein and Skully) is that arbitrators tend to use foregone revenues (which are generally higher than foregone economic welfare gains) as the basis for calculating trade damages so that penalties can discourage future violations of WTO law. Compensation must also be sufficient to induce injured parties to pursue compensation claims, but not as great as to induce opportunistic, nuisance cases.

\(^{45}\) This is an estimate of the area under \(PwAQwQiBPi\) in Figure 2 of the Appendix.
International (through Tagum Agricultural Development Company). The current Secretary of the Department of Agriculture, Luis P. Lorenzo, Jr. (from late 2002 until the present time) also used to be the chair of the PBGEA, the chief executive officer and chair of family-controlled Lapanday Foods Corporation from 1982 to 2002, and chair of Del Monte Philippines, Inc. from 1997 to 2002.

Meanwhile, resisting changes to Australia’s restrictive quarantine policy is the Australian Banana Growers Council, Inc. (ABGC), the banana industry's peak national agro-political organization representing 1,900 banana growers. It was established in February 1961 and on 31 August 1992 it took the initiative of creating a full-time National Secretariat based in Brisbane. The current members of the ABGC are the Banana Industry Committee of New South Wales (BIC) and Queensland Fruit & Vegetable Growers. The ABGC is funded by a 2¢ per carton voluntary levy.

On the other hand, Australian dairy producers led by the Australian Dairy Corporation (ADC) are seen as allies of Philippine banana producers. The Philippine Star reports that, in fearing that the Philippines, in retaliation to Australia’s restrictive quarantine policy, will make good its threat to ban Australian products from Philippine shores, the ADC has urged its federal government to adopt a less rigid approach to the IRA being conducted by Biosecurity Australia (BA). In a 2002 parliamentary hearing on the banana quarantine process

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47 The Department of Agriculture, together with the Department of Trade and Industry and Department of Foreign Affairs, are the primary executive offices in charge of this WTO trade dispute in the Philippines.
50 On 1 July 2003, Dairy Australia replaced Australian Dairy Corporation (ADC) and Dairy Research and Development Corporation (DRDC), assuming their functions other than the export control functions which returned to Government, http://www.dairyaustralia.com.
(this was prior to the complaint being filed in the WTO), ADC submitted its position stressing that BA should ‘consider that $364.4 million dairy earnings from the Philippines is worth much more than the $321 million Australian banana industry. In 1999-2000, the Philippine Agriculture Secretary (Edgardo J. Angara) has successfully pushed for the gradual phase out of live cattle imports from Australia, forcing the latter to commit to allow the entry of bananas and pineapples two years after the conduct of the IRA.

The Philippine government has pursued the case against Australia in the WTO as a means to achieve economic ends. At the same time, this move harnesses the political support of banana producers and other domestic producers in the country in general. Filing a complaint in the WTO exudes an image of toughness and aggressiveness in pursuing economic goals. Winning the dispute against Australia can showcase how trade liberalization initiatives through the WTO Agreement can level the playing field between a developing country like the Philippines and a richer country like Australia. The mere filing of the complaint in the WTO on the fresh fruit and vegetable case stirs confidence of agribusiness firms, providing the impression that the Philippine government is a reliable partner in promoting export interests. Even if the Philippines loses the case, reputation gains as discussed above have already been achieved in the domestic political arena. Despite a wide range of plausible factors affecting citizens’ choices during elections, we cannot discount the possibility that elevating this case against Australia in the WTO has also served as a political tool in the campaign period for the national elections in May 2004. If the Philippines ends up with a losing case, we cannot, however, eliminate the possibility of criticisms on how the case was handled.

52 Some militant farmer groups are already critical of the current Secretary of Agriculture. A farmer leader was quoted as saying that the ‘Secretary of Agriculture’s programs only benefit big landlords and agro-corporations,
It is also interesting to note that, like the US-EU ‘banana war’, multinational corporations
play a role in the Philippine-Australian case. In Stovall and Hathaway’s account of the US-EU
dispute on bananas, Chiquita Brands International, Inc. and Dole Food Company, Inc. had
opposing positions on the ‘first-come-first-served’ EU plan, and Chiquita’s stance to oppose the
proposed EU regime had prevailed over Dole’s interest. The commentary also mentions a Wall
Street Journal article reporting that a former US trade negotiator in four previous administrations
(Christopher Parlin) was quoted as saying: “This is the classic example of ‘money talks’ in trade
and politics -- that in the last political campaign cycle, Chiquita’s top executive and his financial
interests had contributed US$1.03 million to Republicans and US$677,000 to Democrats. Dole
by contrast gave US$134,000 to Republicans and US$25,000 to Democrats.” In the Philippine
case, multinationals, i.e. Chiquita, Dole, Del Monte, have joined forces with local banana
growers in pushing its interests to further open foreign banana markets.

Australia has double-edged stakes in terms of politics. It has to balance the conflicting
interests of its domestic constituents (specially with forthcoming national elections late this year)
while maintaining its international standing as a lead advocate of agricultural trade liberalization.
If the WTO panel or appellate body rules against its measures and Australia doesn’t comply, it
loses its moral authority to lead the Cairns Group in pushing for fairer trade rules in agriculture.
Australia also stands to lose the political support of sectors who may be affected by
compensation or retaliatory measures, while, of course, gaining the support of its local banana
growers. Allowing the WTO panel to decide on the case perhaps reduces the burden on Australia

while farmers receive a bunch of empty promises. His fanatical implementation of agricultural trade liberalization
and the rampant importation of agricultural products in accordance with World Trade Organization (WTO) policies
continues to inflict havoc to farmers’ lives mainly for the benefit of US agro-corporations. We cannot expect a
Cabinet member who represents big agro-corporations to heed the demands of the poorest sector of the country. See
Cyberdyaryo, above n 48.
53 See Stovall and Hathaway, above n 9.
to cave in to domestic rent seeking. If it loses the case, and complies with the WTO ruling, Australia may still obtain reputation gains internationally, although at home, it may be criticized for its failure to defend its quarantine measures. However, the political cost to Australian leaders may somewhat be less if the WTO ruling mandates the policy change rather than if Australia unilaterally relaxed its quarantine rules to allow Philippine banana imports. There is much pressure for Australia to win the case so that it would not be perceived as ‘one who does not practice what it preaches’ in terms of agricultural trade liberalization. If it is able to defend and justify its quarantine measures within WTO rules, it maintains its status as an agricultural free trade advocate while building up the political support of its domestic producers.

C. Litigation Costs

Governments and private stakeholders expend a substantial amount of time and effort when WTO Members decide to go through the dispute process. The literature on the economic analysis of (domestic) legal disputes that may also apply to WTO disputes, posits that the outcome at trial (a win for plaintiff or defendant) is the result of a complex interaction between the efforts that both parties put into trial and the underlying facts and law of the case. Since there is an expectation to win when litigants decide to empanel, substantial effort will be put into the case to meet this expectation. The efforts of parties can be measured for example by expenditures on the trial.

Parties to the dispute must pay their lawyers and consultants to research and argue the case. The Philippines is tapping the expertise of the Advisory Center on WTO Law

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(ACWL)\textsuperscript{55} to provide legal assistance. As an ACWL member, an initial estimated preferential rate the Philippines has to pay for litigation is $150,000. No information on lawyers’ fees was obtained on the part of Australia, although one can expect that Australia will spend a considerable amount on lawyers’ fees\textsuperscript{56}, as we will discuss later. Even if some governments have in-house legal experts to do this job, an opportunity cost is associated with this resource. Incumbent diplomats, government officials and staff are not being paid more when disputes arise, but they use up substantial time and effort on the case, which may have to forego other assignments. Diplomats may have to ensure that the dispute does not harm overall relations with parties involved. Disputes are also tasks on top of attaches work in the WTO government missions in Geneva, which take up much of their time and effort, instead of focusing on other important work such as the ongoing agricultural trade negotiations. Government officials and staff in the capital, in addition to their regular tasks, will also have to help out in the technical details of the case and regularly liaise with private stakeholders. Private interest groups having an interest in the case spend substantial time and effort to provide inputs and political pressure to their governments, especially to the defendant government. The Australian Banana Growers Council for example is devoting substantial resources in media releases, information dissemination activities, rallies and campaigns to move against importation of Philippine bananas and lobby hard with the Australian government\textsuperscript{57}.

\textsuperscript{55} The Advisory Center on WTO Law (ACWL) is a public international organization independent of the WTO that was established in 2001 to provide legal advice on WTO law, support in WTO dispute settlement proceedings and training in WTO law to developing countries and customs territories, countries with economies in transition and least developed countries, \texttt{http://www.acwl.ch}.

\textsuperscript{56} Kisanwatch, a public information website that monitors the impact of developments in world trade on Indian agriculture and farmers' livelihoods, cites that international law firms dealing with WTO disputes (usually US-based) charge anything from US $250 to $1,000 per hour in fees. See, ‘Dispute Settlement in the WTO(2001),’ at \texttt{http://www.kisanwatch.org}.

\textsuperscript{57} See, for example, Australian Banana Growers Council, “Scientific Criticism at the Heart of Biosecurity Australia Report.”Media Release, 08 March 2004 and ‘Save the Aussie Banana’ at \texttt{http://www.abgc.org.au}.
If the outcome of WTO litigations were only a function of effort, i.e. litigation costs, this is where the poorer countries may have a disadvantage. An important problem increasingly recognized, but still unresolved, is how to give poor developing countries an effective voice in the negotiating process. Beyond the problems associated with insufficient domestic analytical resources, most (poorer) countries simply do not have the resources to be adequately represented in Geneva and in other venues where the negotiations occur. Most of the industrial countries attend negotiations with a team of lawyers, economists and diplomats, whereas many of the developing countries must rely by and large on one or two (if any) diplomats in Geneva, and with many other tasks to undertake. For trade disputes, this is where co-complainants and third parties may play a role in reducing the relative cost of litigation to the developing country complainant while assisting in arguing the case.

Another hypothesis in the economic analysis of (domestic) legal disputes literature which may provide an indication of litigation costs in the Philippine-Australian SPS case is Perloff and Rubinfield’s suggestion that defendants typically have more at stake than plaintiffs because defendants are likely to be involved in future litigation of the same type. In this situation, the loss to the defendant is greater than the plaintiff’s gain. The defendant will consequently choose to spend more on trial than the plaintiff.

58 Merlinda Ingco ed., ‘Agriculture, Trade, and the WTO,’ (Washington D.C.: World Bank, 2003). Ingco mentions this in reference to WTO agriculture negotiations in general. However, this point is likewise applicable to disputes, perhaps to a lesser degree, if private sector stakeholders such as multinationals in this case could provide input and support.

59 No information however has been obtained by the authors as to how litigation costs for the Philippines may have been reduced in view of having EC, for example as a co-complainant.

IV. WHY ENGAGE IN WTO DISPUTES?

A. Economics and politics

The foregoing cost-benefit analysis suggests that Philippine producers and its society as a whole stands to achieve economic gains from the WTO dispute process. On the other hand, while Australia can also realize net economic gains from a potential change in its challenged measure, producers will lose in the process. In such case, it is therefore not surprising if the political clout of producers’ groups outweighs the public’s economic interests as explained by the theory of public choice. Our study highlights that the interplay of economic and political forces influences public officials’ decisions in engaging in formal legal disputes. However obvious as this may seem, we provide the following caveats. First, on the part of the complainant, we have seen that litigation costs to pursue a WTO case can be substantial, especially if we take into account how scarce resources are for a developing country. To achieve the same potential market access gains, couldn’t alternative means of increasing exports be resorted to rather than going into the confrontational and costly means of WTO disputes? Would it be a wiser use of resources if, instead, export promotion was done in other countries whose current quarantine policy allow importation of Philippine fruit and vegetables in order to open new markets or expand old ones? Assuming that both means may achieve the same market access gains, it seems that the WTO dispute process is a more attractive recourse for state leaders because of the political gains it could reap in the process (gains that would be absent or less if the export promotion route was chosen). In addition, the private sector may also push for the WTO route, because litigation costs are primarilyshouldered by the state unlike if export promotion is done; export promotion expenses may come out more from the pockets of private exporting companies.
Second, on the part of the defendant, its decision to settle or proceed to the WTO panel stage will depend on how large a value it places on its political interests over foregone economic gains (particularly on the part of consumers) and international reputation costs from defending its measure perceived by many as ‘protectionist’. Australia’s maintenance of its stringent quarantine regulation may not be surprising and its likelihood is suggested by the economic theory of regulation, sometimes referred to as ‘capture’ theory. Applied to technical trade barriers (or SPS regulations), the theory suggests that when there is doubt about the merit of a technical restriction, domestic interest groups will often succeed in obtaining protective decisions from domestic regulatory agencies. 61

For both complainant and defendant therefore, we see how politics play a strong driving force in the engagement of WTO disputes. If more weight were provided to economic implications in dealing with challenged measures, perhaps, in cases such as this, lesser disputes will develop within the WTO ambit. The reverse is implied when state leaders tend to put more weight to political rents obtained from interest groups.

At any rate, cost-benefit analyses of a WTO case along the stages of the dispute system can provide useful insights for government officials in their decision-making. The decisions made are indications of public officials’ objectives in pursuing the case and the weights or ‘shadow prices’ they place on the payoffs from the case. Perhaps, if such analyses were made transparent and known to the public, economic interests may temper political decisions.

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B. Time Factor

Attempts to settle this case bilaterally outside the WTO ambit have been made for about 7 years but have failed. Bringing the case to the WTO’s jurisdiction somehow provides a definite timeline to resolve the issue. If the Philippines had the panel composed at the minimum possible time, the case could still continue for 1,181 days, or 3 years and 2 months, until the final retaliation stage. Despite the seemingly long and tedious process, the WTO system can provide a sense of definiteness on when the issue could be resolved, rather than if the case was outside the WTO’s jurisprudence.

Still, the length of time it takes to resolve WTO disputes through litigation, in addition to the cost of litigating and the utility of solutions resulting from the application of the law whereby one party wins and the other loses, have led to the questioning of the litigation model. In this case for instance, the consultation stage seems redundant, because bilateral exchanges of information have already been conducted prior to the complainant request to undergo consultations with the defendant to formally invoke the WTO dispute process. Another stage in the process which seems to only be “buying time” is the DSB meeting where the request to establish a panel first appears in the agenda and the defendant has the automatic right to object to the establishment of a panel. Subsequently, the panel gets to be established at the next DSB meeting, unless at that meeting the DSB decides by consensus not to establish a panel.

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62 Guzman (see below n 67) notes that there are significant opportunities for delay in the dispute process, and from the defendant’s perspective delay is desirable – all else equal- because WTO rules permit the defendant to maintain the disputed practice as the case is ongoing, political leaders continue to gain political and economic rents from the activity, and there is no offsetting cost for losing defendants to pay damages for violative activities.

63 Authors’ estimated timeline based on actual events, the DSU and WTO dispute settlement primer i.e. at www.wto.org/english/tratop_e/dispu_e/disp2_e.htm. Since the Philippines has not yet submitted the terms of reference of the panel to date, 8 months after the DSB agreed to establish a panel, this timeline will extend depending on when the panel is actually composed.

64 See McRae, above n1, at 9.

65 DSU Article 6.1, above n7, at 410.
C. Reducing the Political Burden for the Defendant

We have suggested that Australia may have chosen not to settle and proceed to the panel stage because its domestic political gains must have outweighed the sum of litigation costs, foregone trade benefits, international reputation loss and some domestic loss in political support (e.g. other interest groups which may otherwise be affected). If the WTO panel or appellate body, however, makes the ruling that Australia has to correct its quarantine rules, the ‘domestic unpopularity’ is passed on to the WTO and less to the Australian government itself if it decided to correct its rules unilaterally. In the same way, if the panel or appellate body rules in favor of Australia where it can retain its rules, this could be less ‘unpopular’ to other interest groups such as the cattle group since the Philippines will now have no legal basis to retaliate by restricting Australian cattle imports.

D. Peer Pressure

WTO disputes are subjected to ‘peer pressure’ so that defendants are drawn towards implementing WTO consistent trade measures while complainants are discouraged to raise nuisance claims. As we have seen in this case, third parties have joined in with the Philippines, increasing the pressure faced by Australia. Third parties (perhaps those who implement similar measures, if any, as Australia) could also come forward to the defense of Australia. The system therefore provides an ‘international reputation’ element in the payoffs that are taken into account by countries when they decide to take on WTO disputes.
E. The Coase Theorem on WTO Litigation and Settlement

1. Optimism of litigants

One of the central claims in the law and economics literature on litigation and settlement in the domestic context is that, in the absence of transaction costs and with symmetric information, all cases will settle. This represents a simple application of the Coase theorem – as long as there are gains from settlement, the parties will reach an agreement to maximize their joint gains.\(^{66}\)

In the context of the Philippine-Australian dispute, we have seen from the economic assessment in the previous section that there is a potential avenue to settle where both litigants can jointly gain. However, their failure to settle may also be attributed to informational asymmetries and transaction costs.

An information, or perhaps expectation, asymmetry is the optimism on the part of both litigants. This is a commonly cited explanation for litigation and may apply in this case. The Philippines may be expecting a favorable ruling from the panel. That is why it may refuse to settle unless it receives concessions that are at least as valuable as the gains from the panel ruling minus the litigation costs. On the other hand, Australia will not offer concessions greater than what it expects to lose before a panel plus litigation costs.

It is interesting to note, however, that out of the 82 cases that have generated a panel ruling (until July 2002), 90% have resulted in a complainant win.\(^{67}\)


Guzman suggests that asymmetry in the payoffs from the panel ruling and asymmetry in the cost of delay contribute to an explanation of the complainant win rate.
2. The nature of the dispute

Another reason for the failure to settle in this case could be the hypothesis\textsuperscript{68} which suggests that WTO disputes involving discontinuous variables (e.g. health and safety regulations, product classification issues, bans, absence of TRIPs\textsuperscript{69} required laws) that have an all or nothing character will proceed to a panel more frequently than disputes involving continuous variables (tariff, non-zero quotas, subsidies). This case may lend support to the hypothesis if the spread of pest and disease comes along with Philippine banana imports, and the change in Australia’s quarantine policy may lead to costs that could outweigh trade gains. There is no direct way for the Philippines to compensate for this eventuality. An analogy used is having a settlement range of $120-$150 between parties who have only $100 bills and cannot make change. In this situation they are not able to settle. In the Philippine-Australian fresh fruit and vegetable case, however, we would argue that non-settlement is more a problem of asymmetric information or, perhaps, expectation. Using the analogy, Australia’s belief might be that the value of allowing Philippine imports is a concession worth $200, when the Philippines believes it is only worth $150 not needing any change. The $50 difference could be due to a difference in perception of the quarantine level that would ensure that no pests and diseases would substantially affect Australian bananas. Until this is resolved, the case couldn’t settle.

F. No other legal recourse

More significantly, the WTO is the only legal recourse to contest trade protection and assert a country’s export rights. Import-competing domestic industries can always file a case within their national jurisdictions to seek trade protection in the form of trade remedies such as

\textsuperscript{68} See Guzman and Simmons, above n 66.
\textsuperscript{69} TRIPs refer to Trade-Related Intellectual Property Rights.
antidumping and countervailing duties, which are provided for by national laws\(^{70}\). However, there are no such alternative legal avenues\(^{71}\) to protect the rights of importers and consumers who may want to access better prices and a wider range of product choices from abroad. In our sample case, Australian distributors and consumers of bananas are constrained to sources from the domestic market when there are cheaper alternative sources of bananas elsewhere. These distributors and consumers have no legal recourse within Australian law to challenge the national quarantine regulation on bananas nor do they have the option to resort to the WTO since only governments can file a complaint within the WTO dispute settlement system. Indirectly then, the rights of Australian importers and consumers are ‘fought’ by the producers of an exporting country, and the only legal instrument is the WTO. We can therefore foresee that as the clout of consumers is strengthened through improved organization and as ownership of companies cross national boundaries while vertically integrating their operations, we may see more WTO disputes being invoked to promote export interests.

V. CONCLUDING NOTES

Our empirical inquiry of the ongoing Philippine-Australian SPS dispute attempts to help illuminate why Member countries opt to take their trade policy disagreements into the WTO’s jurisprudence. Through an analysis of both economic and political payoffs associated with the dispute, we have shown how rent-seeking behavior of interest groups can potentially overshadow national economic interests. Despite the right of each WTO Member to defend its measure and


\(^{71}\) Competition policy and anti-trust regulations somehow address these consumer rights but only in a domestic context.
the automaticity of WTO dispute settlement where any WTO Member has the right to bring a
case to the WTO against another Member, this case study infers the need for more economic
assessments of trade disputes in guiding decisions of state leaders. The economic surplus
methodology used, despite its limitations and simplicity, is a useful tool in analyzing the trade
effects of potential policy changes. There may also be a need for more economics on import risk
analysis and trade policy decision-making, particularly for quarantine policies which are prone to
being used as protectionist measures, given that their implications are less transparent compared
to trade measures such as the tariff. Making such cost-benefit assessments known to the public
may also provide value in terms of underscoring public officials’ accountability for both the
trade protection and promotion decisions they take. Further, it seems that the WTO dispute
settlement will continue to be utilized frequently by exporting countries since it is the only legal
mechanism available to further open markets. Potential importers have limited (or in some cases
no other) recourse within national jurisdictions to enforce the right to import.

Finally, in spite of our argument that provides conditions to the automatic right of
Members to file a case in the WTO, resorting to the rules-based institution’s dispute process
provides some degree of predictability in terms of the timeline and discipline it espouses. It
provides a fighting chance for the ‘small and weak’ to argue a case against the ‘big and strong’, a
chance that could not have been provided otherwise in its absence. We provide another caveat
though -- it is most likely, however, that the interests fought by the ‘small and weak’ are those of
the ‘big and strong’ in their country.
Table 1. Chronology of the Philippine-Australian SPS Case

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Reference*</th>
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</thead>
<tbody>
<tr>
<td>Pre-WTO jurisdiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-1994</td>
<td>Fresh papaya import requests with Australia</td>
<td>WT/DS270/5/Rev.1</td>
</tr>
<tr>
<td>1995</td>
<td>Plantain import requests with Australia</td>
<td>-do-</td>
</tr>
<tr>
<td>1995</td>
<td>Fresh banana import requests with Australia</td>
<td>-do-</td>
</tr>
<tr>
<td>1996-2000</td>
<td>Bilateral discussions</td>
<td>WT/DSB/M/155</td>
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<tr>
<td>1998</td>
<td>Australia issues IRA Process Handbook</td>
<td>Biosecurity Australia (n13)</td>
</tr>
<tr>
<td>2000 June</td>
<td>Australia initiates IRA on Philippine bananas</td>
<td>WT/DS270/5/Rev.1</td>
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<tr>
<td>2001-2002</td>
<td>Exchanges of information/bilateral discussion</td>
<td>WT/DSB/M/155</td>
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<tr>
<td>2002 June</td>
<td>Draft IRA Report on Philippine bananas</td>
<td>Biosecurity Australia (n16)</td>
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<td>WTO jurisdiction</td>
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<td></td>
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<tr>
<td>18 Oct 2002</td>
<td>Philippine request for consultations in the WTO</td>
<td>WT/DS270/1</td>
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<tr>
<td>15 Nov 2002</td>
<td>Philippines and Australia hold consultations joined in by Thailand and the EC</td>
<td>WT/DS270/5/Rev.1</td>
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<tr>
<td>07 July 2003</td>
<td>Philippine request to establish a panel</td>
<td>-do-</td>
</tr>
<tr>
<td>21/23 July 2003</td>
<td>DSB considers Philippine request for a panel, agreeing to revert to it</td>
<td>WT/DSB/M/153</td>
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<tr>
<td>08 August 2003</td>
<td>Australia releases revised IRA Process Handbook</td>
<td>Biosecurity Australia (n13)</td>
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<td>29 Aug 2003</td>
<td>DSB agrees to establish panel requested by the Philippines</td>
<td>WT/DSB/M/155</td>
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<tr>
<td>07 Nov 2003</td>
<td>DSB agrees to establish panel requested by the EC on a similar issue</td>
<td>WT/DSB/M/157</td>
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<tr>
<td>2004 February</td>
<td>Revised Draft IRA Report on Philippine Bananas</td>
<td>Biosecurity Australia (n15)</td>
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* WTO Documents (references starting with WT) can be accessed from http://docsonline.wto.org; Biosecurity Australia documents can be accessed through http://www.affa.gov.au.

Acronyms:
- SPS - Sanitary and Phytosanitary Measures
- IRA - Import Risk Analysis
- DSB - Dispute Settlement Body
Table 2. The Issues of the Philippine-Australian SPS Case *

<table>
<thead>
<tr>
<th>Agreement/Article Invoked</th>
<th>Subject</th>
</tr>
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<tbody>
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<td>GATT 1994</td>
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<tr>
<td>Article XI:1</td>
<td>General Elimination of Quantitative Restrictions</td>
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<td>Agreement on Import Licensing Procedures</td>
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<td>Article 3.5(f), 3.2</td>
<td>Non-Automatic Import Licensing</td>
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<td>Agreement on the Application of SPS Measures</td>
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<td>Articles 5.1, 5.2, 5.3</td>
<td>Assessment of Risk and Determination of the Appropriate Level of SPS Protection</td>
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<td>Annex A[ Definitions], para 4 of Agreement on the Application of SPS Measures</td>
<td>Risk Assessment</td>
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<td>Article 2.2</td>
<td>Basic Rights and Obligations</td>
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<tr>
<td>Article 5.6</td>
<td>Assessment of Risk and Determination of the Appropriate Level of SPS Protection</td>
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<td>Articles 6.1, 6.2</td>
<td>Adaptation to Regional Conditions, Including Pest-or Disease Free Areas and Areas of Low Pest or Disease Prevalence</td>
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<td>Article 3.1</td>
<td>Harmonization</td>
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<td>Article 2.3</td>
<td>Basic Rights and Obligations</td>
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<td>Article 5.5</td>
<td>Assessment of Risk and Determination of the Appropriate Level of SPS Protection</td>
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<td>Counterargument should be Australia invoke Article 5.7</td>
<td>Assessment of Risk and Determination of the Appropriate Level of SPS Protection (provisional adoption of SPS measure)</td>
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* Based on the Philippine complaint inclusive of the sequence of articles invoked (WT/DS270/5/Rev.1)
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<tr>
<th>Index</th>
<th>With ban 2003, actual</th>
<th>With lifting of import ban</th>
<th>If import price increases due to cost of quarantine measures</th>
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<td>Distribution Center price (cents/kg)</td>
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<td>Retail price (cents/kg)</td>
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<td>Consumption (kt)</td>
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<td>Production marketed (kt)</td>
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<td>Imports (kt)</td>
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</tr>
<tr>
<td>Imports ($m)</td>
<td>0</td>
<td>66</td>
<td>98</td>
</tr>
<tr>
<td>Self Sufficiency (%)</td>
<td>100</td>
<td>75</td>
<td>63</td>
</tr>
<tr>
<td>Change in consumer welfare ($m)</td>
<td>n.a.</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>Change in producer welfare ($m)</td>
<td>n.a.</td>
<td>-70</td>
<td>-65</td>
</tr>
<tr>
<td>Change in net economic welfare ($m)</td>
<td>n.a.</td>
<td>105</td>
<td>110</td>
</tr>
<tr>
<td>Remaining producer surplus ($m)</td>
<td>n.a.</td>
<td>132</td>
<td>70</td>
</tr>
</tbody>
</table>
### Table 4. Philippine Economic Surplus and Revenue Foregone Due to Australia’s Import Ban on Banana Market

<table>
<thead>
<tr>
<th>Index</th>
<th>Scenario 1 / Aus. Supply Elasticities</th>
<th>Scenario 2 / Aus. Supply Elasticities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.5</td>
<td>1 &gt;3.57</td>
</tr>
<tr>
<td>Foregone Imports (kt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>77</td>
<td>116</td>
</tr>
<tr>
<td>Year 2002 level of Phil.</td>
<td>1,685</td>
<td>1,685</td>
</tr>
<tr>
<td>banana exports (kt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Increase in Export</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Demand (base=2002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>banana exports (US$ f.o.b.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Price Increase/kt *</td>
<td>8,377</td>
<td>12,620</td>
</tr>
<tr>
<td>of Phil. banana exports due to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased Export Demand (US$ f.o.b.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foregone Economic Surplus (US$)**</td>
<td>14,437,950</td>
<td>21,996,771</td>
</tr>
<tr>
<td>Foregone Revenue (US$)**</td>
<td>14,760,471</td>
<td>22,728,740</td>
</tr>
<tr>
<td>Foregone Revenue (US$)**</td>
<td>14,115,428</td>
<td>21,264,801</td>
</tr>
</tbody>
</table>

Scenario 1: Assumed c.i.f. import price in Australia is .87AUD/kg or US$666,514/kt
Scenario 2: Assumed c.i.f. import price in Australia is 1.10 AUD/kg or US$842,719/kt
* Assumes a1% increase in quantity demanded raises the price on Philippine banana exports by 1%.
** Computes foregone revenue with a proportionate increase in price (large country assumption for Australia)
*** Computes foregone revenue with no price change with increased demand for Philippine banana exports (small country assumption for Australia).
Appendix: Welfare Effects of Lifting the Australian Import Ban on Philippine Bananas

We apply a standard comparative-static partial equilibrium approach for a single commodity market in examining economic welfare effects of Australia’s import ban. If the Philippines and Australia settle at this stage or if the WTO panel or an appellate body rules that Australia has to change its import policy, there will be gainers and losers from the policy change. The economic surplus framework\(^1\) will be used in our analysis where changes in consumer and producer surplus are calculated to obtain the welfare effects of a new trade regime. This approach has been widely and legitimately used by economists to measure the impact of a policy change. Models based on producer and consumer surplus are widely used for policy purposes because they can be estimated using real world data.\(^2\)

A. Welfare Effects of A Quarantine Policy Change on the Australian Banana Market

In this section, we examine Australia’s banana market to determine the welfare implications of lifting the banana import ban for producers and consumers. We estimate the potential amount of bananas that Australia may import upon lifting the import prohibition and conjecture that this is the amount of bananas that the Philippines may potentially export to Australia. To date, no other banana exporting countries have existing import risk analysis protocols with Australia.


\(^2\) Schmitz et.al., above n1, at 88.
In analyzing Australia’s banana market, we build on the work of James and Anderson\(^3\). In 2003, Australia’s cumulative average farm gate production is valued at 270 million AUD (a 35% increase compared to the value in 1996, the basis of estimation by James and Anderson). This banana production value is about 6% of ABARE’s\(^4\) forecasted $4.2 billion net value of total farm output in 2004-2005\(^5\). Approximately 95% of Australian banana production is on Cavendish bananas.

Figure 1 models the effects of lifting the banana import ban on the Australian market when marketing margins are present at the wholesale, distribution center and retail levels. \(S_f\) is the growers’ supply curve, \(D_r\) is the retail demand curve, and \(D_d\), \(D_w\) and \(D_f\) are derived demand curves at the distribution center, wholesale and farm-gate levels, respectively. The initial equilibrium quantity is \(Q_o\) where \(D_f\) and \(S_f\) intersect. With that level of domestic production and a ban on imports, the farm gate, wholesale, distribution center and retail prices are \(P_f\), \(P_w\), \(P_d\) and \(P_r\), respectively. Once imports are allowed, the wholesale price drops to the import price \(P_i\) and the quantity available on the domestic market rises to \(Q_d'\). At that new equilibrium, the farm-gate and retail prices are \(P_f'\) and \(P_r'\) respectively and the quantity produced domestically falls to \(Q_s'\)\(^6\). The fall in producer welfare\(^7\) is given by area \(C D P_f'P_f\) and the rise in consumer welfare\(^8\) is given by \(B A P_r P_r'\). The difference between these two areas is the net economic welfare gain in the absence of externalities, in particular the importation of pests and diseases.

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\(^3\) Sallie James and Kym Anderson, ‘On the Need for More Economic Assessment of Quarantine/SPS Policies,’ 42 (4) Australian Journal of Agricultural and Resource Economics (1998), 425-444. Another approach that may be used for the economic analysis of quarantine policies is applied by Orden, see n61 of paper.

\(^4\) The Australian Bureau of Agricultural and Resource Economics (ABARE), is an Australian government economic research agency noted for its professionally independent research and analysis.


\(^6\) The new distribution center price is not shown but this is the intersection point of line segment B-Qd’ and \(D_d\).

\(^7\) Producer welfare or surplus represents the gain to producers of being able to produce a certain amount rather than producing nothing.

\(^8\) Consumer welfare or surplus is viewed as the difference between the price which consumers would be willing to pay rather than go without the product and that which the consumer actually does pay.
Data obtained or assumed to quantify the welfare impacts of the policy change include: 1) price elasticities of banana demand and supply; 2) c.i.f. import price of banana; 3) the domestic wholesale price with the existing regime of no trade; and 4) the domestic consumption with autarky. We assume a -.5 long-run price elasticity of demand\(^9\). This is a more conservative guesstimate (considering more fruit alternatives are available) than the -.33 short-run price elasticity computed by Anderson in the early 1970s for the demand curve of bananas in Sydney. For the long-run price elasticity of supply for bananas, we assume a .5 conservative lower bound and a more likely 1.0 or more estimate\(^{10}\). We use the actual 2003 c.i.f. import price of Philippine bananas in New Zealand as an approximation of the potential import price in Australia, amounting to .85 AUD/kg\(^{11}\). However, the economies of size in marketing and shipping costs should ensure that Australia’s import price is below that of New Zealand’s. In 2003, for example, New Zealand’s actual banana imports from the Philippines were less than half\(^{12}\) of the potential Australian imports if its import restriction is lifted. For prices along the marketing chain, i.e. farm gate, wholesale, distribution center and retail prices, we used the mean of the Australian banana industry’s statistics for 2003\(^{13}\). A note about the supply chain is that while 55% of all fruit and vegetables are sold through two major supermarket chains, as much as 70% of all bananas may be sold through these two chains. The consumption data of 275,945 tons of bananas

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\(^9\) See James and Anderson, above n 3.
\(^{10}\) Ibid.
\(^{11}\) Data obtained from Statistics New Zealand, Overseas Trade Imports, 2003. Exchange rate used for conversion from NZ dollar to AUD is .881534, the 1\(^{st}\) quarter 2004 average, obtained from www.x-rates.com.
\(^{12}\) 2003 banana imports of New Zealand from the Philippines amount to about 36,042 tons (as obtained from Statistics new Zealand).
is the 2003 market throughput of the Australian banana industry. Virtually all bananas produced in Australia are consumed within Australia (99.9%). Information supplied by the Australian Banana Growers’ Council indicates that only negligible quantities of Australian bananas are exported, and that these are to a specialty market. Australia does not import bananas at all in view of its stringent quarantine policy.

With these pieces of information, we can estimate production, consumption, trade and welfare effects of moving from a ban to free trade in bananas assuming no pests and diseases are imported. The calculations are shown in Table 3 and are discussed in Section IIIA.

B. Welfare Effects of Increased Exports on the Philippine Banana Market

In this section, we analyze the economic consequences to Philippine producers of allowing banana exports to Australia. The Philippines produces about 1,254,000 tons per year of Cavendish dessert bananas, most of which is exported. This amount is about 11% of the world’s Cavendish production. The bulk of Cavendish exports of the Philippines go to Japan. The Middle East used to be the second largest importer of Philippine Cavendish bananas in 1991-1995. Now it is China, which occupies the second place in terms of volume of imports. Other destinations of Philippine Cavendish are Korea, Hong Kong, New Zealand, Singapore and Russia. The Philippines is one of the top banana exporters in the world. In 2002, it is the third largest exporter, next to Ecuador and Costa Rica. The value of Philippine banana exports account for about 16% of the country’s total agricultural exports amounting to about US$1.6 billion a year.

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14 See n.15 of paper.
16 PBGEA, 2001 as cited in n.15 of paper.
17 1995-2002 average, FAOstat data, 2004
The calculated Australian imports of Philippine bananas can increase Philippine banana exports by 6%-25%. The demand curve for Philippine banana exports, $ED_i$, shifts outward to $ED_w$ as shown in Figure 2, in view of this importation from Australia. The Philippines’ FOB export price is assumed to increase from $P_i$ to $P_w$. This demand shift translates to additional producer surplus amounting to US$15 – 59 million\textsuperscript{18} as shown in Table 4 and discussed in Section IIIa.

\textsuperscript{18} This is an estimate of the striped area in Figure 2 within points AB$P_i$P$w$. We assume that a 1% increase in quantity demanded of Philippine bananas will raise its price by 1%.

Figure 2 should appear here.
Figure 1: Welfare Effects of Lifting the Banana Import Restriction on the Australian Market
Figure 2. Welfare Effects of Australian Imports on the Philippine Banana Export Market